

C / D O R A L A N D P O S T E R P R E S E N T A T I O N S

Effect of hospital volume on short- and long-term survival after Acute Myocardial Infarction in Lazio region, Italy

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Background

The complex relation between volume of hospital activity and health care outcomes after Acute Myocardial Infarction (AMI) has not been completely explained.

Aim

To evaluate the effect of hospital volume on short- and long-term survival after AMI taking into account structural and organizational characteristics.

Methods

From the regional Hospital Information System data base we selected a cohort of 7.585 AMI patients (68.4% males, aged ≥ 18 years) (principal diagnosis=410 ICD-9-CM code), hospitalised from January 1, 1997 to June 30, 1998. Information on vital status 30 days and 6 months after admission was obtained from the Municipal Registry of patients' residence. Hospital characteristics were: annualised volume of AMI patients (quintiles; V less than 70 AMI cases/year; I more than 330 AMI cases/year), teaching status (TS), availability of emergency department (ED), of cardiologic department (CD) / cardiologic care unit (CCU), and of invasive cardiologic technology (ICT). Logistic regression was performed to evaluate the effect of hospital volume on outcome adjusting for gender, age, residence (rural, urban, metropolitan), admission source, illness severity (Charlson-Deyo's comorbidity index^a).

Results

Overall 30-day mortality was 16.3% and 6-month mortality was 21.7%. Patients admitted at low volume hospitals were more likely to die within 30 days (V vs I quintile: OR= 1.42, 95% CI: 1.13–1.78). This effect persisted after adjusting for TS and ED, but it lowered after adjusting for CD/CCU (V vs I quintile: OR= 1.23, 95% CI: 0.91–1.68) and for ICT (V vs I quintile: OR= 1.29, 95% CI: 1.01–1.67). The presence of both CD/CCU and ICT was associated with better outcomes, taking into account the case-mix (OR=0.77, 95% CI: 0.65–0.91 and OR=0.83, 95% CI: 0.71–0.96, respectively). The observed results persisted at 6 months.

Conclusions

Patients with AMI have a better chance of survival if initially treated in high volume. Physician experience seems to play an important role. Our results suggest the need for expansion of field triage to transport patients with coronary "angor" to high-volume and specialized centres.

a: Deyo RA, et al. Adapting a clinical co morbidity index for use with ICD-9-CM administrative databases. *J Clin Epidemiol* 1992;45:613-619.

The impact of the introduction of DRGs on the German health care system

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Issue/problem

The prevailing opinion on the non-sustainable structure and quality of the German health care system has dramatically increased the awareness of all involved parties to initiate reforms. One of the already decided upon reforms is the introduction of Diagnosis Related Groups (DRGs) in hospitals beginning in 2003 with the overall objective of enhanced transparency and economic efficiency. DRGs will reorganize the billing and settlement in hospitals towards a defined lump-sum system for approximately pre-specified 2000 groups.

Description of the project

Cross-country evidence states that countries, which have already introduced DRGs (e.g. USA, Australia, Sweden), show lower retention periods and cases per 1000 inhabitants by a factor of one to three in comparison to Germany. Moreover, no negative impact on the quality of treatment could be inferred. This project aims at analyzing the specific incentive mechanisms that come along with the introduction of DRGs from an economic perspective in

Germany and its implications regarding treatment quality and cost impact. Since hospitals were obliged to already document in line with the DRG-system from 2001 on, this abstract will mainly focus on the analysis in three issues by employing statistical methods. Firstly, to examine the case structure of a selected hospital before and after the introduction of DRGs to detect possible changes in the treatment portfolio and to analyze financial implications. Secondly, to compute the impact for health insurances given certain budgeting scenarios and the resulting redistribution of their funds. Thirdly, to come up with a broad estimate of the entire impact on the health care system based on the above-mentioned bottom-up analyses.

Lessons-learned

Works-in-progress

Conclusions

The expected conclusions are to identify potential "winners" and "losers" of this reform and to derive very pragmatic, implementable action steps for the involved parties by taking the German specifics into account. Hospitals will probably need to optimize their current patient-treatment mix and might initiate possible mergers with other institutes as reaction to increased cost pressure. Health insurances will have to adjust their prevailing benefits portfolio and will have to introduce monitoring processes of hospitals medical quality and billing policy.

Working conditions and socio-economic inequalities in work ability

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Background

Research on work disability suggests that socio-economic inequalities in full capability to participate in work-life may be even greater than socio-economic inequalities in health. Research on work ability irrespective of preconditions to disability pension has been very limited.

Aim

The objective of this study was to investigate socio-economic inequalities in work ability in municipal employees, and the contribution of working conditions to these inequalities.

Methods

Subjects were employees of the City of Helsinki aged over 40 years. Data (n=1820) were collected in age group based medical check ups by the occupational health care. Work ability was measured with a work ability index. The association of work ability index with socio-economic status was examined by fitting logistic regression models.

Results

There was a consistent socio-economic gradient in work ability, with lower groups having lower work ability. Adjusting for physical stress accounted for a substantial part of the inequalities between all socio-economic groups. Adjusting for possibilities for influence and development at work accounted for some of the difference between white collar and blue-collar employees, but not for differences between white-collar subgroups in women. Mental stress and problems in the social environment did not contribute to the inequalities.

Conclusions

Socio-economic inequalities in work ability among municipal employees correspond to inequalities in ill health found in general populations. Physical stress at work accounted for large part of inequalities. Poor possibilities for influence at work were unexpectedly unrelated to inequalities between white-collar subgroups in women. Apart from physical work load, working conditions did not explain socio-economic inequalities in work ability between white-collar subgroups in women.

How often are patients receiving advice about alcohol and other lifestyle habits in primary care in Sweden?

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Background

Advice given by the general practitioner (GP) concerning lifestyle habits may be a cost-effective means to health promotion in primary

care. However, it is unclear to what degree this has been put into routine practice.

Aim

The aim was to explore to what extent patients in primary care are expecting and receiving advice concerning alcohol, tobacco, exercise and diet, with special emphasis on sociodemographic factors and consequences for patient satisfaction.

Method

A postal questionnaire was sent to a representative sample (n=9750) of those patients who called on GPs during six weeks at 39 out of the 41 health centres in a county in Sweden. The response rate was 69% (n=6734). The questionnaire included sex, age, type of call, health status, satisfaction with the call and whether the patient expected and received advice concerning alcohol, tobacco, exercise and diet.

Results

There was an almost 4-fold variation between the most frequently (exercise 16,3%) and the least frequently (alcohol 4,7%) reported type. The frequency increased with age except for tobacco and alcohol. In all areas, the men received significantly more often advice than the women (OR=1,5-2,3). The patients received advice more often than they expected in all areas except alcohol. It was concerning alcohol that the patients reported the highest rate of unfulfilled advice expectation (38%) as well as the lowest rate of unexpected advice (1,7%). The first-mentioned group reported significantly lower satisfaction with the GP visit than those who expected and received alcohol advice.

Conclusions

The lifestyle intervention potentialities in primary care seem to be far from optimally developed. That is especially true of alcohol habits. It is notable that the extent to which women receive advice is less pronounced than for men, especially in lifestyle areas in which their habits are not generally supposed to be better than those of men.

Evaluation of Clinical Charts Quality using Factorial Analysis

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Background

Because the quantity and quality of the data that a clinical folder contains, it constitutes a fundamental tool of the sanitary intelligence of the hospital. An examination of the clinical folders can show the quality of the assistance provided.

Aim

To analyse the links between the characteristic features of the clinical folder in order to suggest logical systems for weighing up each feature, to evaluate and improve its quality.

Methods

Sample: A random sample of clinical folders (N=1096) produced by the various departments of Siena Hospital in 1998. **Variables:** We analysed 21 variables, dichotomous (0,1) or categorical (0,1,2), founded in the literature as most important in order to judge their quality (description of hospitalisation's reason, anamnesis, initial medical examination, clinical diary, letter of release, presence of a comprehensive summary, etc.). **Factorial analysis:** An analysis of the main components was performed using the *Scree Test*, which selected eight factors. These main factors were rotated towards the simple structure using *Direct Oblimin*. We considered that all the variables correlating significantly (r>0.30) to a factor are discriminating for that factor.

Results

The *KMO Test* demonstrates (0.66) that the sample was adequate and the *Bartlett Test* ($\chi^2=4637.18$, $DF=210$, $p<0.0001$) demonstrates the correspondence between the data provided by the model and the estimated data. We report synthetically here only the results obtained by analysing the first factor. The discriminating variables were highly revealing: the highest correlating items were "Presence of a comprehensive summary" (r=0.85), "Diagnostic/therapeutic choices" (r=0.81), "Therapeutic indication on release" (r=0.79) and "Periodical summary of the therapy" (r=0.39). There are other variables which correlate to more than one factor, thus demonstrating their importance as indicators of quality in the clinical folder, such as: "Degree of completion of the Hospital Release Form" (HRF) which correlates to the sixth factor (r=0.35) and on the seventh (r=0.66).

Conclusions

Our analysis shows that in order to judge whether a clinical folder is of "good quality", one needs to pay more attention to four characteristic features: detailed reasons for hospitalisation must be shown; there must be an HRF with all its important sections filled in, the therapy should be updated and, finally, the laboratory results must be there.

Can we interpret the Patient Migrations using the Game Theory?

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Background

The Patient Migration (PM) is an important phenomenon in the Italian Health System (IHS). In the year 2000 roughly 11% of Italian patients travelled to reach a hospital in a different region from their own. Besides the effects caused by this phenomenon (PM), which go beyond the financial side and sometimes threaten the right of access to the services, it also creates problems of rationing and discrimination. The Italian State, to guarantee an equal possibility of access and the freedom of choice for all patients, uses mainly yardstick competition. In this form the price of its services is fixed and identical for all the suppliers (Local Health Organisations – LHOs) so that the latter use quality to compete in attracting the patients, who are then free to choose and have free access to the market for the largest number of suppliers. This means adopting competitive methods among the LHOs belonging to the various regions and also among the LHOs of the same region.

Aim

This study is aimed at creating a kind of game for the PM for analysing the strategic interaction between the adversaries (LHO) in order to produce an equilibrium for the game. "Equilibrium" is defined as the combination of the best strategies available for each of the agents taking part in the game.

Methods

Assumption: each competitor (LHO) must have the same skills and possibilities as its adversaries and the aim of each player (LHO) is to maximise its own final result (expressed here in terms of the utility found by the patient). **Description of the game:** 14 LHOs from the Piedmont Region were involved in the game. The competition between them follows the logic of a variable-sum game, since not all the Piedmontese LHOs have been taken into consideration owing to lack of data. Each LHO has three strategies available to it; therefore the game is 3x3: S₁ =Improve the level of its own reputation with respect to the other LHOs; S₂ =Reduce the waiting times with respect to the other LHOs; S₃ =Correct allocation of the hospitals which form a part of the LHOs and make them accessible. The function of the wins, which defines how much each LHO receives from another, has been estimated in terms of utility, applying the Linear Probability Model to a sample survey (N=103 patients).

Results

The estimated payoff function (utility) was ($R^2=0.95$; $DF=7$; $F=257.33$):

$$Max U_{LHO} = -0.51 - 3.06 Sex + 3.29 S_1 - 0.02 S_2 + 0.08 S_3 + 0.0006 S_3^2 + 0.02 S_1 S_3$$

$$t\text{-ratio } (-22.74) \quad (-22.23) \quad (28.63) \quad (-6.56) \quad (29.09) \quad (24.28) \quad (7.34)$$

$$P < 0.0001 \quad 0.0001 \quad 0.0001 \quad 0.0001 \quad 0.0001 \quad 0.0001 \quad 0.0001$$

The mathematical processing is ongoing, but we can demonstrate the result of the game between two of the LHOs (see table).

Since there are some negative terms, we used a positive constant

Table O. Al Farraj

		LHO 18 (Novara)		
		S1	S2	S3
LHO 16 (Mondovi)	S1	(-1.11),(-0.89)	(-0.61),(0.05)	(-0.10),(-0.01)
	S2	(-1.08),(-0.27)	(-0.59),(0.07)	(-0.08),(-0.09)
	S3	(-1.18),(0.02)	(-0.66),(0.08)	(-0.14),(-0.15)

The only choices which ensure the equilibrium of the game (with the maximum utility expected for each player) are: S2 for LHO16 with a result of 0.59 and S2 for ASL18 with a result of 0.96. Therefore, the reduction of the waiting times should be adopted by both players.

equal to the minimum negative value and considered a new matrix derived from the first one. This was obtained by adding the positive constant to each term.

Conclusions

The LHOs solve their problem of maximisation, which is linked to the fact that their adversaries, too, pursue a restricted optimisation. With this study we have singled out the criteria to suggest to each agent and have analysed the compatibility of the decisions taken by the various LHOs.

The successful collaboration between research and practice by the health and education sectors, as demonstrated by health goals for children and adolescents in Germany

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Issue/Problem

Up until now, health goals in German health policy have been discussed and partially implemented only on the state level. As a result all health reform initiatives suffer from a legitimization deficit, because short-term cost cutting has been a higher priority than long-term health goals.

Description of the Project

Since the year 2000, the Federal Health Ministry has initiated and financed projects, lead by the Society for Insurance Sciences and Organization, to define specific national health goals, and to create an inter-carrier consensus to make the implementation of these goals possible. It is the goal of *Gesundheitsziele.de* to show how, in Germany's hierarchically structured health care system, health goals can be defined and implemented into concrete programs. This is only possible with the cooperation of all involved parties, i.e. federal government, states, communities, health insurance companies and other service carriers in the health sector, patient and self help organizations, the science sector and other institutions. As of yet, five goal areas have materialized. For example, the health goals for the target group of children and adolescents, presents the procedure and results of the goal process.

Lessons learned

Inter-carrier consensus concerning concrete goals can be achieved through third party mediation. This can be more easily attained with goals which do not always question the distribution of work between cost carriers and service providers in the health organizations, than for goals with divergent interests. A clear layout of defined areas of responsibility involving all participants is necessary in order to set health goals into motion. The German health care system must, today as in the past, orient itself to long-term health goals.

Conclusions

In health goal definition, collaboration can occur between health research and practical health care maintenance and promotion. Furthermore, a networking of different societal sub-sectors, i.e. education, free-time and health is made possible. To come to a consensus, goal discussions must be carried out, and these discussions must be mediated by a neutral third party.

The course of chronic musculoskeletal pain: a 12-year follow-up of a cohort from the general population

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Background

Chronic pain (duration > three months) has been shown to be a public health problem in several western countries in view of the high prevalence and the great impact on the functioning of the individual and the health care system. The course of chronic pain symptoms has been incompletely described hitherto.

Aim

To study the long-term course of chronic pain among adult individuals in a general population and to analyse possible predictive factors for persistence of chronic pain and survival.

Methods

Three groups of individuals initially reporting widespread pain (n=70), neck-shoulder pain (n=71) or being pain-free (n=73), from a survey of a general rural population aged 25–74, replied to questionnaires after six and 24 months and after 12 years. The questionnaires focused on pain experience and function, as well as

lifestyle, socio-economic and working conditions. Complete data were obtained from 141 individuals. Logistic regression analysis was used to calculate odds ratios of predictive factors.

Results

Total mortality during the 12 years was 11% but tended to be higher in the group of widespread pain compared to groups with located pain and no pain (p=0.07). A predictive factor for permanent pain was a high number of painful body areas (OR 8.6, for widespread vs. located pain). Mechanical workplace strain was the strongest factor for developing chronic pain during the study period (OR 7.9).

Conclusions

The poor prognosis of widespread chronic pain could be related to mechanisms of central sensitisation in the nervous system and support early and intense intervention among individuals with located pain. The association between chronic widespread pain and increased mortality needs further investigation but may deepen the view of chronic pain as a public health problem.

Bright waters, dark moods – explaining regional differences in early retirement with psychiatric disorders

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Background

Social insurance costs have increased dramatically in Sweden and are now higher than the total costs for all health care in the country.

Aim

The aim of this study was to describe the regional differences in early retirement with psychiatric disorders over the last 20 years and to analyse these differences in relation to the socio demographic distribution of the population in different regions.

Method

The study was performed as an ecological study comparing the rates of early retirement in Sweden, in the city of Göteborg and the county of Bohuslän, both located on the Swedish west coast. The study population was all sickness insured individuals aged 16–64 years. Data on early retirement was collected from the National Social Insurance register. Population data was collected from Statistics Sweden. Diagnoses were classified according to ICD. Longitudinal data covering the last 20 years was used.

Results

We found that the regional differences in early retirement with psychiatric disorders were consistent over the studied years. In 1980 the proportion of early retirement with psychiatric disorders was 25% of all early retirements in the city of Göteborg to be compared with 17% in the county of Bohuslän and 15% in Sweden overall. This proportion changed over the years and was in 1998 37% in Göteborg, 25% in Bohuslän and 24% in Sweden. These data also show the large increase of early retirement with psychiatric disorders in relation to other diagnostic groups. Standard mortality ratio 1993 with Sweden as reference was 1.14 in Bohuslän and 2.55 in Göteborg. Corresponding figures for women were 1.30 and 2.29.

Conclusion

Regional differences remained after controlling for age and sex distribution of the population. From a preliminary analysis it appears as the high rate in Göteborg cannot be explained as an effect of urbanity. More knowledge is needed to understand why regional differences exist.

Global Quality of Life measured by Visual Analogue Scale: Validity and feasibility in a population study

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Background

There is a demand for a short and economic measure of global quality of life for population studies.

Aim

The aim was to investigate the validity and feasibility of the Visual Analogue Scale (VAS) for global Quality of Life (QOL) in a population study.

Methods

The subjects were a sample of Finns (n=4613, age 25–74) of the FINRISK-97 postal survey. Socio-demographic information included age, marital status, education, income level and work status. VAS was used as a 10 cm horizontal bar. Emotional well-being was measured by Beck Depression Inventory and State Anxiety Inventory, functional well-being by Activities of Daily Living Scale, life satisfaction, physical well-being, and social well-being were measured by single items.

Results

The study showed significant relationships between the VAS-scores and indicators of well-being. The VAS revealed significant differences between the groups stratified according to work and marital status. Unemployed and unmarried persons indicated worse QOL than employed and married ones. Furthermore, the VAS showed sensitivity indicating that quality of family relations as a factor of QOL had importance over the marital status. The impact of various well-being domains on global QOL differed across age and gender groups. Variances of the VAS-scores explained with hierarchical analyses of regression varied from 24% to 45% depending on the group studied. The results indicated that global QOL judgements made by the VAS are likely to be based on current emotional state.

Conclusions

The study gave evidence of the validity, sensitivity, and interpretability of the VAS for global quality of life. As a short and easy-to-complete measure it is also feasible in population surveys.

Do patients with suspected myocardial infarction have any unmet health needs?

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Background

'Health care needs' analysis identifies specific requirements such as specific medical treatment while 'health needs' is much broader, encompassing personal and social issues, transport, occupation, leisure, finance, accommodation and education. These needs have not been assessed among patients with symptoms suggestive of myocardial infarction.

We developed a comprehensive instrument to ascertain 'health needs' and 'health care needs' of these patients, comprising 45 questions in 5 domains: health care services, carers, information, social, and domestic needs.

Setting and Main outcomes

A random sample of patients with suspected MI admitted to the coronary care unit Nottingham University hospital during 2001 who agreed to take part were recruited in the study (N=122). Personal and social issues in patients were compared with scores from generic and disease specific 'quality of life' questionnaires.

Results

Data (86% response rate) indicate that one fourth of patients had problems with their housing, 38% had difficulty accessing their health centre (mainly due to transportation) and up to 53% wanted health information regarding their illness. Patients with poor health were more dissatisfied with accommodation ($p \leq 0.001$), preferring a bungalow ($p=0.01$), were less likely to be able to undertake a favourite activity ($p < 0.01$), and felt more dissatisfied with transport ($p < 0.01$). Poor health markedly restricted access to health centre ($p < 0.001$). Financial concerns and home help were strongly correlated with QOL scores (Spearman $\rho = 0.45$ $p < 0.001$). In contrast, changes in employment status did not correlate with perception of health.

Conclusion

Identifying health needs concomitant to clinical investigation is essential in a comprehensive plan of management. The majority of patients in this study complained about their mobility, social care, health information and accessibility to health care services, however other issues of health needs warrant further investigation. Appropriate QOL tools can be considered as reliable surrogates for this purpose.

EUROHEIS (European Health and Environment Information System) – applications and case studies

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Issue/Problem

Public health professionals are becoming increasingly involved with the assessment of the risk to the health of the population from environmental factors. Often an initial risk assessment has to be undertaken quickly to respond to alerts from the public and the media.

Description

This EU funded project aims to develop integrated information systems for rapid assessment of relationships between the environment and health at a geographical level with 7 partner countries: Denmark, Ireland, Finland, Italy, Spain, Sweden and the UK. A one-year feasibility study to assess the possibilities of implementing systems developed in the UK, for point source investigations and disease and exposure mapping, within the participating countries was carried out. We report on the second stage of the project, which involved, where feasible, implementation of the UK system in the partner countries. Case studies have been developed within each country to demonstrate the utility of the system including in the UK, a study to investigate cancer incidence in areas exposed to high levels of bromate in drinking water in the UK.

Lessons learned

We have developed the Rapid Inquiry Facility (RIF) which can rapidly generate indirectly standardised rate ratios and directly standardised rates for any disease/end point held on the database (including mortality, cancer and congenital anomalies), for specified age and year ranges, for any geographical area (based on EDs/post-codes) in Great Britain. It will also automatically generate contextual maps and statistics for the study area and smoothed maps of disease risk. The system has also been implemented in Spain and Sweden.

Conclusions

Rapid assessment of disease risk within specified geographical areas is possible using the Rapid Inquiry Facility. We have demonstrated the exportability of the system to other units in other countries within Europe. The usefulness of the system is being evaluated in the final stage of this project.

Review of utilisation of in-patients beds at St. Luke's Hospital in preparation for migration to the Mater Dei Hospital

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Issue/Problem

There are currently 890 in-patient beds at St. Luke's Hospital. The number of occupied beds is often exceeded due to seasonal variations and due to inappropriate use of such beds. Occupancy rates vary from 85% during lean periods to over 110% in times of high demand. The new Mater Dei Hospital has been planned to accommodate not more than 825 beds.

Description of Project

A review of the utilisation of beds was required to determine the appropriate allocation and number of beds for each specialty once services move to the new site. The following aims were identified:

- To carry out an analysis that highlights the differences between current practices in our hospital and best practice.
- To examine factors that act as barriers within our process to performing better
- To develop strategies and action plans for change to achieve best practice.

The review took the form of a benchmarking retrospective exercise using routinely collected data.

The following indicators were measured and compared with performance indicators of a number of international benchmarking partners:

Bed occupancy rates per month: Number of occupied beds by ward and specialty.

Discharges per year (discharging ward not the admitting ward):

- i) Total number of discharges by ward, ii) Discharges by specialty, iii) Discharges by Consultant, iv) Deaths by ward by admitting ward, v) % of deaths at an overall of discharges by ward and specialty, vi) Deaths by specialty.

Length of Stay per year: i) LOS by ward, ii) LOS by Consultant, iii) LOS by specialty, iv) LOS by procedures (for local purposes).

Admissions per year: i) Total number of patient admissions by ward (Elective, emergency, day cases, separately), ii) Total number of admissions by specialty (Elective, emergency, day cases, separately), iii) Total number of hospital admissions, iv) Age composition for all admissions.

Lessons Learned

- In order to carry out an appropriate benchmarking exercise, a robust health information management system needs to be in place to generate the necessary data to be able to carry out meaningful comparisons.
- The benchmarking partners must be comparable in size, complexity and case mix.
- A benchmarking exercise should always be followed with an analysis of the processes and a commitment by all for change.

Patient-Centred Care: What it is and why we need it

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The power of modern medicine to cure and prevent illness is undeniable. However, the reduced morbidity and mortality rates among the European population are due in large part to socio-economic factors amenable to health promotion. If medical care is unavoidable it should be conceived of practitioners and patients as jointly engaged in the production of care which

- empowers patients,
 - offers different treatment options,
 - protects patients from unnecessary care and low quality.
- "In part, the performance of patients depends on what practitioners have permitted them to do and how well they have prepared them for the task" (Donabedian 1992). In the years to come we may expect considerable changes in the relationship between consumers or patients and the providers of care. The concept of patient-centred care provides a framework for the future design of health care processes and health care systems from the point of view of citizens and patients as the ultimate customers of health care – in addition and sometimes perhaps in contradiction to the routines, interests and imperatives of those who are engaged in the provision and financing of health care.

Implementation of patient-centred health care needs shared decision-making on all levels of our health care systems: on the level of expert-patient interaction, in the process of reorienting health care institutions and on the level of health policy-making. "Patient orientation" must become a property of systems of care.

Ethnicity and access to primary care in British general practice

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Aims

To compare access to primary care between ethnic groups and to measure its association with general practitioner consultation.

Methods

A self completion questionnaire The General Practice Assessment Survey (GPAS) was used to examine respondent's experience and evaluation of accessibility to the general practitioner and frequency of consultation. Stratified random sampling was used to distribute the questionnaire to registered patients in 81 practices in 21 Health Authorities in England. Respondents were categorized into one of three ethnic groups: white (6818 patients), black (176 patients) and South Asian (187 patients). Hierarchical regression modelling tested the independent association of ethnic group membership with experience and evaluation of access, treating socio-economic and demographic characteristics as first level mediators and practice characteristics as second level mediators. The association between

access and frequency of consultation was examined for each ethnic group using logistic regression.

Results

South Asian respondents experienced poorer access to care than white respondents, most particularly in the convenience of the practice location, treatment by receptionists, convenience of surgery hours, availability of same day appointments, waiting time in the surgery, ability to speak with the doctor on the phone and ability to see their usual doctor. This did not constitute a barrier to general practitioner consultation, since South Asian respondents were significantly more likely to have consulted the doctor more frequently than white respondents, even after adjusting for differences in socio-economic and demographic characteristics and health status.

Conclusions

Ethnicity is a source of social disadvantage that affects access to and use of primary care services independently of material deprivation. Our findings suggest that dissatisfaction for members of South Asian ethnic minority groups extends across a number of different aspects of access and will not be resolved by policies that focus on improving a single aspect of provision such as waiting times. Our ability to understand the relation between poorer access and more frequent consultation for South Asians is currently circumscribed by assumptions about access to services that have been built from studies of the white majority population.

Epidemiology of tobacco consumption in Georgia

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Introduction/Method

In the years 1999–2000, the Academy of Healthy Life Style has conducted epidemiological research in the whole of Georgia. The research group was the general population from 10 to 74 years old.

Results

The research has shown that in Georgia, the smoking rate is nearly 52,1% in men and 14,7% in women population. Around 1.200.000 men and 500.000 women (the population of Georgia are 4.500.000 persons) are using tobacco in Georgia. Earlier epidemiological studies showed that in the year 1985, the smoking rate in Georgia was 42,8% men and 4,1% women. In 1998 in Tbilisi, 28% of 1725 year old women used tobacco, while in 1995, this rate was 14,3%. In 1997, 1.100 smokers had lung cancer, 1.300 had other location cancers, 9.000 bronchitis, emphysemes and asthma; 130.000 suffered from respiratory diseases, and 105.000 heart diseases. In 2001, 8.000 people died in Georgia because of smoking, which is 21% of total mortality.

Conclusions

In Georgia, we see a steady increase in the number of people who are smoking. Georgia should develop an effective anti-tobacco strategy in the near future.

Users' Satisfaction with Health Care System

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Background

The users' satisfaction with health care is a feedback for professionals' and policy makers' activity. In the same time, the literature shows that the users' satisfaction is determined by socio-demographic characteristics of some groups and their health status. Moreover, in Romanian context of 11 years of changes in health care, it is expected that peoples' assessment of these changes to be related to their satisfaction.

Aim

The study responds two questions:

- What peoples' socio-demographic characteristics and health status may influence their satisfaction with the health care system?
- Are there associations between users' satisfaction with health care and their opinions on changes?

Method

After the stratification of GP to rural and urban area, the Sample Random Selected was used two times to select GP from each area and then to select adult patients from their list. 379 interviews in the urban area and 240 in the rural area were carried out (N=619). The response rate was 67.8. The data were collected by face-to-face interviews in the Dolj region in Romania (720000 inhabitants) in 2000.

Results

The main outcomes are:

- 1) The users' socio-demographic characteristics that predict their satisfaction with health care are: gender and education.
- 2) The users' age, health status and chronic ill status do not influence their satisfaction with health care.
- 3) Peoples' opinions about changes due to reforms are associated with their satisfaction with health care.

Conclusions/ Implications for policy

The women, the less educated people and the people who think that the recent changes in health care are for better are more satisfied with the health care. The higher educated people may be transformed by the policy-makers in a supportive group for the reforms in developing, being satisfied with the last changes, but not with the actual state of affairs of health care system.

Combined exercise programs in patients with stable COPD: influence of psychological profile and monitoring

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Background

Home-based exercise training (HBET) is capable of maintaining improvements achieved through a short-term training program (STP) in patients with severe COPD after initial recovery from an exacerbation (Respir Med 2000;94:1184).

Aim

The aim of the present study was (1) to reveal the role of psychological profiles concerning quality of life (QOL) outcome after STP in patients with stable disease and (2) to examine the effectiveness of HBET after STP by comparing different modalities for HBET.

Methods

Fifty-one patients with moderate to severe COPD (mean age, 65 yrs; FEV1, 41% pred) underwent an out-patient STP and were subsequently randomised to four groups: HBET, either + patient-diaries (D; n=14), or + diaries + pedometers (P; n=13), or + diaries + pedometers + home-visits (H; n=11), or non-exercising controls (C; n=13). Measures of pulmonary function, exercise capacity (6-minute treadmill distance [6MTD], incremental exercise test), and QOL (Chronic Respiratory Disease Questionnaire) were obtained before and after STP, and after 6 months.

Results

After STP, mean 6MTD increased from 311 m to 466 m and maximal exercise capacity from 42 to 58 Watt ($p < 0.01$, each). QOL scores increased from 87 to 105 points ($p < 0.001$). Patients with large increases in QOL were characterized by high scores of self-efficacy and autonomy. All improvements were fully maintained in the groups D, P and H over 6 months, whereas group C showed a significant reduction in exercise capacity and QOL ($p < 0.01$, each), approaching baseline values.

Conclusions

We conclude that (1) strong self-efficacy predicts the maximum benefit in QOL after STP and (2) suitable HBET in patients with stable COPD can maintain short-term improvements in exercise capacity and QOL irrespective of the mode of monitoring.

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The relevance of price in a customer's choice of statutory health insurance providers in Germany

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Background

The German Market for Health Care Insurance has undergone significant changes since the introduction of a free choice of statutory health insurance providers in 1996. Some providers have lost more than 10% of their customers, while others have tripled their customer base. Among many influencing factors, the difference in price levels is often highlighted as the key motivation of choice. Representative interview based studies underline this assumption, mostly focussing on the factors for future customer choices.

Aim

This article analyses the historic relevance of the price level and price changes for a customer's choice of providers.

Methods

The customer development of the most relevant providers was described via a function based, among other factors, on price level and change in price. Respective time series for the years 1996–1998 were provided by the German Federal Ministry for Health. A multiple regression method was applied to determine relevance and significance of the variables.

Results

The regression shows with an R of 81,8% that the price level highly impacts a customer's choice, whereas a change of price has a very low relevance for the selection of a provider. The assumption of a high relevance of the price level for a customer's choice therefore proves correct. It follows basic economic principles as well as the development in comparably deregulated markets like telecommunication. Although the second finding appears less convincing at first glance, a more in depth discussion shows that this was true only for the first years following the deregulation. Since then, customers have become more mature and might react faster and more sensitively now.

Conclusion

Health care insurance providers are forced to not only offer their services at an adequate level of quality, but also at a highly competitive price.

Is sickness absence an valid indicator of morbidity?

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Background

Sickness absence data are widely used for epidemiological research. However it is well known, that sickness absence serves as an indicator for a part of morbidity only, because treatment of a number of diseases does not include rest from work.

Aim

Aim of this study was to relate sickness absence to other data sources of morbidity and to emphasize which diseases are covered well by sickness absence data.

Methods

Sickness absence data from app. 7000 employees were linked to data of drug prescriptions and visits to general practitioners (GP), which in Germany are a precondition for both. On the one hand the percentage of diagnosis-specific sickness spells was considered and on the other hand rate ratios for different job types and work load with respect to the three data sources were calculated.

Results

Preliminary results show that sickness absence data are a poor indicator for incidence and prevalence of diseases. Only about 45% of all contacts to GPs were followed by sickness absence from work. With respect to back disorders e.g. about one third of the patients showed up at GP could be identified in sickness absence data. However, concerning the relative risks no difference could be observed so far. E.g. relative risk for back disorders was about 1.8 for employees with high work load compared to those with low workload. This rate ratio occurred for sickness absence data as well as for visits to GPs (and drug prescriptions when identified by certain analgesics).

Conclusions

We conclude that the validity of sickness absence data as a morbidity indicator depends on the diseases studied as well as on the epidemiological parameters used. The data serve well with respect to relative risks but should be carefully used when estimation of incidence or prevalence is intended.

Specific health promotion for immigrant women why and how? German and Turkish-speaking women in the hospital – results of a survey

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Objective

Knowledge and understanding are basic preconditions for health related behaviour and chances to participate in therapeutic processes. Despite the fact, that in Germany immigrant women

account for up to 30% of the patients in some gynecological hospitals, their access to health relevant information is severely limited. In order to enhance participation and health chances, it is substantial to know their needs and to create adequate information and health promotion concepts.

Methods

To explore the quality of health care for in-patients and to identify specific needs of immigrant women, we compared 320 German and 256 Turkish speaking patients (age: 15–75) in the same gynaecological ward. Bilingual questionnaires focussed also on patient's socio-cultural background, expectations and satisfaction in the clinic, aspects of information, communication and comprehension and their knowledge about the female body (level of significance $p > 0.05$).

Results

Comparison of patient collectives showed significant differences in socio-economic status, education, literacy, knowledge of German language and health knowledge. Both, immigrant and German women expect a thorough, honest and understandable information. However the Turkish sample was notably less satisfied in the clinic and less informed about their diagnosis and therapy. 35% of the immigrant vs. 5% of the German women admitted not having understood the information. Besides unresolved language problems, the lack of recognition of socio-cultural differences in basic health knowledge lead to these obvious deficiencies. 62% of the immigrant patients and 15% of the German patients had only little knowledge about anatomy and functions of the female body.

Conclusion

To reach immigrants in health promotion programmes and to enlarge their participation chances, it is necessary to develop health information and -promotion concepts and practices tailored to immigrant's specific needs (e.g. different mother tongues, education, basic knowledge). Specific communication patterns and networks of immigrant communities can be useful in conveying health relevant information.

Self-Help Initiatives and their Contribution to the Health Care System

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Health related self-help groups and organisations receive increasingly financial support by the German social security system and become more and more part of the health care system. Thus, the Federal Ministry of Health supports and finances an expertise of the Department of Medical Sociology of the University of Freiburg regarding the Research in Germany in this field.

The foundation of this expertise is an inventory of all research projects conducted in Germany related to self-help groups and self help organisations. In order to achieve this inventory, a questionnaire was sent to all relevant faculties and departments of universities, universities of applied sciences, private research institutes and to self-help organisations ($n=800$). Additionally an investigation in data banks and libraries was carried out.

The results of this review show, that health related self-help groups and organisations make an important contribution to the health care system in Germany. Especially self-help groups increase mutual aid and social support, knowledge about the disease and its consequences as well as possibilities for changing attitudes of the group members and their social environment. They disburden the primary social networks and families of the afflicted persons and reinforce the 'intelligent' utilisation of the professional services of the health care system. There has been almost no systematic investigation of the activities of self-help organisations yet, except from counselling services. The co-operation between self-help initiatives and the professional health care system is characterised by an imbalance between medical laymen and experts.

It turned out, that research in this area is fragmented. Further investigations should address the question, how greater parts of the population can be involved in self-help activities and how the relevance of self-help differs in various diagnosis groups.

Mortality amongst migrants in the Netherlands

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Background

Evidence about mortality amongst migrants in the Netherlands is still highly fragmentary.

Aim

The key objective of this study is to describe patterns of mortality by sex, age-group, cause of death and duration of stay for inhabitants of the Netherlands who originate from Turkey, Morocco, Surinam and the Dutch Antilles and Aruba.

Data and methods

Data were obtained from the Municipal Population Registers (GBA) for the years 1995 to 2000. An open cohort design was used. For each inhabitant of the Netherlands the survival status and the amount of person time was determined. Directly standardised mortality rates were calculated and relative risks were estimated by Poisson regression analyses.

Results

As compared to native Dutch, Moroccans and Turkish women have a lower level of total mortality, while Surinamese, Antilleans and Turkish men have a higher level of total mortality. Mortality of neoplasms is lower among all studied migrant-groups than among Dutch. This remains low, also in migrants who have been in the Netherlands for a long period. Mortality from cardiovascular diseases is equal to that of Dutch for Turkish men and Antilleans, much lower for Moroccan men and higher for Surinamese. While the disadvantage of Surinamese and the advantage of Moroccan men does not vary systematically according to duration of stay in the Netherlands, cardiovascular mortality among Turks does: those who migrated long ago have higher levels of cardiovascular mortality than those who migrated more recently. Suicide is less common among Turks and Moroccans and more common among Surinamese and Antilleans. All migrants die more often from homicide than Dutch do.

Conclusions

Ethnic differences in mortality in the Netherlands are substantial. Some of these differences vary systematically with duration of stay. Other's don't. These association possibly reflect health selection and acculturation effects.

Laparoscopic versus conventional cholecystectomy: a comparison of costs and further criteria

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Background

In the 90's, there was a change of operational method applied to patients admitted to the hospital for elective cholecystectomy with symptomatic cholelithiasis, that promised to bring a reduction of expenses at the Hospital.

Aim

The aim of this retrospective study is the examination and review of the effects of a change introduced at the University of Dresden away from the conventional operative technique in cases of cholecystectomy upon expenses of treatment.

Methods

Data were gathered from patients who had been admitted to the hospital for purposes of elective cholecystectomy with accompanying symptomatic cholelithiasis and who were subsequently operated on in the period between 1 JAN 91 and 31 DEC 96. In order to guarantee the comparability of both operative methods, certain exclusion criteria were defined such that in the final analysis „standardized conventional cholecystectomy“ with a „standardized laparoscopic cholecystectomy“ might be compared. The data resulting from the 153 conventional and the 222 laparoscopic cholecystectomized patients were collated in the final evaluation.

Results

A conventional cholecystectomy can be expected on the average to elicit a fee of 4 922.74 DM (deutschmarks). A breakdown of the expenses is as follows: hospital stay: 3 217.24 DM; operation: 1 157.26 DM; examinations, including admittance check-up and anaesthesia procedures with examination: 420.03 DM; and medications: 128.21 DM. The total expense for a laparoscopic cholecystectomy amounted to 4 025.38 DM, of which the hospital stay accounted for 1 718.39 DM; the operation: 1 697.35 DM; examinations: 497.27 DM; and medications: 112.37 DM. Consequently, the laparoscopic cholecystectomy resulted in a 897.36 DM lower cost. In addition, post-operative hospital stay of a laparoscopically con-

ducted operation required on the average merely 3.3 days, compared to a conventional cholecystectomy of 8.0 days. In contrast, the former required an on the average 92 minutes longer operation time when compared with the conventional method (66 minutes).

Conclusions

It can be established that the change of operational method yielded a reduction of expenses at the Hospital.

ISIS: applying knowledge technology to a National System for Infectious Disease Surveillance

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Issue/problem

ISIS is the Dutch National Electronic Surveillance Network for Infectious Diseases. ISIS consists of obligatory notifiable diseases and Laboratory surveillance. Traditionally, laboratory surveillance systems collect data on cases of infectious diseases by applying case definitions within the laboratories before sending the data. Bias due to differences in interpretation of case definitions between laboratories can play a role in these systems. Applying case definitions in the laboratory also is time consuming. We perceived a need for improving the surveillance process using Information Technology

Description of the project

Laboratories for microbiology are connected electronically with their databases to ISIS. Each night, all new test results (positives and negatives) are sent to RIVM. Data are stored in standardised form, and each night, the system applies formalised case definitions to the database, in order to classify cases and non-cases. All data are anonymised. From the central laboratory database, each night 5 different standard internet reports for each pathogen are generated. An electronic algorithm analyses data daily for anomalies in trends, and early warning reports are sent to the national outbreak response team.

Lessons-learned

Consensus on the case definitions is necessary. Case definitions for public health surveillance are allowed to be less specific than clinical of microbiological diagnosis. Applying knowledge technology on surveillance data reduces the workload.

Changing case definitions within ISIS will usually not lead to 'surveillance gaps' or artefacts.

Conclusions

The ISIS system is being developed by the National Institute of Public Health and Environment (RIVM) by order of the Ministry of Public Health, Welfare and Sports. ISIS is a collaboration by RIVM, the Dutch Society for Medical Microbiology and the National Society for Regional Public Health Services.

Managed Clinical Networks in NHS Lothian, Scotland: a development tool

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Issue

Managed Clinical Networks (MCNs) are seen as key to the development of acute services in Scotland (Acute Services Review, 1998), and all NHS Boards are encouraged to develop MCNs. The Scottish Executive has adopted an evolutionary approach to the development of MCNs providing additional investment to establish demonstration pilots (such as Cancer, Coronary Heart Disease, Stroke, Vascular Services and Diabetes) and national "formal" networks throughout Scotland, as well as guidance to help NHS Boards develop local MCNs. Local activity had yet to be formally recorded in Lothian; this paper details the process.

Description of the project

Lothian NHS Board Public Health and Health Policy Department undertook a stock-take of network activity using a checklist devised to document progress against essential and desirable criteria incorporated in national guidance (MEL (1999) 10).

Lessons-learned

1. This work has increased local understanding about the national requirements which must be fulfilled in order to achieve full MCN status
2. Development of specific criteria to measure MCN activity has allowed progress in local activities to be documented.

3. This in turn has identified the key areas for successful development: i) Defined management structures, ii) Named lead clinician, iii) Investment to support the network (particularly in establishing management systems, audit and educational programmes).

4. The findings are now being used by Senior Management to prioritise the specialties in which to develop specific MCNs.

Conclusions

MCNs have the ability to deliver better quality of care for patients by providing agreed standards of care, defined referral and follow-up guidelines and care which is delivered in the appropriate setting. They can also strengthen both audit and clinical governance and enable the system to overcome shortages in specialist staff. The ability to identify areas in which criteria for MCN status are being met is valuable, enabling identification of specialties requiring additional effort to acquire full MCN status. This work has been used to effectively prioritise resource allocation.

The use of a new ICF instrument for self-assessment of function in rehabilitation of sick-listed persons

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Background

A description of individual function is essential in the rehabilitation of sick-listed persons to suggest work replacement, adaptation of work sites, or other measures. In the Norwegian social insurance system, more emphasis is placed on claimants' active participation in the rehabilitation process.

Aim

To construct, test, and evaluate a standardized instrument for self-assessed function among persons sick-listed for more than 6 weeks. The instrument should be compatible with the new WHO classification for functioning, disability and health – ICF.

Methods

Derived from ICF, a 39-item form for self-assessment of function (SAF) was constructed and tested among 386 persons, sick-listed for six weeks. In a second phase, the utility of the SAF was evaluated by including it in standard rehabilitation work for 286 sick-listed persons in 5 local insurance offices.

Results

In phase 1, the form was well accepted (3.9% missing answers). The form demonstrated considerable loss of function in 79% of the sick-listed, mostly in lifting and communication with others. Factor analysis revealed four physical and three psychological dimensions of function that were important to describe work disability. These dimensions differed substantially from the nine domains in the ICF. Reliability was satisfactory (Cronbach's alpha 0.76–0.89 for the seven dimensions). The form showed good construct validity and good convergent/divergent validity when tested against SF-36 and COOP/WONCA charts.

In phase 2, the information on individual function was utilized in 51% of cases, mostly to give guidelines for individually adapted rehabilitation plans.

Conclusions

A standardized form for self-assessment of function was reliable, valid, demonstrated considerable loss of function in many sick-listed persons, and was useful for the design of rehabilitation efforts in the Norwegian social insurance system. The SAF form can easily be adapted for assessment of disability pension claimants.

Does the form of financing gerontopsychiatric care influence the availability of adequate services? A study of gerontopsychiatric services in six European countries

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Background

The practise of service provision for depression in late life varies considerably between European countries. The majority of elderly depressed persons is treated in the primary health care field. However, the availability of specialised gerontopsychiatric services is important for setting standards, treating severe cases and educating practitioners. To provide adequate care, gerontopsychiatric services have to be community oriented, countrywide available and also treat depressed persons.

Aim

This study investigates forms of financing health services as a possible factor that influences the availability of adequate gerontopsychiatric services.

Method

The availability of services and the modes of financing care for depressed elderly persons were studied in six European countries (Denmark, Sweden, UK, Switzerland, France and Germany) by systematic literature search and expert interviews.

Results

Countrywide available community oriented gerontopsychiatric services are found in the UK, Switzerland and Denmark. However Danish gerontopsychiatric services are not always available for depressed persons. Germany offers hospital focused gerontopsychiatric services and Sweden and France only have locally gerontopsychiatric services available to depressed elderly persons.

Only Germany finances gerontopsychiatric hospital care according to per diems. The other countries use case related reimbursement systems or global hospital budgets or a mix of financing forms.

Conclusions

Reimbursing treatment by per diems seems to be at least feasible for promoting implementation of community oriented gerontopsychiatric services. However, even if in theory global hospital budgets seem to be the most preferable to promote community orientation of psychiatric services, this result can not be driven from our investigation. Possibilities of organising and restructuring the style of services provided by an institution (restructuring full inpatient care into day treatment in the community), seems to be more important for the availability of adequate services in gerontopsychiatry and psychiatry. Besides that, factors such as political and professional awareness play an important role.

Analysis of regional differences of oral health indicators: selected results of a representative survey

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Aim/Background

Measuring and detecting regional differences in oral health is necessary to investigate their causes and to balance existing differences. The aim of this study was to assess possible regional differences in an oral health survey data set.

Methods

This study was based on data collected in a regional representative oral health survey conducted in 1996 at six examination points in Saxony/Germany (participation rate: 55%, n=714). A variety of clinical variables (number of teeth, caries, hygiene, restoration status, functional status etc.) were assessed in a dental examination. Attitudinal, behavioural and socio-demographic variables were evaluated with a standardised questionnaire. The examination points were classified based on regional geography and environmental planning. In particular, number of residents, distance to urban centres and socio-demographic/socio-economic aspects were taken into account. Three groups were formed representing an urban-centre-region, middle-size towns and rural towns/settlements.

Results

There was no strong and uniform over-all tendency. From the variables showing statistically significant differences, oral hygiene and periodontal health parameters were selected for this presentation. A tendency towards more favourable results was found for the OHI (Oral Hygiene Index), Community Periodontal Index of Treatment Needs and denture hygiene in the urban-centre-region. The OHI in the age groups of 15–34, 35–54, 55–74 years differed significantly between the urban-centre-region (Mann-Whitney-U-Test; $p < 0,05$) and both middle-size towns and rural towns/settlements.

Conclusions

A comparison with national and international studies suffers from extremely diverse definitions of higher urbanisation forms and from the lack of a well established discrimination between cities and rural areas. Future studies on regional differences should employ a profile design and a standardised definition of settlement structures. This study may give an example of how to evaluate data on oral health by use of a model for assignment of examination points to settlement structures.

Cultural differences and subjective evaluation criteria: findings from a European multi-centre study

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Over the last forty years mental health reforms across Europe have promoted the autonomy and social reintegration of individuals with severe mental health problems. Within this context of deinstitutionalisation, community based concepts of care have been developed and acute day hospitals have emerged as an alternative to conventional inpatient psychiatric treatment. Tentative research findings have suggested that day hospital treatment may be as effective and less costly than inpatient care, but there remains a lack of methodologically sound empirical research to corroborate the efficacy of this treatment setting.

This randomised controlled trial aims to evaluate the efficacy day hospital versus inpatient psychiatric treatment for voluntary patients aged 18 to 65. The same study design was employed in five centres in five European countries: Dresden (Germany); London (UK); Wroclaw (Poland); Michalovce (Slovak Republic); and Prague (Czech Republic) to allow transnational analytical comparisons. All new patients admitted to acute psychiatric inpatient care in the five catchment areas were assessed for eligibility for inclusion in the study. Eligible patients who gave informed consent were randomised to day hospital or inpatient treatment. Data was collected on admission and at 1 week, 4 weeks and at discharge.

In the total sample recruited in the first year of the study (December 2000 to November 2001), no statistically significant difference was found between the two treatment settings on subjective evaluation criteria (quality of life, needs, satisfaction with treatment). This initially suggests that day hospital treatment may be a suitable, but not superior, alternative to inpatient treatment. However, there was a statistically significant centre interaction effect on the subjective evaluation criteria. Therefore, it may be that it is not just the treatment type that is important, but also the cultural context of that treatment.

Family history of venous diseases in patients with varicosis: results of a population-based cross-sectional study

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Background and aim

Diseases of the venous system belong to the most frequent diseases in the German population. However, the last comprehensive population-based German data stem from a study conducted in Tübingen in 1979. Since then, diagnostic methods have improved substantially. Practical experience and scientific studies indicate a familial predisposition to this disease. We examined this issue using actual epidemiologic data.

Methods

We conducted a population-based cross-sectional study in Bonn and its surrounding rural area (Recruitment period: 11/2000–12/2001; response: 59%; study participants: n=3072 subjects, 18 to 80 years of age; investigation: standardized medical history, physical examination, duplex sonography of veins of the legs). The definition of varicosis of the leg is based upon the CEAP-Classification. Participants were defined as having varicosis if the clinical classification was at least C3, excluding those showing spider-bursts exclusively. Risk factors examined were family history of varicosis (VV), thrombophlebitis of the legs (TL), deep venous thrombosis of the leg (VT), and crural ulcer (CU). Logistic regression, adjusted for age, sex and family size was used for calculation of odds ratios (OR) and 95% confidence intervals (95%-CI).

Results

There were 304 study participants (10%) showing a varicosis as defined above. Prevalences of family history (parents and siblings) were as follows: VV: 52%, TL: 14%, VT: 13%, CU: 8%. Results of the logistic regression were as follows: VV: OR=1.7 (95%-CI: 1.3–2.1), TL: OR=1.5 (95%-CI: 1.1–2.0), VT: OR=1.4 (95%-CI: 1.0–1.9), CU: OR=1.7 (95%-CI: 1.2–2.4). Including the information on grandparents did not lead to relevant changes in results.

Conclusions

The association between family history of various forms of venous diseases and varicosis was confirmed by the results of this study.

Strengthening the focus on consumers in health care: the quality of care from the patient's perspective questionnaire

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Background

The general population can be viewed as a set of stakeholders that can influence change in health care just as in other areas. This seems to be especially true when the reforms being implemented lead, as they have in Poland, to a growing conflict between social and market values.

Public views also temper the ways in which quality assurance policy in the health care sector can be established. For these and other reasons consumer involvement in defining and delivering information about their needs is a crucial point of the reform process.

Methods

Surveys and feedback from consumers are the methods to accomplish this goal in the Wielkopolska Region. Consumer surveys are administrated frequently to provide ongoing feedback to various units of service organizations. So far in Wielkopolska over 12,000 people have been surveyed on their level of satisfaction and their expectations regarding health care providers, especially in primary health care. It also means in practice: a representative sample of Wielkopolska population was asked to rank, in order of importance to them, a set of items that a prior survey of health care professionals had shown to be important quality issues.

Results

Most answers to the main question: "What does high quality of medical services mean?", concerned: care provided by well-educated staff (45%), patient-oriented attitude (43%), accessibility of care (40%), efficiency of care (36%) and time spent with patient (19%).

Conclusions

Two aspect of the project should be underlined. Firstly, the project's realization can be thought of as creating possibilities for providing services according to patient's expectations what can mean that identifying consumers needs as well as customizing them is the focal point of the Wielkopolska project. Secondly, it follows international trends as well as current Polish policy in terms of involving patients in the health care delivery system.

Social ties and mortality in elderly: Cracow study

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Background

The association between social ties and mortality in elderly have become a topic of increasing interest and research, but little attention has yet been directed to this relation in polish population of elderly.

Aim

The aim of the study was to assess the role of social ties in mortality risk of old community-dwelling citizens of Krakow.

Methods

The study of 30 months mortality was performed in group of 607 participants of two base-line surveys conducted at 12 year interval. The following types of social ties have been examined: i) ties with spouse (marital status) and living with children, grandchildren, other persons; ii) quantity of social contacts per week (5 or more contacts); iii) quality of ties; iv) perceived loneliness; v) attendance to church activities.

Index of social ties, which measure, overall social connectedness combining information an individual types of ties into a single scale has been constructed.

Of the study group of 607 elderly 83 died during the 30 months follow-up study.

Results

Univariate analysis conducted for males showed that risk of death was decreasing with high frequency of social relations face to face (contacts with 5 or more persons per week) (ExpB=0,38). Such factors like living with non-relative (ExpB=2,45) and lack of church activity (ExpB=2,46) have been found to increase significantly death risk.

Multivariate regression model defining independent predictors of mortality demonstrated that low level of social ties had significant effect on mortality risk in old-old males (ExpB=17,49).

Univariate analysis performed for females confirmed that risk of death decreased with higher level of education (ExpB=0,54), high level of independence in (ADL) daily living activities (ExpB=0,77). The risk of death increased with age (ExpB=1,33), instrumental support from family (ExpB=3,66), lack of church activity (ExpB=2,69) and living with non-relative (ExpB=2,45).

Multivariate analysis showed that risk of death increased in females independent in daily living activities during I base-line study but needed instrumental support from the family during the II base-line study (ExpB=3,31).

Conclusions

Study confirmed that predictors of mortality independently affecting mortality of old-old males and females have been found to be directly related to social ties.

Winners and losers on flexible labour markets: the fate of women with chronic illness in Britain and Sweden

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Introduction

Flexible labour markets are once again being advocated among European leaders as a remedy for ailing economies and the persistently high rates of unemployment in many parts of Europe. Britain and Sweden could be considered to be at opposite ends of the spectrum in this respect, with Britain having the most flexible labour market in Europe, while Sweden has one of the most tightly regulated. Together, they therefore serve as a natural policy experiment to study who are the winners and who the losers under the different approaches, particularly among the more vulnerable groups in society, including those who have a chronic illness. This study aimed to analyse whether one approach protected the vulnerable and sick more than the other and what the impacts were for women in different social groups compared with their male counterparts.

Methods

Secondary analysis of data on women aged 25–59 years from the British General Household Survey and the Swedish Survey of Living Conditions 1979–1995, aggregated into four time periods (1979–83, 1984–87, 1988–91 and 1992–95). Age standardised employment rates, unemployment rates and rates of economic inactivity among women with and without limiting longstanding illness, by socio-economic group, in four time periods were calculated.

Results

Overall employment rates were higher and rates of unemployment and economic inactivity were lower in Sweden than in Britain in all periods. The socioeconomic differences in these rates among women with and without limiting longstanding illness were smaller in Sweden than in Britain.

Conclusions

Our results lend support to the hypothesis that active labour market policies and employment protection, rather than deregulation, may increase the opportunities for women with chronic illness (as well as men), to remain in work

Relationships between environmental health and mental health disorders: results from the Belgian health interview survey

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Introduction

The possible link between environmental and health aspects is currently drawing much attention in public health research. This study examines the relationship between (the perception of) environmental noise and mental disorders (depression, anxiety, sleeping disorders and somatization).

Methods

Data from the Belgian Health Interview Survey 2001 have been used. Household members were asked whether they were annoyed by environmental noise. Interviews were performed in a face-to-face setting. All selected members of 15 years or older were asked to

complete an additional booklet used to gather more 'sensible' information, like data on mental health. The prevalence of depression, anxiety, sleeping disorders and somatic complaints was estimated using the SCL-90-R subscales. In total 12,150 persons participated in the study. For 8,990 of them, information on mental health issues was available. Information on environmental conditions, measured on the level of the household, was imputed for all (selected) members of the household. All estimates reported are weighted to the age-sex distribution of the population in Belgium. The association of the selected mental health indicators with the (perception of) environmental noise was assessed using logistic regression while controlling for age and sex.

Results

10,5% of the population (all ages) assesses its environment as (very) noisy. People are mostly annoyed by environmental noise during daytime (6,6%) while 2,4% indicate they are annoyed all the time. The results show that people who assess their environment as (very) noisy are more likely to present symptoms of somatization (OR 1.41; CI 1.40–1.42) and to have depressive complaints (OR 1.94; CI 1.93–1.96), anxiety (OR 2.21; CI 2.2–2.32) and sleeping disorders (OR 1.8; CI 1.79–1.81).

Conclusion

Analysis of the link between environmental noise and mental health dimensions demonstrates that they are correlated: people living in a noisy environment are more prone to mental disorders. However, it should be kept in mind that people with mental disorders are also more sensitive to environmental noise.

Hospital assistance to migrant population in the Lazio region, Italy

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Background

Immigration from Less Developed Countries (LDCs) is increasing in Italy and a difficult access to health care services has been reported.

Aim

We investigated hospitalisation of migrant population in the Lazio region using administrative data.

Methods

Data on acute and day-care discharges occurred during 2000 were selected from the regional Hospital Information System.

Population figures, used as denominators to calculate crude and standardised hospitalisation rates, are reported by the Italian National Institute for Statistics.

We defined as foreigners all the individuals without Italian citizenship.

Results

In 2000, there were 34,747 episodes of hospitalisation in the Lazio region among foreign population. They accounted for 3% of overall hospital discharges.

Age and sex standardised hospitalisation rates for people coming from LDCs were lower when compared to resident population: 132 per 1,000 versus 148 among acute episodes and 31 per 1,000 versus 40 among day-care, respectively. Rates of people from LDCs (age >17) were higher for infectious diseases, psychiatric disorders and external causes both for men and women; rates were higher also for pelvic infections and deliveries among women. Moreover, we observed an excess use of day-care among women aged 18–24, due to induced abortions, the rate being 76 per 1,000 versus 33 among residents.

Conclusions

Results are consistent with other studies conducted in Italy on migrants' health reporting a population in good health status. However, migrants are more frequently affected by conditions like infectious diseases – particularly tuberculosis –, injuries, and induced abortions, related to poor living and working conditions and to social vulnerability.

Patients' attitudes to a hospital based smoking cessation service

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Background

There is little existing research on the implementation of hospital-based health promotion. Much of the published research focuses on

how to persuade clinicians and patients to change their behaviour with little attention paid to the opinions of clinical staff and patients. Available research suggests that to effectively implement a service patients must believe they need it, be willing to use it and feel that this advice is appropriate in the hospital environment.

Aim

As part of a larger study into organisational change, this project investigated patients' attitudes towards a new hospital-based smoking cessation service.

Methods

A survey was carried out of patients attending a large acute unit in Scotland. Patients were asked whether they smoked, had been asked if they smoked, had been advised to stop, had been offered help to stop, would be willing to use a service to help them to stop and whether they felt such a service was appropriate and necessary. 185 inpatients and 228 outpatients responded (response rates of 99% and 95%, respectively).

Results

Forty per cent of inpatients and 28.5% of outpatients smoked. Just over half of the patients were asked if they smoked, 44% of smokers were advised to stop smoking, and over half of the smokers reported that they would like help to stop smoking, although only 5.8% were offered help to do so. The majority of patients (89.2%) thought that it was appropriate to be asked about smoking in this setting and that smokers should be offered help to stop (74.3%).

Conclusions

These findings suggest that there is room for improvement in hospital smoking services offered. Clinicians do not routinely ask patients if they smoke and rarely offer help to stop. However patients feel it is appropriate to be asked about smoking, and that the hospital should offer a cessation service. Many of the smokers want to stop and want help to do so.

The findings contradict those of American studies which suggest patients may be reluctant to receive lifestyle advice in hospital and would rather stop smoking on their own.

Incidence of pneumonia among adults in 1997–1999 in Lazio region, Italy

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Background

Pneumonia is one of the leading cause of death in the world, but it is usually undetected by the infectious diseases surveillance systems.

Aims

To quantify community acquired (CAP), nosocomial (NP) and in AIDS pneumonia (AP) in Lazio region among adults. To describe geographical differences in standardised hospitalisation ratio (SHR).

Methods

From the hospital discharge register we selected incident episodes of pneumonia occurred in the three-year period 1997–1999. The cases met the following criteria: a main or secondary diagnosis of pneumonia; age ≥18; residence in Lazio. Classification criteria for NP were: a hospitalisation in the previous 10 days, a diagnosis of trauma, the main diagnosis different from pneumonia or a pneumonia related disease; the register was screened to detect diagnosis of AIDS or HIV infection. CAP resulted from the exclusion of the other two classes. Hospitalisation rates were standardised by sex and age. We calculated the days of hospitalisation/inhabitant/year for all causes, as an ecological indicator of the exposure to hospital environment.

Results

We found 20444 CAP, 9818 NP and 964 AP (73% meeting also the criteria of NP); the mean age was 65, 69 and 38 years respectively. SHRs for CAP did not show a clear geographical pattern, while SHRs for NP and AP were higher in the five districts of the metropolitan area of Rome (ranges: 105–128 and 107–171 respectively) than in rural-urban districts (ranges: 75–100 and 8–68 respectively). On average, people resident in Rome spent more time in hospital, for all causes, than people resident in rural-urban areas did (1.64 and 1.42 days/inhabitant/year, respectively).

Conclusions

The observed differences in SHRs among areas could be related to variation in both socio-demographic patient factors and health services supply. NP is higher in Rome as well as the time spent in hospital by people resident in Rome. AP is confirmed to be a metropolitan disease.

Doctor's care or self-care? Expectations of doctor's care in case of common self-limiting health ailments

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Background

According to the Health Belief Model, the patient's expectation of the benefit of medical care is an important factor influencing medical help seeking and satisfaction with care. Given developments in Western society, health care, and Dutch general practice, up-to-date information about patients' expectations is of importance for practice management and health care policy.

Aim

The aim of this study is to gain insight in the expectations of the benefits of general practice care as compared to self-care in case of common self-limiting symptoms, as well as to evaluate to what extent patients' expectations have changed over the last 14 years.

Methods

The Nijmegen Expectation Questionnaire (NEQ) was used to assess patients' expectations with regard to medical treatment as compared to self-care given non-severe health complaints. In the NEQ patients' expectations are operationalized in 12 items concerning possible benefits of consulting the general practitioner for various common symptoms. The NEQ was administered in 1987 and 2001 as a part of two Dutch national surveys of general practice. Both study samples were representative with regard to the general practices (1987: n=103, 2001: n=104) and patient population (1987: n=13.014, 2001: n=12.514).

Results

Preliminary findings show that patients' expectations of doctor's care are significantly lower than 14 years ago (mean scores \pm SD: 36,8 \pm 8,9 versus 41,2 \pm 7,7). Expectations and changes in expectations differ between symptoms. Compared to 14 years ago, people would consult the practitioner less to seek relief for a cold or sore throat, but equal or more in case of nervous complaints. Furthermore, expectations vary according to social and demographic variables.

Conclusions

Patients' expectations vary between symptoms and have changed accordingly over time. The question will be addressed how the results of this study relate to increased (access to) medical knowledge, self-care, and past policy measures.

Socio-economic differentials in acute hospitalisation in Rome, 1996–2000

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Background

Many studies reported higher hospitalisation rates among people of low socio-economic status (SES). It is known that the gap between upper and lower SES groups in mortality is widening, but not much is known about hospitalisation.

Aim

To investigate the variation of socio-economic differentials in hospitalisation rates in Rome during the period 1996–2000.

Design

Rome has a population of 2,840,000 inhabitants, in 5558 census tracts (CTs). During the study period 2,041,050 acute hospitalisations occurred among residents.

A record linkage with the Registry Office data to assign a CT index (four levels defined) of SES to the 92.8% discharges.

Direct age standardised overall hospitalisation rates (SHR) by SES were calculated. SHRs were compared across SES levels and calendar years. RR and 95%CI were computed with highest level of SES as reference.

Results

As expected the introduction of a hospital payment system based on DRGs in 1995, generated an increase of the overall SHRs in 1997, followed by a decrease afterwards.

Comparing SES specific SHRs between 1996 and 2000 we observed: for males a slight decrease for the upper SES, and an increase for the lowest SES, and for females an increase in the lowest SES and stability in the upper SES. This contributes to widening of the gap in SHR between the highest and the lowest SESs, particularly among males (Males: RR=1.42, 95%CI: 1.40–1.44 in 1996; RR=1.51,

95%CI: 1.48–1.53 in 2000. Females: RR=1.39, 95%CI: 1.37–1.41 in 1996; RR=1.44, 95%CI: 1.41–1.46 in 2000).

DRG specific analysis showed that the excess hospitalisation of low SES population is mainly attributable to treatments characterised by high probability of inappropriateness.

Conclusions

These findings show that gap between high and low SES in hospitalisation rates, in Rome, appear to be widening from 1996 to 2000. This results suggest the hypothesis of an increasing higher vulnerability of low SES population to inappropriate hospital care.

Targeted Fetal Anomaly Scanning in Edinburgh – Implications for Policy Change

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Issue/Problem

Ultrasound has a number of valuable functions in obstetrics including dating, confirming viability, counting the number of fetuses and the exclusion of certain fetal anomalies.

The most recent report "Ultrasound screening for fetal abnormalities" from the Royal College of Obstetricians and Gynaecologists (RCOG) recommends that a two scan regime (i.e. a booking scan at 10–14 weeks followed by a fetal anomaly scan at 18–20 weeks) should be routinely offered to all pregnant women. Substantial literature exists on the benefits of routine versus targeted scanning, including a number of key trials under randomised controlled conditions.

Edinburgh currently has a policy of targeted scanning which this piece of work sought to review.

Description of Project

During September – November 2000 a working group with representation from across Edinburgh was convened to provide an informed view as to future local policy with regards to fetal anomaly scanning. The agreed remit of the working group was as follows:

- i) To establish the evidence base for routine fetal anomaly scanning by a critical review of the key literature, ii) To describe current practice relating to fetal anomaly scanning in Edinburgh and calculate screening parameters and prevalence of fetal anomaly in the local population, iii) To document practice elsewhere in Scotland.
- To consider the implications of introducing routine fetal anomaly scanning in Edinburgh.

Lessons Learned

The evidence surrounding targeted and routine fetal anomaly scanning is inconclusive with regards to whether a routine or targeted fetal anomaly scanning policy is superior in terms of health outcomes for the mother and child and this is reflected in the variability of policy across Scotland.

Conclusions

The decision to change policy, in this case moving from targeted to routine fetal anomaly scanning, is not always based on the most robust evidence, and has to take into account organisational and political constraints.

Evaluation of national and regional health reports at the European level (EVA-PHR)

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Issue/problem

As part of a research project co-funded by the European Union under the Health Monitoring Programme the "policy impact" of health reports carried out to date in the European Union is being analysed at the national and regional level to find out how the European Public Health Information Network (EUPHIN) should be designed and configured.

Description of the project

150 regional and 50 national health reports have been analysed. This included documentary work as well as a formal analysis of structures and a qualitative political analysis in terms of relevance (responsibilities of the decision-making levels in charge) to the corresponding health system. In an attempt to discover the existence

and form of the conceptual framework for each report the background material was analysed and semi-structured interviews were conducted. Examples illustrating "Best Practice Models" are quoted.

Lessons-learned

In most cases the analysed reports follow no explicitly defined "conceptual framework" but are a mixture of commented medical statistics, institutional achievements or policy-related accountability reports. From the heterogeneity of the present reports in terms of policy impact it can be concluded that the function of health reporting is perceived differently at the national and particularly at the regional level.

Conclusion

For the selection of issues and indicators as part of the further development of the European Public Health Information Network (EUPHIN) special consideration should be given to political responsibilities prevailing at the regional and national level in the EU Member States.

Development of influenza surveillance activity in Italy

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Background

Influenza is currently one of the major burdens on Public Health, due to the high morbidity rate and its complications.

Aims

To develop a system to establish in real time the trend of morbidity and the types of viruses circulating in Italy.

Methods

A network of sentinel practitioners has been set up, coordinated by Regions and the Ministry of Health. Nearly 700 doctors of the NHS (pediatricians and general practitioners) each week notify the number of cases of Influenza-like illness (ILI) observed among their patients directly to the two centres for data collection and processing (CIRI and ISS). Knowing the number, the age and the vaccinal status of each doctor's patients, it is possible to establish the weekly morbidity rate x 1000 subjects and per age group. The Italian population sample is over 2% of the general population. Virological surveillance is carried out for each Region through a network of specific labs.

Results

During the 1999–2000 season, the epidemic period (caused mainly by A/H3N2 strains) lasted 9 weeks with an average aggregate morbidity equal to 7.87/1000 (peak equal to 12.66/1000 in January). During the 2000–2001 and 2001–2002 seasons the epidemic periods lasted 6 and 9 weeks respectively, with an overriding circulation of A/H1N1 virus in the first season and type B virus in the second. Average aggregate morbidity rates were equal to 4.40/1000 (peak equal to 5.53/1000 in February) and 6.05/1000 (peak equal to 8.76/1000 in February) respectively. Children were the major victims of Influenza during the latter two seasons.

Conclusions

The surveillance activity showed the high annual burden of ILI among the overall population. Virological surveillance was useful in suggesting the composition of vaccines, and to increase the knowledge of molecular epidemiology of the infection.

Who returns to work and why? Outcomes from a six country study

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Background

In many countries there is a lack of insight into the effectiveness of measures and incentives aiming to increase work resumption after sickness absence. Under the auspices of the International Social Security Association (Geneva) the repertoire of work resumption measures was compared across six countries (Denmark, Germany, Israel, Netherlands, Sweden and United States).

Aim

The project aimed to learn how work resumption of work incapacitated persons can be improved. To that end for a similar

category of sick listed employees medical interventions (treatment, medical rehabilitation) and non-medical interventions (as applied by employer, social security agency, vocational rehabilitation agency) as well as the role of (dis-)incentives were to be compared and evaluated.

Method

In each participating country a research team created a cohort consisting of employees who were fully work incapacitated for 3 months, due to low back disorders (in the period end 1994 – mid 1995). The cohort size varied from 245 in Germany to 441 in Denmark. The employees were interviewed at 3, 12 and 24 months after their first day of sickness absence. Uniform cohort creation criteria and standardized measurement instruments were used to guarantee comparability across cohorts.

Results

Cohorts showed considerable variations in patterns and rates of work resumption. Return to work rates after one year varied from 32% (Danish cohort) to 73% (in the Netherlands). Medical interventions (treatment, medical rehabilitation) varied across countries, but also showed not to be significantly related to return to work. Also vocational measures (e.g. working time adaptations) and disciplinary measures (e.g. dismissal) were found to be applied differently across cohorts.

Conclusions and discussion

Effectiveness of non-medical interventions as to work resumption was hard to prove. Among interventions, work place accommodations appeared to be the most successful intervention. However, personal and work related 'base line characteristics' (which already are present after 3 months of work incapacity) seem to be more influential (in particular: perceived work ability, pain intensity, age and physical job demands). Contextual aspects like job protection and benefit system showed to affect work resumption with a new employer.

A comparative appraisal of the relationship of income, education and housing tenure with poor health among the elderly in Europe

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Background

Former research did not always show a relation between socio-economic status and health among the elderly. One explanation for this could be that there are some important problems when using the core socio-economic indicators (education, income and occupational class) among the elderly. This indicates that there is a need to systematically assess the usefulness of different socio-economic indicators and to explore alternative socio-economic indicators, like housing tenure.

Aim

The objective of this paper is therefore to determine the power of different socio-economic indicators in predicting poor health among the elderly.

Methods

Data from national health surveys from 10 European countries was used. Education, income and housing tenure were used as socio-economic indicators, since they were available in most surveys. These indicators were studied in relation to self-assessed general health using standardized prevalence rates and (multiple) logistic regression analyses. Data were analyzed for elderly respondents of 60 till 79 years of age.

Results

In each country there are substantial differences in self-assessed health among the elderly according to education and income. After mutual control both education and income still show a strong relation with self-assessed health among the elderly. Health differences according to housing tenure are usually smaller, especially after control for education and income. In Great Britain and the Netherlands however, housing tenure shows a strong relation with self-assessed health, even after control for education and income.

Conclusions

It is recommended to use both education and income as socio-economic indicator when studying socio-economic health differences among the elderly. In most European countries housing tenure can not replace education or income as socio-economic indicator.

Recent advances in stress management and prevention programs: a cumulative meta-analysis study

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Background

A recent systematic review in managing and preventing work-related stress (van der Klink et al.) found that cognitive-behavioral interventions were more effective than organizational ones. This meta-analysis, which was carried out using 48 articles published between 1977 and 1996, showed that the former had a higher effectiveness than the latter (Cohen's d: Cognitive-behavioral 0.68 95% CI: 0.54,0.82; Organizational 0.08 95% CI: -0.03,0.19).

Aim

The aim of our study was to evaluate whether recently published trials (1997–2002) significantly improved the knowledge about the effectiveness of the different intervention programs.

Methods

We carried out a cumulative meta-analysis of the literature about stress management and prevention programs for each of the two intervention types considered. We searched electronic bibliographical databases (Pubmed, Blackwell Sinergy, SWETSNET) using the following keywords: work stress, stress management, work-site stressor, job stress, distress at work, stress therapy, stress reduction, occupational stress, absenteeism, sickness leave. Inclusion criteria were the following: intervention aimed at reducing stress in a working population and experimental design. We computed Cohen's d in order to estimate the effect size of an intervention.

Results

We found 653 articles searching for the chosen keywords; 4 trials meeting inclusion criteria were added to those considered in van der Klink's meta-analysis. We studied 15 outcome variables in these studies. Organizational interventions were showed to be ineffective with Cohen's d = 0.03 (95% CI: -0.05, 0.11); on the other hand, cognitive-behavioral programs gave evidence of a moderate effectiveness with Cohen's d = 0.51 (95% CI: 0.39, 0.63), thus lowering the estimate of the effect size computed in the previous systematic review.

Conclusions

Our findings confirm the different impact in terms of effectiveness of the two types of intervention considered and sharpen the precision of the estimates. Further considerations about an economic evaluation of different stress management and prevention programs are needed.

Spatial Patterns of Cancer Mortality in Europe

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Background

Previous research in cancer mortality has revealed large spatial variations within and between countries and that factors associated with the aetiology of most cancers include diet, socio-economic status, smoking and genetic predisposition. Without detailed data on individual mortality and exposure to risk factors it is still possible to explore the geographical variations in cancer mortality and their relationships with population characteristics.

Data and Methods

Cancer mortality data and population data are available for 187 regions in 11 EU countries by age and sex. All deaths from neoplasms are examined for 1991 and standardised mortality rates have been calculated. Other data available are consumption (per head) of fresh fruit, vegetables, animal fats, alcohol and cigarettes for each country and GNP per head at a regional level. Spatial multilevel models were used to examine the distribution of cancer mortality. Mapping the mortality rates from these models allows visual exploration of patterns across Europe. The addition of covariates in the models allows the associations with causal factors to be examined.

Results

After taking into account the spatial structure of the data and adjusting for significant causal factors, France has the highest mortality rates and Greece and Finland have the lowest, with mortality appearing highest in the West. Univariate analyses of the effect of the covariates on cancer mortality suggest fruit and vegetable consumption are negatively associated with the risk of all

cancer mortality and animal fat consumption is positively associated. Smoking appears to show no association with cancer mortality. When examining the factors together, the positive association between smoking and cancer mortality becomes apparent.

Conclusions

High variability in cancer mortality between and within countries in EU is evident. Lifestyle factors have strong influences on the risks of cancer mortality. Estimates are improved by taking into account spatial relationships and relationships with covariates.

Rising workload or rising work pressure in general practice in the Netherlands

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Background

General practice in the Netherlands seems to be in a crisis. Worries about shortages of GP's, the first strike of general practitioners in 2001 and the rapid increase of triage systems in out of hours care are signs that work pressure and/or workload are rising. But systematic evidence of this is not presented yet.

Aim

To investigate change in work stress and workload in general practice over the past ten years. Also relationships between subjective and objective work stress are analysed.

Method

A comparison is made of results of the first and second Morbidity Survey in General practice held in 1988 and 2001 respectively. In both surveys participated more than 100 practices with 160/190 GP's and 330,000/400,000 listed patients respectively. The GP's registered diagnosis and type of consultation for all consultations during one year. During six weeks consultation length was registered. Further an extensive postal survey was held with a.o. questions around work satisfaction, working hours, task delegation and the Maslach Burnout Inventory. Diaries were kept during 1 week.

Results

The consultation rate rose from 3.2 per patient per year to 3.9. At the same time there was a shift from home visits to less time demanding office hours consultations. The average working week remained about 50 hours for a full-time working GP. Consultation length did not change either. Task delegation increased by professionalisation of practice assistants, the introduction of practice nurses and out-of-hours triage systems. Work satisfaction decreased, however, and higher scores were reached on the Maslach Burnout Inventory.

Conclusions

The crisis in general practice seems to be caused by rising work pressure rather than rising workload.

Physicians working in different hospitals: variation in what they do?

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Background

A persistent finding in health services research is that hospital utilization varies widely between small areas. These differences do not disappear when differences in need, as measured by age, gender, and socio-economic variables between patient populations have been controlled for. Explanations for the variation between and similarities within units have been sought in different directions. Most were based on individual practice style, leaving the behavioural mechanisms that produce different practice styles unclear. We search for an explanation in the social conditions that influence the behaviour of physicians.

Aim

The aim of the study is to examine whether medical practice variation is related to the work-environment of physicians. Two questions are asked, first: Is variation in length of stay for comparable patients within hospitals small compared to variation between hospitals? Second: Does the length of stay chosen by physicians working in different hospitals vary in the direction of the average stay in the hospital where the procedure was performed? We hypothesize that the combination of similar institutional restrictions and the tendency of physicians to conform to the usual practice in the hospital, results in small length of stay variation between physicians treating similar patients within hospitals. Furthermore, we

hypothesize that physicians working in more than one hospital conform to the usual practice in each of these hospitals.

Methods

We used the 1999-data from different hospitals in the state of New York (USA), originating from the Statewide Planning and Research Cooperative System (SPARCS). Data on the surgical interventions hysterectomy, cesarean section, total hip replacement were used. Other medical conditions used in the analysis were Congestive Heart Failure (CHF) and Chronic Obstructive Pulmonary Disease (COPD). We examined hospital length of stay concerning patients with these interventions and illnesses.

The total data set consists of 240 hospitals, 17,238 different physicians, and 211,477 cases.

Multi-level analyses were used to find out whether variation in length of stay for specific procedures within hospitals was small, compared to the variation between hospitals. Furthermore, it was analysed whether physicians working in different hospitals chose a length of stay comparable to the usual practice in the hospital.

Results

First results show that there is more variation between than within hospitals. Furthermore, it was found that physicians working in different hospitals choose different lengths of stay in the hospitals where the procedure is performed. As yet, no statistical evidence was found that these physicians conformed to the usual practice in the hospital, but indications have been found and these are further explored.

Conclusion

Our study shows that variation in length of stay is larger between hospitals than between physicians within hospitals. Physicians seem to conform to local standards, which differ between hospitals. In developing effective interventions to reduce variation in medical practice, the social context in which physicians practice should be taken into account.

In-hospital mortality for stroke and misclassification in a cohort derived from the Health discharge register of Lazio Region Italy

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Background

In health outcomes research the evaluation of co morbidity data is essential. Some studies have criticized co morbidity data, derived from administrative databases, for lacking the accuracy required for clinical research.

Aim

To detect misclassification in discharge records of stroke hospitalisation. To analyse the association between the outcome, death or at home discharge, and misclassification for some co morbidities.

Methods

The study population consists of a cohort of 12781 incident cases with a diagnosis of acute stroke (ICD9CM 430–431–434–436), resident in Lazio region, aged ≥ 18 years, occurred during the two years period 1999–2000 and selected from the hospital discharge register of Lazio region (Italy).

We looked for all diseases known to be risk factors for stroke mortality in previous hospitalisation of the cohort population: we define patient as misclassified when discharge record do not report a chronic disease diagnosis notified in previous hospitalisation.

Results

The risk of death for stroke associated with Diabetes Mellitus (DM) is OR 0.76 (IC95% 0.68–0.84), after reclassification the OR is 0.94 (IC95% 0.85–1.03); dropping the incidence episodes without previous hospital discharges, the OR becomes 1.03 (IC95% 0.91–1.17).

We obtain similar results for the following co morbidities: peripheral vascular disease, obesity, psychiatric diseases, degenerative nervous system.

Conclusions

Reclassification of patients based on previous discharge eliminate the paradox effect of protective OR for some chronic diseases. The residual not differential misclassification introduces a bias toward the null. Anyway, misclassification limits the utility of administrative data for risk adjustment in stroke mortality.

Working abroad: Experiences of nurses from other European countries in The Netherlands

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Background

Because of nursing shortages some Dutch health care organizations want to recruit nurses outside Europe (e.g. Indonesia, South Africa). The Dutch government, however, does not stimulate this policy and prefers recruitment within the European Union. This study concerns the experiences of nurses from other European countries in The Netherlands.

Aim

Research questions are:

1. To what extent and for which reasons do nurses qualified in other EU-(candidate) states want to work in The Netherlands?
2. How do they prepare working in The Netherlands?
3. What problems do they encounter when searching for a job?
4. How do they experience working in the Netherlands?

Methods

A questionnaire has been send to all registered nurses educated in another EU-(candidate) state (response is 987 or 67%).

Results

Until now approximately 1500 nurses from other EU-(candidate) states came to The Netherlands. Private reasons, such as marriage, are the most important reasons for coming. Half of the nurses followed one or more courses before starting to work as a nurse, often Dutch language courses. The nurses had a number of adjustments to make. The foremost problem was to get acquainted with the Dutch laws and procedures (such as taxes, social security), the recognition of diplomas, and the application for permits. When searching for a job it is difficult to know what is customary (e.g. how to write a letter). Language and unfamiliarity with the Dutch health care system caused them problems finding a job. Once working as a nurse these remain the most important problems.

Conclusions

International nurse mobility towards The Netherlands is rather low. If the Dutch government decides to import nurses from other countries, several measurements can be taken to make working in The Netherlands more attractive.

The Use of a Household Survey in the Community Assessment Process in Armavir Marz, Armenia

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Issue

A US-Armenia community health partnership desired population-based information to guide its development of a multi-year strategic plan on improving primary health care in Armavir Marz, Armenia. The partnership needed information on health status, knowledge, attitudes, beliefs, and practices of the target population. The limited extant health information system could not address these needs.

Description of the Project

In April 2001, a baseline household health survey was conducted among the residents of Armavir Marz, Armenia. The study utilized a multi-stage cluster sample, probability proportional to size, cross sectional, hybrid (combination of interviewer-administered and self-administered) design. All women 18 years old and older living in a selected household were considered eligible for the survey. Respondents orally consented to participate after having the project explained to them. Responses were confidential. Trained nurses from the local clinics conducted the fieldwork. A total of 1,019 households from 59 populated areas participated in the survey.

Lessons Learned

The results suggested a high prevalence of both probable depression (55.4%) and perceived chronic health conditions (high blood pressure 27.2%; cardiac diseases 23.5%; gastro-intestinal pathology 19.3%; kidney problems 17.1%) negatively affecting the quality of life of the target population. Low accessibility of medical services, poor practice and knowledge of preventive medical care, childcare, and reproductive health were among the other important findings. The survey revealed difficult socio-economic status as the primary causal factor for low accessibility to health care services and as one

of the key risk factors for unsatisfactory health status of the target population.

Conclusion

The survey served as a good source of data, both quantitative (burden) and qualitative (perceived priorities) for the partnership in identifying areas of concern needing immediate intervention and valued by the community. In the absence of health information systems, rapid survey techniques can be used to guide community-based prioritization of health needs.

Equal access for equal needs: role of cultural differences and language proficiency

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Background

With the increased migration in Western countries, health care is more and more confronted with people from various ethnic backgrounds. Health behaviour is culturally bound and thus partly responsible for ethnic specific utilization patterns.

Aim

To assess the relative importance of cultural differences and language proficiency on differences in health care utilization in addition to the known contribution of socio-economic factors.

Method

We used data of a large national survey among the largest ethnic minority groups and a Dutch comparison group in the Netherlands. In 1998 1562 Turks, 1353 Moroccans, 1759 Surinamese, 1032 Antilleans and 1433 Dutch people were interviewed in their preferred language. The interview contained questions about health status (subjective self rating), health care use, ethnic background, cultural norms and values, language proficiency in Dutch and mother tongue and socio-economic indicators as education, profession and income.

Results

Turkish and Moroccan people experienced their health more often as worse than Dutch and Antillean people (21%, 23%, 8%,8%). Turkish people visited their GP most often in the past two months (1,6 times), followed by Moroccans (1,2), Surinamese (1,1) Antilleans (0,9) and Dutch people (0,8). Adjusted for health status, Turkish and Surinamese people visit their GP most often.

Based on several questions, Turkish and Moroccan people have the most traditional norms and values and the Dutch the most modern views. Turkish and Moroccan people have the most language difficulties, as well in Dutch as in their mother tongue. Also, the same groups have the lowest socio-economic position.

Results from multivariate analyses will be presented.

Conclusion

Differences in health care utilization between ethnic groups exist regardless of health differences. The relative importance of socio-economic factors versus cultural factors will be discussed.

Modern social marketing can increase the effect of traditional preventive measures in hypertension. Results of the Polish Four-Cities Project

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Background

The efficacy of various educational interventions in the detection and management of arterial hypertension has not been established.

Aim

The objective of the Polish Four-Cities Project, carried out in 2000 and 2001, was to develop effective methods of detection and management of arterial hypertension, especially in men and in small towns where the epidemiological situation worsened over the recent years.

Methods

The study was carried out in three small towns (population of 17.000): Kartusy (traditional intervention), Oborniki (traditional intervention plus social marketing), Braniewo (control location – no intervention), and in a district of one large city (>200.000) –

Łódź (traditional intervention). The intervention lasted 3 months. Traditional intervention consisted of education and training for medical staff representing primary health care (doctors and nurses) and an invitation to blood pressure measurements for all men and their spouses. Social marketing intervention (social research and an intensive media campaign) was added to traditional intervention only in Oborniki. Before the intervention started and half a year after it finished, a representative survey based on a questionnaire interview and blood pressure readings (n=450–500 subjects aged 30 years and over in each survey) was completed in each of the four cities in order to assess changes in blood pressure awareness, detection of hypertension, usage of antihypertensive drugs and knowledge about risk factors.

Results

Blood pressure awareness increased significantly ($p < 0,001$) in Oborniki (from 61% to 77%), while it did not change in three other cities. The percentage of undetected hypertension cases significantly decreased in Oborniki (from 50% to 27%), and in Łódź (from 46% to 28%), while it did not change in two other cities.

Conclusions

The results of the Polish Four-Cities-Project show that modern social marketing can increase the effects of traditional preventive intervention. Traditional methods seem to be only effective in large cities.

Looking at home injuries using an emergency-based surveillance system: a complex phenomenon

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Background

Home accidents are a new frontier for the public health and prevention. The dimension and the characteristics of the phenomenon are not yet defined. A new surveillance system based on the emergency gathers information about home injuries in Lazio region.

Aim

To quantify and to describe the incidence of home injuries in Lazio.

Methods

The source of data is the emergency information system, collecting all the admissions to emergency wards. We selected all the emergency admissions for traumas occurred at home, except for intentional injuries. We calculated incidence rates by sex and age for any type of injury and body district based on the ICD-9-CM diagnosis code reported. Triage, an operative scale of urgency, was used as an indicator of severity.

Results

We found 145500 episodes of injuries admitted to emergency wards in 2000 (2700/100000). 74% of the cases were of the less severe triage and 20% were cases judged not proper for emergency ward. The most frequent injuries are: contusions (29%), open wounds (21%), fractures (15%), stretches and distortions (10%) and superficial injuries (5%). The arms are affected in 42%, head in 27%, legs in 17%, the spinal column in 6% and the trunk in 3%. The contusions show a peak in newborns for the head and in old women for arms; legs fractures show a peak in the elder especially in woman; open wounds are higher in newborns for all the body and in young adult males for limbs; burns have a lower incidence in school age; poisonings are higher in children and elder.

Conclusions

The shape of the curves of incidence by age is completely different for any type of injuries analysed. Home accidents are a complex phenomenon affecting different groups of population with different injuries.

Extreme temperature effects over daily mortality on children under 10 years of age in Madrid, 1986–1997

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Background

In the last years, lots of papers have analysed the extreme temperature over the total population or in the elderly, but few of

them have studied this effects in the children group and particularly in those under 10 years of age.

Aim

The objective is to analyse the extreme temperature effects on daily mortality in the group and subgroups of children under 10 years of age in Madrid, controlling by the effects of other covariables.

Methods

The study included the period from 1 January 1986 to 31 December 1997, for all population resident in Madrid under 10 years of age and the subgroups considered were: children under 1, 1–4 and 5–9 years, based on mortality due to all causes except accidents (ICD-9-codes 1–799). Appropriate confounding factors were controlled. The study has been focused on heat wave effects (May–September) and cold wave effects (November–March). Poisson regression methodology was performed.

Results

In the percentile 5 and 95 of the maximum temperature daily series is defined cold wave when daily maximum temperature not surpass 6.2° C while heat wave is considered when daily maximum temperature exceed 36.5 °C. The analysis shows that there is no statistic association in heat wave days. Nevertheless, there is an association in the case of cold wave days. Although this association is established for the group of children under 10 years, the main contribution to the mortality is caused by under 1 year. The relative risk (RR) are 1.021 (1.007–1.034) for children under 10 years, and 1.012 (1.003–1.020) for under 1 year.

Conclusions

There is a statistic association between daily mortality, in the group of children under 10 years, particularly under 1 year, and temperature in winter period when the maximum temperature not exceed 6.2 °C. There has not found association in the case of heat.

Results and efficiency of treatment in children with early childhood caries (ECC)

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Early childhood caries (ECC) is a public health problem in many European countries. The aim of our study was the assessment of the results of dental treatment for children with ECC. Between 1992 and 1999 418 children with ECC got comprehensive dental care at the university department of paedodontics. Now they were invited for check-up. 99 children had moved unknown. 149 of the remaining 319 children (47%) could be examined. Data were obtained by clinical examination and a questionnaire, filled in by parents. Statistical analyses were performed by Chi-square test ($p < 0.05$). Mean age at the beginning of dental treatment was 3.3 (± 1.3) years, mean dmft-score was 10.0 (± 4.1). The first comprehensive treatment lasted 3.9 (± 3.0) months. The costs of this treatment were 343 (± 153) Euro per child. 48% of children had been treated under general anaesthesia. At check-up 64% of the mothers confirmed an improvement of the oral health status of their child. But only 41% of all children had complete treated teeth: 56% of children, who had been treated conventionally, but only 35% of children after treatment under general anaesthesia. Children, attending after treatment paedodontic department at the university, more often had healthy or treated permanent teeth than children, referred back to their own dentists ($p < 0.05$). Because dental treatment of children with ECC is highly expensive, we concluded, that intensive preventive care is required after oral rehabilitation to certain results and to increase compliance of children and parents. Competent advices are important.

Quality of life one year after acute brain damage in patients and their spouses: preliminary results

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Background

Brain injury is one major cause of long-term disabling conditions in society. Many studies have investigated the psychological adaptation of patients and the burden and health of family caregivers. Only in the recent years there have been studies which focused more closely on the issue of quality of life in patients and family member, most of them being cross-sectional.

Methods

We conducted a prospective study on the role of social factors in adaptation after traumatic brain injury (TBI) and subarachnoidal haemorrhage (SAH), respectively.

The first assessment took place as short as possible after the incident. One year later, patients and spouses were administered, among other instruments, the WHOQOL-BREF which is designed to measure quality of life in four domains. Additionally, a global score can be computed.

Results

So far, data for N=35 couples who completed the 12-month follow-up are available; twenty-five patients were able to provide data on the WHOQOL. Mean age of patients and spouses at time of injury was about 44 years. 54.3% of patients had sustained a moderate and 45.7% a severe brain injury. The comparison with the normative data on the WHOQOL revealed that neither the group of patients nor the spouses showed a marked reduction of their quality of life. Cross-sectional analyses showed significant associations primarily between anxiety and depression and the quality of life. Furthermore, longitudinal analyses provided hints for the importance of spouses' level of anxiety shortly after the incident and pre-injury social characteristics for the quality of life one year after brain injury.

Discussion

The results indicate that there are couples who achieve and maintain an acceptable quality of life one year after brain injury. Anxiety symptoms seem to play a major role in determining quality of life. Furthermore, pre-injury couple and family functioning probably are of additional importance. These conclusions are limited by the small sample size, missing data and attrition and thus have to be considered preliminary.

Diagnosis Related Groups Hospital Performance Impact Assessment: a Prediction for Eastern European countries

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Background

The Diagnosis Related Groups (DRGs) are a patient classification system designed to group inpatients according with the diagnosis and resource use. Beginning in 1983, the United States of America (US) introduced DRGs as a prospective payment for inpatient services. Based on the US experience, most Western countries have initiated the incorporation of a DRG system as a part of their national hospital financing system. Following the Western model, Eastern European countries are in the process of DRGs system design and implementation. DRGs as a system of hospital financing has major influence on the rest of the health care system and thus the public health situation.

Objectives of the study

1. To predict the impact on hospital performance of the introduction of a DRGs financing system in Eastern European countries,
2. To make recommendations for the measures to be taken at policy level for an effective implementation of a DRGs financing system in Eastern European countries.

Methods

First, an extensive literature review was carried out to assess the impact of DRGs and other health system attributes on hospital performance in four case-study countries (US, Portugal, Hungary and Italy). Hospital performance was defined through seven performance indicators: Length of stay, Case-Mix Index, Hospital admission Rate, Mortality in selected DRGs, Patient status at discharge, Type and volume of services provided and Readmission rates. Second, based on the international overview and specific local circumstances, a prediction for the impact on hospital performance of the DRGs system in an Eastern European country is made, taking Romania as a case study. Further on, predictions for Eastern European countries in general are provided.

Results

1) The impact of DRGs on hospital performance in Eastern European countries will depend on: Quality assurance measures adopted, the type of DRGs payment (per case or case mix adjusted model), the use of the DRGs as a unique payment method for inpatient care or in combination with other methods, payment method for outpatient and primary care services, medical advances in health care.

2) In principal, DRGs will have the following impact on hospital performance in the actual Eastern European context: LOS will

decrease; Hospital admission, CMI, Hospital readmission and Discharge impairment will increase; Hospital intensity services will decrease and Mortality rates will remain unaffected.

3) The potential DRGs implementation raises serious concerns from the public health perspective. Nursing homes and facilities for the elderly are not adequately developed to provide care for those patients who are discharged earlier from the hospital setting. Also, families will face an increased burden to provide support and elder care.

Conclusions and Recommendations

1) A Case mix adjusted model should be adopted rather than a per case system for payment purposes in Eastern European countries. If a per case payment is adopted, restrictions must be established for the number of cases treated during one year,

2) The DRGs system must be implemented together with a sound quality assurance program,

3) A consistent training program in clinical coding has to be organised at initial and ongoing levels,

4) Strict legislative measures have to be established to prevent coding fraud,

5) A gradual programme for alternative care development (home care, social care and nursing homes facilities) has to be carefully considered prior to and during the system implementation.

Risk factors for coronary heart disease in middle-aged women

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Aim

To evaluate the relationships between recognised cardiovascular risk factors and the risk of myocardial infarction (MI) or death from coronary heart disease (CHD) in the middle aged women.

Methods

A prospective study with average follow-up of 11.97 ± 0.07 years of 2,788 women who had participated in risk factors survey within the framework of the WHO MONICA Project either in 1983–1984, 1987 or 1992–1993, was conducted. The end points used in the present study were the incidence of MI or death from CHD. There were 27 cases of MI and 30 deaths from CHD among women who were free of CHD at entry ($n=2,319$). Age and risk factor-adjusted relative risks (RR) for CHD were determined by use of the Cox proportional hazards model.

Results

In the univariate analysis an increase by 1 mm Hg in systolic and diastolic blood pressure (BP) was associated with increased risk of CHD by 1.4% and 2.7%, respectively. An increase of high density lipoprotein cholesterol (HDL Chol) level by 1 mmol/l was associated with 3-fold decreased risk of CHD. Presence of diabetes was associated with more than 5-fold increased risk of CHD. The influence of total serum cholesterol level was not significant. According to the results of multivariate analyses, presence of diabetes ($RR=3.7$; $p<0.05$), decrease in HDL Chol ($RR=0.33$; $p<0.05$), increase of systolic BP ($RR=1.0$; $p<0.05$) and age ($RR=1.1$; $p<0.05$) appeared to be strong and independent risk factors for CHD.

Conclusion

The main risk factors for MI or death from CHD among women aged 35–64 years appeared to be diabetes, HDL Chol and systolic BP. The effective means of prevention are available for all risk factors mentioned above.

Comparison between self-reported symptoms and GP records in the aftermath of an airplane disaster

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Background

On October 4th, 1992, an El Al Boeing 747-F cargo crashed on two apartment buildings in Amsterdam. Thirty nine residents on the ground and the four crew members of the plane died. In the years after more and more people, attributed physical signs and symptoms to their presence at the disaster scene.

Aim

To investigate the consistency between patient's symptoms attributed to the crash, and GP's diagnoses and perception of the association with the crash.

Method

Comparison between self-reported symptoms to a call centre six years after the disaster and GP's medical records on onset and type of symptoms, diagnoses and GP's perception of association with the disaster assessed by questionnaire.

Results

The 553 respondents reported on average 4.3 complaints to the call centre. The majority of these symptoms (74%) was reported to the GP. Of the top ten of symptoms fatigue, skin complaints, feeling anxious or nervous, dyspnea and backache were in 80% reported to the GP. One out of four symptoms were either reported to the GP before the disaster took place, or six or more years after ('98/'99, at the time of a lot of media attention). Depression (7%), PTSD (5%) and eczema (5%) were most frequently diagnosed by GPs. GPs attributed 6% of all reported symptoms to the disaster.

Conclusions

Most of the symptoms attributed to a disaster by patients have been reported to their GP. GP's related only a small proportion of these to the disaster.

Narrowing the gap between disease surveillance and disease control: a Dutch National Electronic System for Infectious Disease Surveillance

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Issue/problem

Forty-three health services provide complete national coverage of infectious disease control and surveillance. They report on 33 notifiable disease to the Inspectorate of health and the National Institute for Public Health and the Environment (RIVM) using paper forms. Because paper data management required a huge administration and was very time consuming, reporting delays and incomplete data were common and therefore surveillance & control of infectious diseases was suboptimal. To optimise disease surveillance, a standardised electronic system for infectious disease surveillance was developed. This system was developed as an integral part of the already existing national Infectious Diseases Surveillance Information System (ISIS).

Description of the project

The RIVM, in collaboration with three municipal health services, the Health Inspection and the National Association of Municipal Health Services, developed an Internet Surveillance Reporting System. As of January 1, 2002, the system was implemented in the Netherlands during a period of 9 months. To train people in electronic data collection, at first double data collection, electronic as well as on paper was required. As soon as persons were used to the new system they were authorized to report only by internet.

Lessons-learned

After a 6 month period we evaluated the system. The main findings were:

- ISIS serves as an instrument for rapid disease surveillance.
- ISIS reduces the amount of administration.
- ISIS increases the speed of reporting, as well as the quality of the data.

Conclusions

ISIS appeared to be a reliable instrument to enhance the surveillance of all obligatory notification infectious diseases in the Netherlands. It offers rapid and accurate data on infectious diseases and it facilitates interaction between the Inspectorate of Health, the RIVM and the regional health services.

To narrow the gap between disease surveillance and disease control, ISIS proved to be an adequate instrument.

Socioeconomic status, comorbidity and the use of health services in the Netherlands

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Background

There is a strong association between comorbidity and volume and variety of health care utilisation.

Aim

The study objective is to examine the relation between socioeconomic status and multiple health care utilisation and comorbidity.

Methods

Analysis of continuous Netherlands Health Interview Survey data (1990–1998). The study population consisted of adults older than 25 years ($n=53,339$).

Socioeconomic position was indicated by educational level in four categories. Comorbidity was defined as the concurrence of multiple health conditions in the same persons. Multiple health care utilisation was measured by the number of different health care services contacted in the preceding year. Health services included were general practitioner, medical specialist, physiotherapist, home help and/or home nursing, and hospital admission. Statistical methods used are logistic multiple regression, adjusted for age, gender and year of interview.

Results

The lower the socioeconomic status, the more often people used three or more different types of health care in the previous year (OR 1.46). Comorbidity – more than one chronic disease in the same person – also occurred more often in lower socioeconomic groups (OR 2.47). This socioeconomic pattern of comorbidity explained one third of the educational differences in volume of health care services.

Conclusions

Socioeconomic differences in comorbidity explain part of the association between socioeconomic status and multiple health care use. Nevertheless, even after adjustment for multiple morbidity, socioeconomic differences in the use of multiple health services still persist.

Cardiac Rehabilitation

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Important changes in cardiac rehabilitation have occurred in last years. At the beginning, it was concerned mainly with patients recovering from uncomplicated myocardial infarction. Gradually, the indications for cardiac rehabilitation have broadened, including patients after heart surgery or percutaneous coronary interventions, subjects with chronic heart failure or peripheral artery disease, those with implanted pacemakers or cardioverter-defibrillators, and the elderly.

Numerous studies have shown that cardiac rehabilitation as a multifactorial intervention improves functional capacity, emotional well-being, return-to-work rate and longevity. Moreover, it has been proven to be cost-effective intervention, especially following acute coronary events. The costs of cardiac rehabilitation are comparable to those of other routinely offered treatments.

Contemporary rehabilitation is not only exercise training, but it is considered as a cornerstone of secondary prevention, especially in patients with coronary heart disease. The role for exercise to improve functional capacity for the prevention and treatment of cardiac disability is unquestionable. The concept of cardiac rehabilitation as a secondary prevention method is a challenge for the nearest future. We need system of care that can effectively reduce risk in patients with coronary heart disease by detecting metabolic risk factors, offering successful weight-loss programs and nutritional counselling, by optimising hypertensive and diabetic care, by recognizing and treating depression, and by optimising preventive pharmacologic therapies.

The number of patients participating in cardiac rehabilitation programs should be increased. The reason for many subjects eligible for rehabilitation do not participate in it is not only financial barrier, but also weak motivation to change lifestyle habits and lack of physician referral. Life-long prolongation of the rehabilitation/secondary prevention and individualization of rehabilitation strategies are other important issues.

Taking into account contemporary experience, it seems unquestionable that in the 21st century all patients who can benefit from cardiac rehabilitation services should receive them.

The health impacts of new roads: a systematic review

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Background

Road building is an emotive and controversial issue. Any attempt to assess the costs and benefits of new roads must take into account human health, particularly considering the growing use of Health Impact Assessments.

Objective

To review the available evidence on the positive and negative impacts of new roads on human health and wellbeing, focusing on developed countries.

Method

Systematic literature review: published and unpublished studies in any language eligible for inclusion.

Results

Following evaluation for methodological quality, studies from Europe, North America and Australasia were selected for synthesis. The majority of those synthesised were before and after studies with some controlling for confounders.

According to these studies, introducing new bypasses significantly decreases road injuries. New urban arterial roads do not appear to have a significant impact on injury rates.

Annoyance caused by noise, dirt, and ambient pollution is related to traffic density. New urban arterial roads increase annoyance, whilst bypasses decrease annoyance in towns and villages. In both cases the impacts are long-term.

Residents' perceptions of community severance also correspond to changes in traffic density. Behavioural adaptations to such changes can take several years to manifest themselves.

Conclusion

Many primary studies investigate environmental impacts of new roads, but relatively few attempt to measure human health outcomes. This review shows that bypasses have positive impacts on health, whilst arterials have negligible or negative impacts in terms of road injury, severance and annoyance. More research is needed on health inequalities, specific health impacts of pollution and induced traffic.

Predictors of good quality of life in school children: a population-based Swedish study using a new concept, Positive Odds Ratio

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Background

The health and well-being of school children have come into focus in recent decades. In conjunction with the family, the school is an important setting for children, where different health issues can be addressed. Health-promotion activities are being run in two schools in a rural district in Sweden. The results of the baseline measures in 2000 are used for this study.

Aim

The purpose was to analyse predictors of positive quality of life among school children.

Methods

The study group consisted of 206 children, 114 boys and 92 girls, aged 8–12 years. The participation rate was 99.5%. A questionnaire was used to collect the data, with special attention to the youngest children's ability. Quality of life is referred to here as the child's own evaluation of his/her life contents, i.e. global quality of life. A logistic regression model was used to analyse the data, including various aspects of health, attitudes, behaviours, self-confidence, relations and habits. In keeping with the salutogenic perspective of the study, a new concept, Positive Odds Ratio (POR), was used as an outcome of the analysis instead of the odds ratio, which is commonly used in epidemiological studies with a pathogenic approach.

Results

Variables found to be significantly related to good quality of life were good subjective health (POR=3.0), feeling comfortable with the classmates (POR=4.4) and teachers (POR=3.0), self-reported skills in physical education (POR=3.1), feeling popular among the opposite sex (POR=3.2), good self-reported condition (POR=2.9), exercise in a sports association (POR=3.0), feeling appreciated by friends (POR=2.5), and having at least five friends (POR=2.5).

Conclusions

In conclusion it seems that variables constituting good quality of life in children are principally related to friends and self-reported fitness. Positive odds ratio is a concept well adapted to theories of health promotion, which can be used when talking about positive outcomes instead of risks.

Methodological problems in health care research among Moroccan migrants in the Netherlands

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Introduction

In many European countries, research on health (care) of migrants is increasing. In the Netherlands, Moroccan migrants seem to generate more difficulties than other groups. Response rates are often lowest. Although this is one of the largest groups, for this reason, researchers every now and then decide to exclude them from their research. Aim is to get insight in the problems encountered in data collection among Moroccans, in order to provide recommendations for improvement.

Methods

Data are based on experience in 3 studies. The 1st study deals with experiences and opinions of Moroccan women with Dutch maternity care. For this study 90 in-depth interviews were conducted among women who recently gave birth. The 2nd study concerns the development of a valid and reliable instrument to measure the quality of care as experienced by migrants. In this study focus group discussions were conducted, followed by face-to-face interviews among 151 migrants. The 3rd study concerns the prevention of cardiovascular diseases in different migrant groups by means of intensified care provided by peer health educators and practice nurses. For this study an existing instrument, the EQ-5D, measuring health related quality of life, has been adapted for use among migrant groups.

Results

In the different stages of data collection, language brings about difficulties. First, the usual procedure to approach respondents for participation, is sending a letter. Even when bilingual-, this not succeeds in providing information on the project, because of the high rate of illiteracy even in the mother tongue. Next, translation of questionnaires, especially measuring instruments, in written language is difficult or even impossible. Indeed, Moroccans' mother tongue is either Moroccan Arab (MA), either Berber which are non-written languages. Even so, written questionnaires are often not appropriate, considering the high rates of illiteracy. But then again, face-to-face interviewing requires recruitment of interviewers able to communicate both in Dutch and in MA or Berber. Unfortunately, such interviewers are extremely scarce.

Conclusion

The problems in research among Moroccan immigrants in the Netherlands are attributable to a combination of specific characteristics of the native languages (non-written) and the low educational level of the majority, especially women from first generation migrants. Therefore it is important to carefully describe the target population before starting fieldwork, especially with respect to age, sex, generation and education.

Building public health knowledge into local and national decision making – Wales as a case study

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Issue

There is growing recognition of the importance of the physical, economic and social environment in determining the health of individuals and communities. With this has come an acknowledgement that impacts on health need to be considered as a part of the policy and decision making process outside the health service. Health impact assessment is a tool that can build health knowledge and awareness into policy areas, such as regeneration, transport and economic development, that do have a major affect on health and on the unequal distribution of ill health.

Description of Project

The Welsh Health Impact Assessment Support Unit, funded by the Welsh Assembly Government, aims to develop this approach across Wales. Local Authorities are currently the main focus of attention as they are responsible for many of the major public developments that affect people's lives and their health. The unit will help to develop screening tools, provide ad-hoc advice, a web based resource for accessing evidence and training.

Lessons Learned

Early experiences have suggested that providing tools, information and training is not enough. If health impact assessment is to be

embedded into organisational processes in a way that is sustainable it will require both a cultural shift by policy makers and accommodation for such assessments within existing organisational processes.

Conclusions

Embedding health impact assessment within local government to ensure healthy policy-making requires an organisational development approach. Wales is a small nation and the potential to gain from such learning is considerable given the tight policy context. This approach may also provide lessons for developing health impact assessment at a regional level throughout Europe.

Substance use, problem behaviour and leisure activities among youths from families with low socio-economic statuses in the periphery of Brussels

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Background

As a follow-up on epidemiological research carried out in 1994 and 1998 in the Brussels Capital Region, this study examines the prevalence of licit and illicit substance use, problem behaviour and leisure activities among 2,068 adolescents between the age of 12 and 22 living in the periphery of Brussels.

Aim

Data were collected by a structured questionnaire in March 2001. The sample was representative of school going adolescents from the periphery of Brussels. Under supervision of a researcher, the pupils completed the anonymous questionnaire in class. Lifetime prevalence and past year frequency of use of alcohol, tobacco, pharmaceutical and illicit substances were enquired after, together with the incidence of leisure activities and several forms of problem behaviour. Information about socio-economic background, such as parental educational level and employment, and parental, sibling and peer substance use, was also collected.

Results

The results indicate clear variations concerning drug use, problem behaviour and leisure activities in relation to socio-economic background, of which differences between adolescents from the two lowest groups (on a 5-point scale) are of particular interest. Statistical analysis comparing both groups points out prevalence and frequency of use of tobacco, tranquillizers and stimulants was significantly higher with very low status groups, whereas low status groups reported higher levels of alcohol use. Also, more very low status pupils were involved in vandalism and petty crime and they reported far less involvement in sport events and clubs.

Conclusions

Prevention and family support programs targeting underprivileged youths which are set up in the region of Brussels should take into account this behavioural disparity.

Ageing and Health Policy: Demographic change – How can we save solidarity?

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Issue/problem

The ageing society and its implications on health care policy were widely discussed. Some calculations of prospective health care expenses forecast huge contribution rates and ask for fundamental reforms of the health care system. The development of the ageing structure in Germany and possible reform measures have to be analysed.

Description

The ageing structure of the German society is characterised by a growing number of elderly people (60 years and older) and a shrinking of the entire population from about 81 million people in 2000 to about 65 million people in 2050. Three factors are responsible for this development: Firstly, life expectancy is growing continuously from about 59 years in 1924 to about 80 years in 1997 for women and from 56 to 74 years for men. Secondly, the baby boom in the 1950s and 1960s leads to a high amount of people who will retire from 2010 onwards. Thirdly, fertility rates have been fallen in the last 10 years. Confronted with this development all social security systems are faced with a decreasing amount of payers and an increasing amount of consumers. On the other side of the coin there are several factors which moderate the described situation and

reduce the forecasted disparity between contributions and health care expenses. For example the currently increasing number of working women which could be promoted further by a family friendly policy leads to increasing rates of women in the labour-market and to growing contributions into the health care system. Other possible measures of health care policy are prevention programs to reduce the burden of disease, especially chronic diseases. The actual health policy in Germany tries to find new ways of improving quality and efficiency with combined elements of solidarity and competition. Examples are the reform of the risk equalisation scheme and the insertion of a new reimbursement scheme (Diagnosis Related Groups, DRG's) for hospitals. Further reform measures to avoid over-, under- and misuse in health care delivery must be discussed taking into account the actual analysis of the Advisory council for the Concerted Action in health care.

Conclusion

Demographic change and an ageing society are a challenge for the social health insurance system, but there is no reason for 'crisis-talk'. As already shown in the past, the system of social health insurance in Germany is flexible enough to meet big challenges. There is no evidence that other systems run better in financing a comprehensive benefit package for the whole population. Possibly a policy of incremental reforms will be necessary.

Sickness absence – Do doctors know best? An analysis of National Insurance Consultants and Officers ability to identify sick-listed persons who might reduce their ongoing sick leave by work adjustments

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Background

The experienced increase in sick leave challenges Insurance companies, employers and public authorities to identify measures to reduce the individual, work place and economical burdens.

Aims

To study the Norwegian National Insurance officers and consultants ability to identify sick-listed persons where work adjustments were expected to discontinue the ongoing sick leave.

Methods

The study was based on 999 consecutive persons sick-listed more than 14 days with musculoskeletal or mental disorders in the cities of Tromsø and Harstad.

Agreements on whether work adjustment might reduce sick leave or not, assessed on a visual analogue scale, were examined by kappa-, proportional agreement- and differences against mean analysis. National Insurance assessments were based on routine sick leave information, and analysed within and between officers and consultants and between their assessments and the opinion of the sick-listed.

Results

Sick-listed and National Insurance officers and consultant assumed that 20 to 30 percents might reduce the ongoing sick-leave period by work adjustments, while another 20 percents was uncertain. The consultants were least optimistic.

The chance corrected agreement were poor ($k < 0.20$), within and between officers and consultants, and extended medical and social information only marginally improved the agreement.

There was no agreement beyond chance between National Insurance collaborators and the sick-listed. Extended medical information tended to increase disagreement.

Conclusions

Among patients with musculoskeletal or mental disorders information from medical sickness certificates was insufficient to identify sick-listed who might profit on work adjustments. To exploit the potential capacity of work adjustments in reducing the length and frequency of sick leave, the sick-listed should be heard in the selection process.

Acculturation in health research among ethnic minority groups

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Introduction

Over the past decades most West European countries became immigrant societies. Immigrants meet another culture, inducing a so-called process of acculturation. They often end up in a situation of disadvantage also with respect to health. It is often suggested that acculturation fulfils a role in the relationship between migration and health, but research results are very conflicting.

Aim

Therefore we conducted a literature review, in order to assess the ways in which acculturation is defined and measured.

Method

The review is based on searches in Medline, Psycinfo and SSCI, using 'acculturation' and 'cultural adaptation', as main key words. We combined these keywords with 'measuring instruments' and with 'health', 'disease', 'illness' and 'morbidity'. App. 100 references (1990–2001) are included.

Results

No unambiguous definition of acculturation exists. In most epidemiological research, acculturation is not or only vaguely circumscribed, assuming implicitly that the reader understands the meaning of the concept. Actual definitions, merely by cultural psychologists, include various aspects, viz. changes in behavioural functioning (e.g. customs, food and music choice), in affective functioning (emotions) and in social integration. Value changes are seldom mentioned, implying that little attention is paid to the antecedent concept of 'culture'.

Notwithstanding this lack of consensus, general agreement exists that acquiring of the host culture does not involve a corresponding loss of the culture of origin. Therefore some scholars present a two-dimensional model of acculturation.

Acculturation still often is measured by single indices, such as year of residence, generational status (1st, 2nd generation). Also composite models have been developed, including several aspects, of which the choice is seldom motivated. The more fundamental level of values and norms is frequently ignored, as well as the bi-dimensional character of the concept.

Conclusion

The concept of acculturation offers the opportunity to make relevant distinctions within ethnic minority groups when studying differences in health status. Indeed, often only ethnic background is included in research, assuming cultural homogeneity within each ethnic group. However, it is impossible to take advantage of this opportunity, as long as the conceptual and measurement problems as described above are not solved.

EURO-MED-STAT: Monitoring Expenditure and Utilisation of Medicinal Products in the European Union Countries. A Public Health Approach

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Problem

Several thousands medicinal products are marketed in the European Union, with an expenditure wider than 90 billions Euro per year. This large amount of medicines influences public health:

1. They cause intended therapeutic effects: i.e. improving or preventing diseases and relieving symptoms;
2. They may cause medication errors and medicine-related problems: patients taking a medicine for no medically valid indication, patients receiving a wrong medicine or the right medicine in the wrong way, patients failing to receive the medicine they need, patients experiencing adverse drug reactions.
3. They pose an economic burden and impose an opportunity cost: pharmaceutical expenditure accounts for a large proportion of health care spending and it is rising faster than any other area of health care.
4. The use of pharmaceuticals has an ecological impact by promoting microbial resistance and by releasing in the environment, via the wastewater, pharmacologically active substances (including endocrine disrupters and carcinogens) able to pollute drinking water, rivers, seas and soil.

Description of the project

EURO-MED-STAT is a project funded by the European Commission (D-G Health and Consumer Protection) within the Health Monitoring Programme. It is aimed to develop a set of indicators, to be integrated into the EU Public Health Information Network (EUPHIN), for monitoring price, expenditure and utilisation of medicinal products in the EU member states.

Representatives from fourteen Member States, Norway and WHO-Europe participate to EURO-MED-STAT whose objectives are: performing an inventory of data sources and a survey of available data; assessing data reliability and comparability between countries; developing Standard Operating Procedure (SOPs) for data management (collection, validation and comparison); pooling and comparing the validated data with special reference to cardiovascular medicines.

Results

EURO-MED-STAT will produce a better knowledge of the European pharmaceutical policies, it will increase the transparency of the medicine market, and by producing comparable data for indicators will promote both a more rational use of medicines and a better cost-effective utilisation.

Benefit-cost evaluation of influenza vaccination in elderly people in Liguria, Italy

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Background

Influenza disease causes great damage to society. The allocation of resources for the protection of health cannot disregard the facts on the cost-benefits of feasible interventions. One of the highest impact measures by Public Health in the prevention of influenza is vaccination.

Aims

The objectives of this study were: first, to evaluate, during the whole winter, in the Ligurian population, the weekly incidence of influenza and to isolate, or at least identify, prominent viral strains during the epidemics; secondly, to assess the costs of the disease and the efficacy of a preventive vaccination program.

Methods

During the winter 2000–2001 we carried out a study to assess the costs of the disease and the benefits of vaccination. We did a clinical-virological surveillance study, through 46 doctors and paediatricians, on a population of 55,984 subjects that included 14,818 individuals older than 65 years. Furthermore, we carried out a perspective study on 512 elderly individuals, arranged according to vaccination (304 vaccinated and 208 non-vaccinated). Finally, in order to assess with a good degree of accuracy the percentage of vaccinated elderly individuals, we carried out a telephone survey on 500 subjects.

Results

Our clinical surveillance study enabled us to establish that morbidity was particularly low in elderly individuals, even in relation to higher rates of incidence in other age groups (6th week of 2001). During this period we had the highest number of viral identifications and isolations (the isolated strains were similar to the A/New Caledonia/20/99). The results of the perspective study allowed us to estimate the benefit/costs ratio at 8.22, with a saving of 242,835 lire (Euro 125.41) for each vaccinated subject. We were also able to establish that the vaccine coverage among elderly individuals was 63%.

Conclusions

Our study, though carried out during a low epidemic year, confirms the economic advantage of vaccination in the elderly.

Socio-economic inequalities in health among Slovak adolescents

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Background

Based on the most of the prevailing European literature, absence of socio-economic health differences among adolescents might be presumed, but several recent findings from Nordic countries, USA, Hungary and Slovakia did not support this hypothesis. Particularly in Central European countries, due to transformation crisis, we can expect deeper inequalities in health.

Aim

The main aim of this paper is to explore socio-economic health differences among Slovak adolescent.

Methods

Using occupation and education of mother, father, and highest one of parents as an SES indicator, the socio-economic differences in experienced health complaints and self-reported health were explored among Slovak adolescents (1370 boys, 1246 girls, mean age 15 years, sample stratified according to the gender and type of school, data collected in autumn 1997). Analyses were done using GLM methods separately in male and female and for each indicator of SES and health.

Results

With some exceptions (mostly when father's characteristic were used as an indicator of SES) the socio-economic differences in experienced health complaints and self reported health among adolescents unfavourable for lower SES groups were confirmed. Adolescents from lower SES reported more frequently to feel dizzy, get tired sooner, get shortness of breath easily, feel headache more often. Our findings confirmed poorer health of girls in comparison to boys. There are no gender differences with regard to socio-economic differences in health. It seems to be that mother's characteristics are a better indicator of SES than father's ones in inequality research among adolescent.

Conclusions

Substantial inequalities in health according to socio-economic status can be found among Slovak adolescents unfavourable for lower SES groups.

Promotion of Family Planning Services in Armenia Ghukasyan, G. ^{*}, McPherson, J.

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Issue

Previous evaluations found extensive reliance on abortion as means of limiting/spacing births. In 1999, USAID funded Johns Hopkins University Population Communication Services (JHU/PCS), to implement Information-Education-Communication (IEC) Campaign to promote the Family Planning Cabinets and modern contraceptives as alternatives to abortion. This 6-month campaign was the first large-scale, multi-media health campaign conducted in Armenia.

Project Description

The objective of the Campaign was to increase demand for modern contraceptives and increase attendance by 20% at family planning cabinets in pilot regions by the end of 2000.

The Campaign promoted modern contraceptives and family planning services using national and local media, and community events. Campaign materials included television and radio spots, brochures, posters and promotional materials. Community-based activities included women's seminars, concerts, sports events, and clinic open houses.

To prepare Family Planning Cabinet staff for the potential rise in demand for services, JHU/PCS and Ministry of Health conducted seminars in counseling and client-provider interaction for health personnel.

Lessons learned

The Campaign was implemented during a difficult period in Armenia marked by a plummeting birth rate, high rate of emigration, and growing deprivation. Important lessons were learned that could be used in the future by groups planning to implement family planning campaigns in similar settings. These lessons include:

- alternatives to mass media for IEC campaigns should be explored for promotion of family planning;
- advocacy with government should be conducted at the highest levels to build support for public campaigns;
- materials' pretesting with stakeholder groups is crucial for anticipating negative public reaction,
- collaborative network of partners is essential for gaining support for program activities.

Conclusions

Despite some negative criticism, the campaign accomplished its objectives. Contraceptive prevalence rate increased by 4.6%, and visits to Family Planning Cabinets increased (84%). Women responded positively to the campaign with increased knowledge and improved attitudes.

Measuring the burden of road accidents injuries using an emergency-based surveillance system

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Background

Road accidents are one of the most relevant causes of mortality and morbidity in the entire world. The surveillance of road accidents is, in Italy, delegated to the police, now in Lazio region a new surveillance system based on emergency permits to estimate the health consequences of the phenomenon.

Aims

To quantify the incidence and hospitalisation of injuries due to road accidents; to describe the characteristics and the severity of injuries reported.

Methods

The sources of data are the emergency information system, collecting all the admissions to emergency wards and the hospital discharge register. We selected all the emergency admissions for traumas occurred in the road, except for intentional injuries. We looked for the patients in the hospital discharge register and we considered hospitalisations consequent to road accident the admissions in the same day or in the day after the emergency admission. Triage, an operative scale of urgency, was used as an indicator of severity.

Results

We observed an incidence of 2769/100000 emergency admissions, and a hospitalisation rate of 244/100000. The incidence was higher in young adults (about 8000/100000 in the 21–25 males). The mean length of stay in hospital was 7.8 days and the median was 4 days. 72% of the cases were of the less severe triage and 22% were cases judged not proper for emergency ward. Half of the injuries affected the limbs, 29% the neck, most of them whiplash, 17% affected the head and 3% affected the thorax and abdomen, the proportion of severe cases was higher in head, thorax and abdomen injuries.

Conclusions

The police based surveillance reports 433/100000 injuries in our region in 2000, we observed an incidence six times higher, the most part of the cases reported are not severe and probably are affected by underreporting by the police.

Register-Based Monitoring Shows Decreasing Socio-economic Differences in Finnish Perinatal Health

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Background

Several studies on differences in infant outcome by socio-economic position have been done, but these have usually been based on ad hoc data linkages.

Aim

We investigated, whether socio-economic differences in perinatal health in Finland could be regularly monitored using routinely collected data from one single register.

Methods

Since October 1990, the Finnish Medical Birth Register (later: MBR) has included data on maternal occupation. A special computer programme was prepared that converted the occupation name into an occupational code and into a socio-economic position. The Finnish MBR data for years 1991 to 1999 (N=565,863 newborns) were utilised.

Results

An occupational code was derived for 95% of women, but we could not define a socio-economic position for 22% of women, including for example students and housewives. For the rest, our data showed socio-economic differences in all perinatal health indicators. Maternal smoking explained up to half of the excess risk for adverse perinatal outcome in the lowest socio-economic group. The socio-economic differences narrowed during the 1990s: infant outcome improved in the lowest socio-economic group, but remained at the same level or even deteriorated in other groups. When comparing the lowest group with the highest group, the odds ratios (OR) adjusted for maternal background characteristics at least halved for prematurity (from 1.32 [95 % confidence interval 1.24–1.43] in 1991–1993 to 1.16 [1.08–1.25] in 1997–1999), for low-birth weight

(from 1.49 [1.36–1.63] to 1.25 [1.17–1.40]), and for perinatal mortality (from 1.79 [1.44–2.21] to 1.33 [1.07–1.66]).

Conclusions

Social inequality in perinatal health outcomes exist in Finland, but they seem to have diminished in the 1990s. Our data showed that routinely collected register data provides a good data source for studies on socio-economic health differences in the perinatal period, but that uncertainty, mainly due to the large group of women in the group 'Others', remains.

Variations in risk for disability pension in Norway 1970–1999: period or cohort effects?

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Background

A universal scheme for disability pension was introduced in Norway in 1967. The aim of the study was to investigate whether specific cohort or period effects could explain varying incidence of new disability cases.

Methods

The data set included all new cases of disability pension in age group 16–59 years according to age and gender for each year from 1970–1999: 252 320 cases among women and 216 799 cases for men. Population at risk was defined for each year from census data and number of individuals already on disability pension. The data were organised in 5-year age groups, 5-year time periods and corresponding, overlapping 9-year age-cohorts. Age-specific rates were displayed graphically for periods and cohorts. Following a strategy proposed by Clayton and Schifflers, separate statistical models were then fitted for age-period and age-cohort and analysed by means of Poisson regression.

Results

Age adjusted annual incidence rates for women varied between 4.9/1000 non-disabled (1975–79) and 10.2/1000 (1995–99). Corresponding figures for men were 4.6/1000 and 6.5/1000. Statistical analysis showed an increasing trend ("drift") for both genders in all models, more pronounced for women than men. All time-periods significantly deviated from the trend, either upwards or downwards. In age-cohort models women born 1920–1939 contributed most to the increased incidence. Women born in 1940–59 significantly lowered the trend. For cohorts born 1959–1984 increasing incidence of disability pension, significantly exceeding the general trend, was found among both genders.

Conclusions

Both cohort- and period-effects were identified. Significant period-effects could be explained with political shifts and economical conjunctures. The gender difference for cohorts born 1920–39 might be caused by the fact that this was the generation where women, on a large scale, took up paid work in addition to domestic responsibilities. Increasing incidence among younger cohorts are still based on relatively few observations.

Perceived health and organizational climate in the workplace

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Introduction

Several studies have shown the influence of the organizational climate in an institution on the level of the workers' health. In this line, the objective of this study is to obtain a measure of the organizational climate for ten Basic Areas of Health in Jaén (Spain) and to analyze its influence on the perceived health by the workers.

Methods

A cross section descriptive study was designed including all the workers of 10 Basic Areas of Health in Jaén (Spain). For each worker

a questionnaire was executed where socio-demographic information, information on its labour history, and data about its perceived health was picked up. Also, they carried out the VOG questionnaire on problems of health and the WES questionnaire, of organizational climate. It was carried out a statistical analysis by mean of the following tests: the test of Kruskal–Wallis, the OR of Mann–Whitney and the Correlation of Spearman. In all cases the interaction phenomena and confusion were analyzed.

Results

The questionnaires used in the investigation were responded by 179 (63.13%) workers of the Basic Areas studied. The average age were 41.06 years (typical deviation: 6.60 years). 59.2% of the participants were men and 40.8% were women. The measure of organizational climate obtained achieved 63.92 points in a scale of 1–90 points (with a typical deviation of 12.44 points). Globally, the perception of health of the workers in the Basic Areas studied is very positive: 86.03% of them consider that their health, as minimum, is good. Concretely, 48.6% consider that their health is good, 24.6% that is very good and 12.8% consider that it is excellent. On the other hand, 13.97% consider that its health is bad or passable. A significant statistical association was revealed between the organizational climate and the perceived health ($p=0.008$).

Conclusions

In agreement with the contributions of other authors, the organizational climate in an organization is related with the health perceived by its workers. Therefore the preventive efforts should go guided toward the promotion of a policy based on the improvement of the organizational climate in the workplace.

An inquiry into the community approach to safety promotion: a study of safety measures for children and adolescents in Swedish municipalities

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Background

There are two major aspects that might explain the extent of safety measures in a community, the way safety promotion is organised and the relative affluence of the municipality.

Aim

To investigate two aspects of the community approach to safety promotion for children and adolescents. Firstly, if there is any correlation between safety promoting measures in different municipal settings, and secondly, if municipal affluence, measured as socio-economic characteristics, affects the level of safety promoting measures.

Methods

A cross-sectional study comprising 25 municipalities in Stockholm County was carried out. The extent of safety promotion measures in four settings were studied; the municipality setting in general, the traffic, the pre-school and the school-leisure activity settings. Eleven demographic, political, economical and social characteristics of the municipalities were collected from public statistics.

Results

There were four main findings. Firstly, environment orientated safety promotion measures in the municipality setting in general, the pre-school setting and the school-leisure activity setting correlated with the total municipal safety promotion measures. Safety promotion measures in the traffic setting, however, were not correlated with measures in other settings. Secondly, an individual orientated activity, bicycle helmet campaigns, seemed to be negatively correlated with the environmental measures that were focused in this study. Thirdly, socio-economic characteristics of the population did not predict the amount of safety promotion measures. Fourthly, growing municipalities with large fractions of children reported less safety promoting measures.

Conclusions

The study gives some support to the community approach to safety promotion. In Sweden, with an extensive system for equalising municipal resources, the level of municipal safety promotion seem to be independent of socio-economic factors.

Computerised Child Health Record in Iceland

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Issue

Child health services in Iceland are available to all free of charge, and are universally accepted. It includes home visitations after birth and regular follow-up visits at the health centres. Nurses play a pivotal role, supported by medical practitioners. All information concerning the family and the development of the child has been hand-written in the child health record, kept at the health centre. These records have proved to be useful in daily work but less so for epidemiological surveillance, quality management or research.

Description of the project

The child health record was in 1997 incorporated into the general computerised health record *Saga* in use at most health centres. Yet it has proved to be inefficient for data analysis. Consequently, since 2001 an interdisciplinary team of people has been working on a new child health record in *Saga*, to be introduced in late 2002. It addresses key aspects of child health such as the family situation, pregnancy and birth experience, breastfeeding and nutrition, development of the child, immunisation and health promotion. Further, it incorporates as appropriate new indicators of child health in line with those recommended by CHILD—the EC-funded project on Child Health Indicators of Life and Development. National guidelines for the services will also be easily accessible.

Lessons learned

The development process has been an excellent opportunity to radically reconsider the registration routines within the child health services and to redefine key concepts such as breastfeeding status and current nutrition as well as health promotion. Still it is a time consuming effort with many potential stakeholders.

Conclusion

The new record combines ease of use, rapid access to key information on individual children while being flexible for data analysis. It will generate new knowledge on child health and contribute to evidence based practices by combining research and policy.

Preadolescent children's concepts of their own psychiatric illness and hospitalisation

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Background

According to Piaget are 7 to 11 years old children in the “concrete operational stage”. Operational thinking develops (mental actions that are reversible). Children start to distinguish between body and mind. Szainberg and Weiner found, that mental ill children described personal problems, but they did not relate them to hospitalisation (1989).

Aim

There are not many existing studies about illness concepts of children. But the child's understanding of the nature of psychiatric hospitalisation is important for developing of treatment strategies.

Methods

50 preadolescent children (6–12 years old) hospitalised in a child- and youth-psychiatry in Schleswig/Germany were investigated between 1996 and 1998 with special conceptualized short stories (Hach/Ruhl, 1995) about animals suffering from typical child- and youth- psychiatric illnesses. They were asked the reasons of animals problems and solutions. A semi structured interview evaluated their understanding of reasons for their own hospitalisation and possible treatment-profits.

Results

Children held main the family, internal faults and fatalistic reasons responsible for the animal's problems. They answered, that mostly the family or things nobody can influence (e.g. time, getting older) could help. Although 78% answered, that actual hospitalisation would help themselves, only 42% were on “their own free will” in hospital. Only 20% affirmed to be ill, 50% to have problems before hospitalisation. It was very difficult for the children to decide what or who in hospital could help them most.

Conclusions

It seems to be that children recognize to have problems, but not to be ill. They think hospitalisation is helpful, but they do not want it. So for successful treatment it is important to try to make children understand, what a mental illness is and how important their own role during recovery will be.

Changes in health care systems and their impact on mental health care

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In European history mental illness became distinguished from socially unacceptable behaviour considerably later than physical diseases were given illness status and provided care for. Even today persons with mental illness are faced with ignorance, prejudice and discrimination in many countries. In its extreme consequence social stigma led to the killing of some 200,000 mentally ill people in the National Socialist era in 1939 to 1945.

Long underestimated in medicine, the media and politics, the enormous public-health relevance of mental disorders became recognized only in the past few years. The widespread diseases of depression, alcoholism and schizophrenia figure among the ten illnesses with the highest DALY values worldwide. In Europe we have the know-how, tools and resources to recognize and treat the major mental disorders. However, only a minority of mental patients receive timely and adequate treatment. In most of the serious mental disorders severe social and personal consequences occur before the first treatment contact.

With the revival of human and civil rights after World War II the mental health care system has undergone sweeping changes. The focus of treatment has shifted from the mental hospital to the family doctor and the burden of care from intramural institutions to complementary services in the community, the patients and their families. Besides the need for treatment, the manifold social needs of the seriously mentally ill have to be met. Problems of cooperation between sectors of care and of responsibility and financing will be discussed. As part of the general health care system mental health care in many countries is still struggling with remnants of legal and practical discrimination. Especially the need of the seriously mentally ill for long-term multi-disciplinary care is associated with considerable economic and social risks. State and society in principle bear the responsibility for guaranteeing fairness and providing good medical and social care not only to the physically, but also to the mentally ill and for protecting them against the financial costs and consequences of illness.

Cost-effectiveness analysis method for diagnostic procedures in the course of 30 years at the medical university hospital

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Background

This paper draws on results of a study by W. Kirch and C. Schafii, "Misdiagnosis at a University Hospital in 4 Medical Eras". In this study, 400 randomly selected medical records of deceased patients who were subsequently autopsied in the years 1959 (= 100 persons), 1969 (= 100 p.), 1979 (= 100 p.) and 1989 (= 100 p.) were examined to determine whether a misdiagnosis had been made. In the three decades scrutinized, the misdiagnosis rate remained nearly constant at approximately 10%.

Aim

The goal of the present study was to investigate the development and application of a public health cost-effectiveness analysis to evaluate on a comparative basis the diagnostic procedures over a period of 30 years.

Methods

This present study examines the expenses arising from the particular diagnostic treatment applied, whereby use was made of the same group of patients. In addition, the frequency of application of the methods utilized was also analysed. The study classified and financially evaluated a total of 22,648 diagnostic examinations according to 210 distinct DKG-NT ciphers.

Results

In the period 1959 through 1989, both the number of examinations (+314%) as well as their accompanying expenses (+580%) increased exponentially. The comparatively steep rise in costs can be traced to a trend towards more expensive diagnostic procedures. The costs of diagnoses per patient rose for persons with cardiovascular and pulmonary illnesses by 966% and 486% respectively, and were thus considerably more significant than for other illnesses. No age-related increase in diagnostic expense could be determined.

Conclusions

The economic principle of attaining a set goal through application of minimal means appears increasingly to have been lost sight of in the medical diagnosis sector over last years in the study.

Mortality of migrants from the Indian sub-continent and duration of residence in England and Wales

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Background

South Asian migrants in England and Wales experience different mortality patterns from that of the whole population, with particularly high cardiovascular disease (CVD) mortality.

Aim

To examine mortality of south Asian migrants by duration of residence in England and Wales.

Methods

Longitudinal study, 1971–99, of south Asian migrants in the 1971 Census aged 25 to 54 years. Duration of residence was measured using year of arrival and related to mortality using Cox regression. Socio-economic position was measured using occupational social class and access to cars.

Results

All-cause mortality of south Asians who arrived earlier was higher than that of those who arrived later. At ages 25–34 in 1971, 5 yearly increases in duration of residence were associated with a hazard ratio of 1.46 (95% confidence interval 1.14–1.87, deaths 113), and at ages 35–44 with 1.21 (1.03–1.42, 200). Mortality from CVD was the main attributable cause to this trend. At ages 25–34 in 1971, 5 yearly increases in duration of residence were associated with a hazard ratio of 1.55 (1.13–2.13, 65), and at ages 35–44 with 1.26 (1.01–1.57, 103) for CVD. For cancers, a significant relationship with duration of residence was seen at ages 35–44 (hazard ratio 1.54, 1.05–2.26, 31) and at ages 45–54 (1.30, 1.07–1.57, 24). This trend remained after adjusting for differences in socio-economic position by duration of residence.

When mortality of south Asians was compared with all other study members, excess CVD mortality adjusted for socio-economic differences at ages 25–34 and 35–44 was observed for only the long established residents.

Conclusions

This study shows evidence of a positive relationship between mortality from cardiovascular disease and cancers, and duration of residence in England and Wales among South Asians.

The impact of patients cultural background on the consultation

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Background

It is generally known that cultural differences influence outcomes of care.

Aim

To develop a cultural belief scale. To study the influence of cultural belief and patient characteristics on patient-GP mutual understanding (MU).

Design

Thirty-eight GPs in Rotterdam, the Netherlands, were invited for the study (in 2000). Patients were asked to participate on the investigations days. Directly after the consultation, the GPs completed a questionnaire on the presented health symptoms, diagnosis and given treatment. Patients were asked counter questions and questions on culturally defined attitudes in a home interview.

A unidimensional cultural belief scale was created with factor analysis; all patients were classified on this scale. MU was assessed by comparing the answers about the consultation. The influence of the cultural beliefs and other variables on MU was tested with regression techniques.

Results

In total, 1479 patients agreed to participate (response 61%) of which 476 could not be visited at home: 986 patient's interviews were matched with a GP's questionnaire (556 Dutch and 430 ethnic minority). The cultural belief scale showed good internal and construct validity. MU was better in Dutch patients than in ethnic minority patients (66.5%, respectively, 55.5% good MU). Cultural belief scale appeared to be a stronger predictor for MU than ethnicity in multivariate analysis (OR 1.5 and 1.3, respectively).

Conclusion

A strong cultural belief scale was developed. Cultural belief determines MU more than ethnicity. To obtain good MU, GPs

should be educated in assessing the cultural beliefs of their patients and be trained in communication with these patients.

Can adding fish-oils or soya-protein to bread and biscuits reduce elevated risk factors for coronary heart disease?

MONALISA – a randomised trial

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Background

Randomised trials have found supplementation with long-chain omega-3 fatty acids (LCn-3) or isoflavonoids, reduces low-density lipoprotein cholesterol (LDL-C) and blood pressure. Oil-rich fish is the main dietary source for LCn-3. Soya-protein is the main dietary source for isoflavonoids. In the United Kingdom, the intake of these is low. One solution to increase the intake of these nutrients could be to add them to commonly eaten foods. This was examined in adults living on the Scottish isles of Lewis and Harris, in 2001.

Aim

To determine the effect of providing daily portions of bread, biscuits or cereal bars containing soya-protein, or LCn-3 or both, on blood cholesterol and blood pressure after five-weeks of follow-up.

Methods

Adults aged 45–59 years, with serum total blood cholesterol greater or equal to 5.7 mmol/L or a systolic blood pressure greater than 130 mmHg, or both, were identified through screening. Consenting participants were randomised to receive fortified bread rolls, cereal bars and biscuit-like crackers providing 2grams of docosahexaenoic acid (LCn-3), or 25 grams of soya-protein (50 milligrams of isoflavonoids), or DHA and soya-protein, or no added nutrients. Cholesterol and blood pressure were measured after five weeks.

Results

Of the 213 randomised participants, 159 (74.6%) completed follow-up. Univariate analysis found no important effect on blood pressure or total cholesterol in any groups. However, high-density lipoprotein cholesterol increased by 5.8% in those given foods only containing LCn-3 (DHA) ($p < 0.01$ for the differences between groups).

Conclusions

The beneficial effect on HDL-C from fish-oil supplemented foods is similar to some fibrate pharmacological preparations. The value of fish-oil supplemented foods deserves more attention.

Effects of Exposure to Green Path Information-Education-Communication (IEC) Campaign for Reproductive Health, Armenia, 2000

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Background

Previous assessments documented a need in Armenia for quality family planning (FP) services in conjunction with a public education campaign. The *Green Path* campaign, funded by USAID and implemented by Johns Hopkins University Population Communication Services, was launched in June 2000. It included television and radio spots, community events, and print materials. The Center for Health Services Research and Development of the American University of Armenia evaluated the campaign.

Aim

The evaluation tested the overall impact of the campaign. An outcome of interest was the relationship between change in demand for FP services and use of modern contraceptives as a result of exposure to the campaign.

Methods

A modified cluster sample, representative of Armenia was drawn. A panel of 1,088 married women (18–35) completed a survey prior to and following the campaign.

Results

The campaign reached its audience, with over 90% exposed to the campaign logo and 65% recalling the slogan. Exposure to TV spots ranged from 65–92%, with exposure to posters, radio spots, and brochures ranging from 15–30%.

Women exposed to the campaign liked it. Use of FP services was positively and significantly associated with exposure to the campaign. Most (61.4%) women were prompted to visit FP cabinets by media messages.

Exposure to campaign was associated with frequent spousal communication and search of information about modern contraceptives.

Women exposed to TV and radio advertisements were more likely to adopt modern contraceptives.

Conclusions

The first large-scale health promotion media campaign in Armenia succeeded in shifting women's health behaviour. The campaign reached its target audience. The audience liked the messages and improved their attitudes towards modern contraceptives. The messages were designed and delivered in conformity with the needs of women. The observed positive shift in the behaviour is attributable to exposure to the campaign.

Post-stroke depression – a limiting factor of quality of life after stroke in young patients

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Purpose of study and Background

Stroke is the leading cause of long term disability in western countries causing major individual, social and economic burdens. Improving quality of life of stroke patients has received increasing attention. Mood disorders are common, but often unrecognized outcomes of stroke. Post-stroke depression (PDS) is known to have an influence on activities of daily living and the severity of neurological deficit – decreases the motivation for life-style changes and rehabilitation.

Methods

We studied 92 patients admitted to Neurological Clinic with stroke (55 with ischemic stroke, 22 with intracerebral hemorrhage and 13 with subarachnoid hemorrhage; aged 45–65), eighteen patients were diagnosed as depressive, over 4 months after initiation of antidepressants. Patients underwent evaluation of neurological deficit (Barthel index) and depression symptoms (SDS – Self-rating Depression Scale, CGI – Clinical Global Impression) at week 2, 4, 6, 8 and 12.

Results

At second week of antidepressant therapy we observed 10 points Barthel index difference in depressed group compared to non depressive group. At week 4 we found significant improvement of Barthel index scores in depressed patients, nearly approaching to the value in non-depressed group. We also observed adjustment of depressive signs and symptoms (CGI improvement for 2,6 points, SDS for 11 points).

Conclusion

PSD is relatively common in occurrence. Patients with PSD have lower functional status, increased cognitive impairment and higher mortality rate. Identification and treatment of depression after stroke can help patients take better advantage of rehabilitation opportunities. Early initiation of antidepressive treatment facilitate the recovery from stroke and thus improves the quality of life after stroke.

Social position and gender differences in quitting smoking

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Background

A number of studies have found that there are gender differences in quitting smoking in particular age groups. Younger women tend to have higher quit rates than younger men, middle aged and older men have higher quit rates than younger men.

Aim

To examine the role of social position at different stages of the life course in explaining gender and age differences in quitting smoking.

Methods

Survival analysis of quitting smoking using data from nine waves (1991–1999) of the British Household Panel Study, a nationally representative panel survey of adults aged 16 and over, with interviewer administered questionnaires. Current smoking of cigarettes was asked at each wave; quitting smoking was defined as smokers who in a later wave reported that they did not smoke cigarettes. Measures of social position include education level, household income, occupational class and general social advantage (Cambridge scale). Covariates included number of cigarettes smoked, other smokers in household, number of children in household, marital status and employment status.

Results

There were clear age and gender differences in quitting smoking in

Britain in recent years. Women under the age of 35 were more likely to quit smoking than men under the age of 35 (hazard ratio 1.23 [95%CI 1.0,1.5]) whereas women aged 35–64 were less likely to quit than men aged 35–64 (hazard ratio 0.78 [95%CI 0.7,0.9]). In younger men, education was a stronger predictor of quitting smoking than the other measures of social position whereas in both younger and older women, the Cambridge score was more strongly associated with quitting smoking. Some of the gender differences in quitting smoking are related to the relative importance of different measures of social position.

Conclusions

The influence of different social circumstances on quitting smoking varies by gender. These findings are relevant for policies aimed at reducing socio-economic and gender inequalities in health.

Dental indices and resource allocation in subsidized public dental care for young adults in Helsinki, Finland

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Background

Dental indices, such as DT for caries and CPITN for periodontitis, are widely used in describing dental states and treatment needs in dental prevention, periodontics and filling therapy. On an administrative level these indices can be used for resource allocation.

Aim

The objective of this study was to relate DT and CPITN indices of 19- to 36-year-old patients to their check-up intervals, number of visits, and the time used for repeated dental prevention, periodontics and filling therapy in subsidized public dental care.

Methods

Our data covered all 19- to 36-year-olds receiving comprehensive dental care in Helsinki, Finland, in 1999, totalling 25 770 check-ups. Data on dental status, proposed check-up interval, visits and dental treatments were taken from municipal ADP files.

Results

Mean DT was 1.6 (SD 2.4); 6% of patients had deepened periodontal pockets, 70% calculus and 14% gingivitis. The patients made, on average 3.4 (SD 2.7) visits and their check-up interval was proposed to be 17.8 (SD 5.5) months on average. Per patient, mean time used for repeated dental prevention was 3.6 (SD 9.0), for periodontics 11.1 (SD 16.3), and for filling therapy 48.1 (SD 63.9) minutes. The length of check-up intervals and time used for repeated dental prevention accurately reflected DT and CPITN indices. For patients with DT=0, an average of 14 minutes was used for filling therapy. On the other hand, 29% of patients with CPITN \geq did not receive any periodontics.

Conclusions

The proposed check-up intervals best reflected dental indices, indicating optimal allocation of resources. DT index can lead to underestimated allocation of filling resources among adults.

Self medication and the role of general practitioners

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Background

The Janus head of self medication – more patient autonomy vs concerns about the safety of this products and drug interactions – raises the question whether patients would like their general practitioner (GP) to play a more active role in self medication management.

Method

A telephone survey was conducted with a representative sample of households in Germany, based on random digits provided by ZUMA, a scientific centre for survey research in Mannheim. Members of households were selected following the 'birthday method'.

Results

The response rate was 59% (432/737). More than one-third had practised self medication within the last four weeks; 81 informants could not remember to have ever taken an over the counter (OTC) drug. Most often self medication was used for minor complaints (44%), but 19% used OTC products also to treat a chronic disease. Only 9% had talked with their GP about self medication within the last 12 months, half of them had initiated this conversation. About

40% of the informants had the feeling their GP would feel bothered by such a conversation; 71% would like their GP to give a recommendation for self medication.

Conclusion

Consumers use most frequently pharmacists and the media, and not their doctor, as sources of information on self medication. A broader involvement of family doctors in self medication counselling is welcomed and does not seem to conflict with patients' wish for more autonomy in health care.

Sex-specific health related behaviour and Quality of Life in chronically ill patients after a behavioural intervention in an integrative medicine clinic

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Background

Integrative medicine (standard internal medicine combined with intensified life-style modification) aims to help patients with chronic illness to cope with their condition more effectively and to achieve a health promoting life style, trying to increase health related quality of life (QoL) and reduce morbidity in later life. It includes instructions on nutrition, exercise, the elicitation of the relaxation response, cognitive restructuring and stress coping.

Aim

This study describes the effects of a two week hospital stay in an integrative medicine clinic in chronically ill patients on health related behaviour and QoL 3 and 6 months after completion of the hospital stay.

Methods

Observational, uncontrolled study with consecutive in-patients, who were referred to the clinic between January and August 2001 for treatment of a chronic illness. Patients filled out a questionnaire including questions on QoL (SF36), anxiety and depression (HADS-D), and daily health related behaviour (nutrition, exercise, relaxation) before (t1), directly after (t2), as well as 3 (t3) and 6 (t4) months after the medical intervention. Sex specific means and confidence limits (CI) were calculated. Differences between times and sexes were tested for significance with the t-test or chi-square-test.

Results

326 patients were treated within the mentioned time period. The return of the questionnaires was 87% (t1), 80% (t2), 60% (t3) and 45% (t4). Mean age was 53 years (median 55), 76% were female. Musculoskeletal diseases were most common (39%), followed by chronic pain conditions (headache, migraine, other, 17%), and chronic obstructive lung disease (9%). 6 months after hospital stay, women had increased their frequency of physical exercise (1.89 units per week, 95%CI 0.94;2.48) and their intake of healthy food (0.94 servings per week, 95%CI 0.02;1.86), while men had decreased their consumption of unhealthy food (-2.27 servings per week; 95%CI -3.83;-0.70). Both sexes increased their regular use of relaxation exercises (27% to 60%, p<0,05) and improved on the physical sum scale of the SF36 by 15% (4.95, 95%CI 2.49;7.41). There were no qualitative differences between t3 and t4.

Conclusions

Lasting effects on health related life-style and QoL can be achieved in chronically ill patients through a behavioural intervention. Furthermore, sex specific programmes are needed to achieve this goal most effectively.

Evaluation of a quality improvement programme for allied health professionals

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Background

From 1997 to 2000 the allied health professionals in the Netherlands participated in a quality improvement programme (QI programme) initiated by the Dutch Ministry of Health. Professional groups were physiotherapists, dieticians, dental hygienists, exercise therapists, occupational therapists, orthoptists, podiatrists, speech therapists and radiology assistants. For reasons of monitoring efficiency a

collective approach was adopted. During the programme QI instruments were developed and implemented. The programme was evaluated independently; in this paper the results of the evaluation study are presented.

Aim

The aims of the evaluation study were to determine the results of the programme in terms of products, satisfaction with products and possible surplus value of the collective approach.

Methods

Products were collected and documented, satisfaction and surplus value were assessed through 10 semi-structured interviews with representatives of the allied health professional groups and 4 interviews with representatives of agencies supporting the development and implementation of products.

Results

Products were treatment guidelines, a system for the accreditation of postgraduate courses, peer review methods, methods for practice visits by peers, guidelines for uniform patient reports, professional codes of conduct and criteria for monitoring patient satisfaction. In addition peer review groups were initiated (1360 of which 1200 physiotherapy groups) and 185 practice visits were conducted. The respondents were satisfied with the products to a large extent; satisfaction depended partly on the quality of the communication with the supporting agency. The collective approach proved efficient for the supporting agencies. The professional groups experienced surplus value especially when actual collaboration with members of other allied health professions was demanded. These situations provided instructive insights and a broadened view.

Conclusions

The QI programme proved successful in terms of products, satisfaction and collective approach. As a result the allied health groups receive additional funding for another three years to continue the implementation of QI activities.

Diabetes Mellitus type 2: How to identify in GP information systems?

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Background

Diabetes mellitus type 2 (DM2) is a common chronic disease among elderly in the Netherlands. Newly diagnosed patients above 45 years are supposed to be DM2 patients instead of "juvenile" diabetes (DM1). However the prevalence of DM2 is also rising in children and adolescence.

In this study we focus on the selection of DM2 patients in a computerized health information system.

Aim/Methods

When using GP information systems (GPIS) like the Integrated Primary Care Information (IPCI) database (containing approx. 500000 patients) to identify DM2 patients in a population, ICPC coding, medication, measurements and markers for DM2 patients are relevant indicators. However using this method, problems occur due to wrong coding of the GP or of lack of information on type.

Results

An example of wrong coding is that, if DM2 is detected in a 70 years old patient, the patient started immediately on insulin instead of oral medication by the specialist. The specialist reports it as insulin dependent diabetes to the GP, which is then wrongly coded as DM1 by the GP.

As a result of wrong coding you find unexpected results. Based on the ICPC-coding (T90.0, T90.1 and T90.2), medication, measurements and markers, the relation DM1 and DM2 patients in a population are distorted. According to the literature the relation DM1 and DM2 should be approximately 10 : 90. Without manual adjustments the relation is almost 22 : 78.

A further limitation of GPIS is that GPIS contains information only on a small portion of a patients' life. This can complicate classification of for example a 50 year old.

Conclusions

This study shows that to identify DM2 patients based on patient information from a GPIS one should be cautious relying on registration and coding of GPs. Without the use of additional

information and manual verification of the type of diabetes, incidence and prevalence estimates are biased.

Prevalence of varicocele in 1200 Bulgarian boys

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Background

Estimation of genital abnormalities is a part of the evaluation of male reproductive function. The role of varicocele as a risk factor for male infertility remains unclear. The prevalence of varicocele in the general adult population is approximately 15% and in about 19 to 41% of men with infertility.

Aim

To be found out the prevalence of varicocele in children and adolescents.

Methods

A population-based cross-sectional study of 1200 healthy boys from Sofia, chosen at random. The age of the subjects varied from birth up to 19 years. They were divided into 3 groups: group 1 (few months after birth to 6 years), group 2 (from 7 to 12 years) and group 3 (from 13 to 19). Ph. K. examined all boys. Examination for varicocele included scrotal palpation and Valsalva maneuver.

Results

A left-sided varicocele was found in 5.6% in the boys. In group 1, only 1 six year old boy had varicocele—0.2% compared to 6.1% in group 2 and 10.5% in group 3 ($p < 0.0001$). The median (25% and 75% interquartile range) age of boys with varicocele was 14 (12, 18). Logistic regression analysis indicated that the age of the subject was a significant factor for diagnosis of varicocele (odds ratio=1.61 at 95% confidence interval, $p < 0.0001$).

Conclusion

This first report of the prevalence of varicocele in young Bulgarian males shows that varicocele can be detected as early as the age of 6 years and that its prevalence increases progressively with age. In addition, our study indicates that varicocele had no impact on testicular volume yet, probably because the period of influence of varicocele on testicular volume is short.

Objective and subjective health in persons with diabetes mellitus

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Background

Within the framework of a study of the interaction between diabetes mellitus and employment, analyses were made on existing observations in a large cohort study on perceived jobstress and health (BELSTRESS-study). These analyses are the basis for further research on this topic.

Aim

Difference in objective and subjective health indicators were examined between subjects with and without diabetes mellitus.

Methods

The BELSTRESS-project is an epidemiological survey on job-stress and health conducted in 24 large Belgian companies ($n=21419$, aged 35–59) between 1994 and 1998. Information on diabetes and its treatment was collected. Self-report questionnaires on general health (13 health complaints-questions) and on depression (18 questions) were used in the analyses (= subjective health-indicators). Also Body Mass Index (BMI), arterial blood-pressure, total and HDL cholesterol were measured by standardised methods; a ratio of total/HDL cholesterol was calculated; arterial hypertension was defined as BP ≥ 140 mmHg and/or ≥ 90 mmHg (= objective health indicators). Logistic regressions were conducted.

Results

The prevalence of diabetes was 2.7% of which 7.4% take insulin, 33.3% take other medication and 59.3% were on diet only. Diabetics, compared with non-diabetics and controlled for gender and age, score worse on both the objective (BMI, blood-pressure and cholesterol) and subjective health-indicators (depression and general health questions). Diabetics on medication are more likely to have a BMI > 30 and to have hypertension, compared with diabetics not taking medication. Insulin-dependent diabetics compared with diabetics taking oral medication, are less obese, have a lower cholesterol-ratio, are more depressive and have more elevated blood-pressure.

Conclusions

Working people with diabetes have a poorer objective and subjective health compared with working people without diabetes. In the group of diabetics, persons taking medication have a poorer objective health than persons not taking medication, but they don't differ on the subjective health indicators. Insulin-dependent diabetics have more health and depression complaints and have higher blood-pressure but they are less obese and have a lower cholesterol-ratio than diabetics taking oral medication.

Socio-economic inequalities in mortality in 10 European countries; the case of the elderly

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Background

Some Northern European studies reported that relative educational and income inequalities in mortality among middle-aged people are much larger than among elderly people. It is not clear whether this pattern is also observed (a) in other parts of Europe, (b) according to other socio-economic indicators, and (c) when absolute measures of socio-economic mortality inequalities are used.

Aim

This study aims to describe mortality inequalities related to education and housing tenure in ten European countries. It describes the age-pattern of relative and absolute socio-economic mortality inequalities over the adult population.

Methods

Mortality data were acquired from ten European national and urban longitudinal mortality studies. Indicators of socio-economic status were education and housing tenure. We determined relative inequalities with rate ratios. Differences in age standardised mortality rates between socio-economic strata were used as indicators of absolute inequalities. Age-specific socio-economic inequalities were described for the ages 30 to 90+, by ten-year age group. Analyses were performed on total pooled European data, and on the data sets for specific countries/cities.

Results

Among men, relative mortality inequalities mostly decreased with increasing age. Among women relative educational inequalities remained of equal size until age 80–89. Absolute differences continued rising with age. Socio-economic mortality inequalities were still present at the oldest ages (90+) in Europe. While inequalities related to housing tenure were higher at middle-age, they decreased more strongly with age than educational mortality inequalities. In Denmark, France, Belgium and Austria relative educational inequalities were not smaller among the elderly than among the middle-aged.

Conclusions

The results of this study indicate that mortality inequalities among elderly people may certainly not be dismissed. Housing tenure can be used as a complementary indicator of socio-economic status. Based on the variations in age-pattern between countries it can be concluded that mortality inequalities are not unchangeable and may be further reduced.

Opioid prescriptions in a representative regional health insurance survey

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Background

Facing the amount of opioids prescribed, physicians in Germany were often blamed for not treating pain adequately (Radbruch et al. 2000, Sabatowski et al. 2001). Since 1999 an increase of opioid prescriptions could be observed (Böger/Schmidt 2001). In order to find out whether this development indicates an improvement in pain management patient-related data is necessary to analyse details of prescription prevalence and patterns of prescribing for different diagnosis groups.

Aim

To calculate the opioid prevalence and to describe prescribing patterns for opioids

Methods

Secondary analysis of person related health care data (prescription and diagnoses of a 18.75% random sample of the 1.9 million patients

insured by the Local Health Care Fund (AOK). Diagnoses were coded with the ICD-10 classification, prescription data with the ATC/DDD-classification. The year 2000 was used as evaluation period.

Results

5.8% of the patients (males 4.8%, females 6.8%) were treated with opioids in the year 2000. 10.5% of these patients had a cancer diagnosis. Opioids were mainly prescribed by GPs and internal specialists (84,6%). Most patients (57.6%) received opioids only once, 11.9% got long-term treatment throughout the year. The latter increases with age (22% in the age group 80 years and older). WHO-step 2 opioids were given more frequently (87.7% of the prescriptions) than morphine (8.1%) or other WHO-step 3 opioids (4.2%). 73.9% of the prescriptions were issued for opioids with non-modified release, 22.7% for slow release forms and 3.4% for very slow release forms, with cancer patients receiving slow-release opioids more frequently than patients with non-cancer.

Conclusions

The percentage of patients treated with opioids in the evaluation period was higher than expected. However, predominantly WHO-step 2 opioids and opioids with non-modified release were prescribed, and most patients received opioids for short periods of time. Continuous therapy with WHO-step 3 opioids was rare.

Generalized Anxiety and Depression in Primary Care: Prevalence, Recognition and Management

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Objective

To develop a comprehensive clinical-epidemiological description of the prevalence of generalized anxiety disorder (GAD) and depression among (MDE) primary care patients along with an assessment of physicians recognition rates and prescription behaviour.

Methods

The study was carried out in Germany based on a nationally representative sample of 558 primary care physicians and over 20,000 patients, who attended physicians' offices on the target day. Survey data were collected in three stages: (1) a comprehensive description of the physicians characteristics in terms of psychosocial qualification, and provider aspects as well as attitudes towards GAD and depression, (2) a diagnostic screening questionnaire for GAD and depression filled in by the patients, and (3) a physicians characterization of the patients in terms of diagnostic status as well as past and current interventions.

Results

Conservatively estimated, 5.3% of all primary care patients met criteria for GAD. Only one third of all GAD patients met criteria for depression cross-sectionally. Physicians recognized a mental disorder (case recognition) in more than two thirds of cases with GAD; rates were even higher in patients with co morbid anxiety and depression (85.4%). Recognition of the specific disorder (diagnostic recognition) was conspicuously worse in patients with GAD (34.4%; MDE: 64.3%). This has significant implications for treatment. 44% of patients with GAD (MDE: 37%) receive no intervention; the rate of prescribed first line treatment can be estimated 46% in GAD (MDE: 55.5%).

Conclusions

The majority of primary care doctors viewed GAD as a prevalent, independent disorder with special treatment needs. The findings at the target day highlight the significance of GAD in primary care as a condition that occurs at about the same frequency as major depression. Further, the relatively high proportion of pure GAD suggests that the frequency of depression-co morbidity of GAD has previously been overestimated. In primary care, GAD is often recognized as a mental disorder but seldom as the specific diagnosis. Suggestions for a better recognition are discussed in the light of specific treatment demands. Overall, the findings reveal an unsatisfactory picture of current treatment strategies for GAD patients in primary care.

Bridging the gap between research, policy and daily practice: Towards an improved infrastructure for infectious disease control in the Netherlands: The VISI Project

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Issue/problem

In the Netherlands forty-three Municipal Health Services (MHS) are responsible for infectious disease prevention and control, supported by national institutes like the National Institute for Public Health and the Environment (RIVM) and the National Co-ordination Centre for Communicable Diseases (LCI). Recent outbreaks and the fear for bio-terrorism after September 11th have caused an increased awareness of the importance of a strong national system for disease control. A lot can be gained by better synchronisation and coordination between research, policy and practice.

Therefore the Ministry of Health is sponsoring the VISI-project, aiming to strengthen the infrastructure for infectious disease control and prevention.

Description of the project

The VISI-project is carried out by the National Association of MHS. The project started in April 2001 and will end in June 2003. Three of the key-dilemma's to be solved are:

- Ensure an up to date standard of scientific knowledge among an often small local staff of medical professionals.
- Develop a nationwide computerized data-system for early-warning and surveillance, while substantial investments are already made in different local systems.
- Implement a uniform system of coordination and action to control outbreaks and large scale disasters.

To strengthen the infrastructure, several working committees started and clustering of MHS into seven regions was initiated. Each region elaborates one of the many issues and presents their implementation-proposal to the others.

Conclusions

1. It is impossible to bridge the gap between research and policy in public health without involving public health practice as a liaison.
2. Sophisticated ICT-methods can now be used to coordinate different local data-surveillances into a nation-wide system for research and policy-making.
3. Commitment of national and local policy-makers is essential for a) efficient infectious diseases control, and as a result of that: b) the willingness to invest in long-term research-programs.

The distribution of the acute myocardial infarction in patients aged 25–64 according to the Kaunas population-based ischemic heart disease register data in 1983–1992

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Objective

The aim of the present study was to evaluate the distribution for the Kaunas men and women aged 25–64 years, who experienced acute myocardial infarction (AMI) in 1983–1992, who survived more than 28 days and had electrocardiograms.

Methods

The Kaunas community-based ischemic heart disease (IHD) register was the source of data. The methods used for the data collection were those applied by the WHO "MONICA" Project. Electrocardiograms were standardised by Minnesota codes.

Results

During 1983–1992 in the Kaunas city hospitals were 3320 patients, who experienced AMI, diagnosed by clinical, electrocardiological, laboratory findings. The first AMI was diagnosed for 2449 patients – 1853 men (75.7%) and 596 women (24.3%). AMI morbidity rates among age groups 50–59 and 60–64 both men and women aged 25–64 yrs were thrice as high as among those aged 25–29, 30–39, 40–49. The transmural AMI was diagnosed for 935 patients (771 men (82.5%) and 164 women (17.5%)). The nontransmural AMI rates among both men and women were twice as high as among those with the transmural AMI. The transmural AMI distribution by the lesion localisation was anterior in 535 patients, posterior in 375 patients, lateral in 25 patients. The nontransmural AMI distribution by the lesion localisation was anterior in 650 patients, posterior in 540 patients, lateral in 502 patients. The complications of AMI were those: with the blocus of AV node – 89 patients, premature beats – 508, with atrial fibrillation and undulation – 149, ventricular arhythmias – 16, theaneuryzma of the heart – 29, the rupture of the heart – 1 patient.

The pharmacist, a professional resource: pharmaceutical care for migraine and headache patients

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Background

Pharmaceutical Care is of increasing importance for pharmacy practice in Germany but currently only a few disease or target group specific concepts have been systematically evaluated. Especially because of high prevalences of chronic headaches and of self-medication among these patients, often combined with insufficient knowledge about the disease and therapeutical options a particular benefit from Pharmaceutical Care can be expected for migraine and headache patients.

Aim

Aim of the PharMiKo-Project is to evaluate benefit and expenditure for pharmaceutical care for migraine and headache patients. In addition prevalences of major headache types and different therapeutic strategies will be investigated.

Methods

About 90 out of a total of 435 pharmacies in the study region (Bremen and adjacent regions of Lower Saxony) participate in the project. They were randomised to an intervention and a control group. After an intensive 2-day training course, intervention group pharmacists started to implement pharmaceutical care for patients of the target group. Patient-based information was acquired before and after intervention. Time expenditure was documented weekly in the pharmacies. Training courses and implementation of pharmaceutical care were offered to control group pharmacies after completion of the intervention. Intervention outcome will be measured as changes of headache specific parameters and by changes of indices as e.g. quality of life. Economic aspects e.g. lost workdays will also be considered.

Results and Conclusions

Data acquisition has been completed and analyses are in progress. Results and conclusions are expected in September and will be presented.

Predicting adult smoking: tobacco consumption and social circumstances

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Aim

To investigate the effect of cigarette consumption level and social circumstances during adolescence on adult smoking habit.

Methods

1958 British birth cohort (all births 3rd-9th March 1958). Logistic regression models were used to predict (i) smoking at 41 years and (ii) persistent smoking (23, 33 and 41 years) from cigarette consumption and social circumstances at 16 years, as indicated by social class and educational qualifications. An interaction term was also tested, between 16-year consumption level and social circumstances.

Results

Of 6537 subjects with full smoking history data, 31% smoked at 16 years. Of these, 50% were smokers at 41 years and 42% were persistent smokers at 23, 33 and 41 years. Adolescent cigarette consumption predicted smoking and consumption level in adulthood. The effect of adolescent social circumstances was robust to adjustment for consumption: both consumption and social circumstances independently predicted subsequent adult smoking (adjusted OR 1.44 95% CI:1.27, 1.64) social circumstances, (adjusted OR 1.67 95% CI:1.26, 2.22) consumption for women. For men there was a significant interaction between adolescent consumption and social class: the association between adolescent cigarette consumption and adult smoking was weaker among men from manual class backgrounds than those from non-manual classes. A similar interaction was seen with educational achievements.

Conclusions

Tobacco dependence is an influence on future smoking behaviour, but this does not account for an effect of social circumstances. Our

results also suggest that at least among men, the effect of early cigarette consumption is modified by social and educational background.

Post-Soviet therapists' attitudes in interpreting public mental health

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Background/Aim

During 1998/2001, two hundred therapists (Age 22–78, 90M/110F; professionals in Psychotherapy, Psychiatry, Clinical Psychology; Seven Doctorates, 56 Kandidats Nauk, 137 University Graduates) from fourteen clinical and psychological institutions in Russian Federation, Armenia, Azerbaijan, and Georgia were interviewed by 3 Questionnaires measuring Generalized Self-Efficacy (Jerusalem, Schwarzer), Social, Political, and Religious Attitudes (Jeshmaridian, Takooshian), Moral Judgment (Gibbs, Basinger) to find out what attitudes post-Soviet therapists have in understanding what the impact of various factors are on the population's mental health.

Results

Post-Soviet therapists try to overestimate the role of psychological factors (73% of therapists put "psychological factors" in the first place when answering the question: "Arrange, please, biological, psychological and social factors according to their significance to a person's mental health") in public mental health. Their attitudes of overestimation of the role of psychological factors as well as the mystification of psychological mechanisms can be explained by the social psychological defense mechanisms of rationalization and responsibility denial. Ninety-one percent of the interviewed professionals believe that praying is useful and beneficial for a person's mental health, and sixty-one percent of them believe that praying positively influences patient's well-being. Religion and religious activity are mostly viewed as a societal phenomenon and social activity.

Conclusions

The investigation has shown that post-Soviet therapists believe:

1. They will serve the patients better and the results of their work can be much better if their own social/financial conditions are bettered; 2. PTSD can be minimized if the ex-combats have better conditions morally, socially. (All the respondents have mentioned, "combats' social and economic conditions should be improved" as an answer to the question "What should be done to help ex-combats' mentally and morally?"); 3. The mental condition of any mentally disordered person can improve if the latter's social, economical, moral conditions are bettered.

Post-Soviet therapists actualize some kind of "therapeutic" philosophy, which is thought to be the best but which, in fact, leads to false interpretations in understanding public mental health and sane society. At the same time, they are in search of "a magic wand," which can/ought to/will solve all the therapeutic problems in public mental health. These fallacies characterize post-Soviet therapists' thought orientation: division of the world into We versus they, Therapists versus patients, Insiders versus outsiders. It can be assumed that these fallacies are more or less common to any post-socialist society.

Interrelationships between smoking and deviant alcohol consumption in medical care patients and the population

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Background

There is only little evidence about the particular factors of interrelations between smoking and alcohol risk drinking from studies using population and clinical samples although high synergy effects of both health risk behaviors are known for some diseases.

Aim

To analyze smoker rates among different groups of deviant alcohol drinking (DAD) in medical care patients and a population sample.

Methods

Three samples were drawn in northern Germany: (1) 1167 patients consecutively admitted to a municipal general hospital, (2) 696 patients who consecutively showed up in 12 general practices which had been drawn at random, (3) randomized population sample of 4075 adults. In sum, there were 5938 individuals aged 18 to 64 years. Internationally standardized instruments (SCAN, CIDI) were used for the collection of the data about smoking behavior and DAD which includes risk drinking as well as alcohol abuse or dependence according to DSM, the American classification system for psychiatric diseases.

Results

The rate of DAD is highest among the daily cigarette smoking hospital patients (47.1 %), medium among the general practice patients (32.1 %) and lowest in the population (18.4 %). For the currently smoking general hospital patients the odds of being actually alcohol dependent is 11.7 compared to the population. In all three samples taken together there is a linear progression in the odds for having a DAD with the number of cigarettes smoked per day.

Conclusions

The data reveals that there are subgroups of comorbid tobacco and alcohol users with an ordinarily high risk of alcohol- as well as tobacco-attributable morbidity and mortality. The results show special needs of prevention which are not yet sufficiently met.

Free choice of sickness funds and selection: First results from the KORA-survey "Living and Health in the Region of Augsburg"

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Background

Traditionally, the majority of people covered by the German statutory health insurance scheme had no choice over their sickness fund and were assigned to a given fund according to geographical and/or job characteristics. Since 1996 almost every insured person has the right to choose a sickness fund freely and to switch funds. Free choice of sickness funds has been introduced in order to strengthen the competition between the funds and eventually to improve the quality and efficiency of health care. There is, however, the fear that these aims cannot be reached: As the risk adjusters in the current risk structure compensation mechanism include only age, gender, and disability, changes between the funds might result in increasing morbidity-risk segmentation.

Aim

The study aimed at (1) providing a detailed picture of how the insured persons made use of their new right between the years 1996 and 2000 and (2) exploring whether and to what extent morbidity-related risk differentials do exist between persons switching funds and persons sticking with their funds.

Data and Methods

The study is based on the KORA (Kooperative Gesundheitsforschung in der Region Augsburg) survey "Living and health in the Region of Augsburg" which was conducted from October 1999 to April 2001. 4261 German residents (= 66.8 percent of a random sample stratified by age and sex) of the study region (city of Augsburg and 2 adjacent counties) at 25 to 74 years participated in the survey. The data were collected in computer-based, standardized oral interviews and analyzed by use of standard statistical techniques.

Results

12.2 percent of all persons insured in a statutory sickness fund changed their funds between 1996 and the time of the interview. The large majority among those who switched made their choice in favour of a fund with a lower contribution rate. The propensity to switch correlates with age: 27.1 percent of the persons at the age of 25–34 and only 0.1 percent of the persons at 65–74 years changed their fund. After adjusting for age and sex the prevalence of chronic diseases was higher among the persons sticking with their funds compared to the persons switching funds (OR = 1.27; 95%CI [1.00–1.61]).

Conclusions

The results support the supposition that free choice of the sickness funds has resulted in an increase in the morbidity-risk segmentation between the sickness funds with low and with high contribution

rates. As morbidity differentials are not appropriately reflected in the current risk adjustment mechanism, differences in the contribution rates still do not only indicate differences in efficiency, but diverging risk structures as well. In order to weaken the incentives for cream-skimming by the sickness funds, morbidity indicators should be included in the risk structure compensation scheme.

Health needs assessment of men living in Sefton, Merseyside, England, UK

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Background

There are few specific health services directed especially towards the health needs of men. However, a number of UK health plans focus on diseases for which men fare worse than women in terms of either morbidity or mortality or both. In situations of corresponding levels of ill health, men are known to use services less than women and, when they do, they present much later in the course of illness. This presentation will review men's health status across the borough of Sefton, will examine men's attitudes, beliefs and health-related behaviour, and will consider all the implications in the context of both health promotion and health service provision aimed at men.

Aim

Firstly, to describe the health status of men in Sefton, secondly, to review the evidence base for health promotion interventions aimed at men, and thirdly to study the attitudes, beliefs and behaviour of men concerning matters relating to health.

Methods

These include a review of the literature, collection and analysis of routine health data, semi-structured interviews with representatives of service providers, and a survey (by postal questionnaire) of men selected from a population-based register and stratified according to age and residency.

Results

Health status will be demonstrated using morbidity and mortality data, along with risk factor indicators such as smoking rates, alcohol and dietary intake, and levels of physical activity. Results from the survey, local health service contact and lifestyle data, supplemented by findings in the literature, will together be used to draw conclusions concerning local male beliefs, attitudes and behaviour about health.

Conclusions

This study should inform the development of more sensitive and accessible services for men and advise on the need for male specific health services. The review of best practice in health promotion should be used to target the most suitable health promoting interventions.

Direct costs of handling patients with thyroid diseases in areas with mild and moderate iodine deficiency

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Background and aim

Denmark is a mild to moderate iodine deficiency area. Iodine supplementation has not been mandatory until June 2000. Urinary excretion of iodine has been measured to 40–85 microgr./day in the western part of Denmark and 70–105 microgr./day in the eastern part of Denmark.

Aim:

- to access treatment of thyroid disease in the two areas of Denmark with different degree of iodine deficiency.
- to compare the direct cost of handling patients with thyroid disease in the two areas.

Methods

A number of central registers are used:

- Hospital Discharge Register, where all admissions and operations are registered.

- Institute of Radiation Hygiene, where all scintigraphies and 131 iodine treatments are registered.

- Danish Medicines Agency where all prescribed thyroid medicine is registered.

- Local laboratory registers for TSH T3 and T4.

Results

As regards anti-thyroid drugs defined as DDD an excess of 60% was seen in the western part of Denmark compared to the eastern part, whereas only a marginal effect was seen on thyroxin. There was 20% more people treated with 131 iodine therapy in the western part than eastern part. Surgery was performed 25% more often in west- than east-Denmark. The direct costs including GP-visits were calculated to 4700 EUR/1000 inhabitants in west and 4380 EUR/1000 in east. If the iodine level in the western part of Denmark was increased to the same level as in the eastern part of Denmark there would be a reduction in direct costs of about 1 million EUR/year.

Conclusion

There are substantial differences in treatment activity in areas with mild and moderate iodine deficiency. Iodine supplementation to a certain level will reduce costs. As iodine supplementation was introduced in Denmark in June 2000, the effect of health economics and treatment will be monitored during the next 10 years.

Period of socio-economic transition and inequalities in health of urban and rural populations in Lithuania

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Aim

The aim of the study was to assess inequalities in mortality from major causes of death in Lithuanian urban and rural populations during the period of socio-economic transition in the country.

Methods

Information about the population and the deceased was obtained from the Lithuanian Department of Statistics. Mortality rates were age-standardized. Trends in mortality from major causes of death and average annual changes for the period of 1990–2000 were based on logarithmic regression analysis.

Results

The age-standardized overall mortality rates of the rural populations exceeded those of the urban in 1990–2000. This difference increased from 16.9% in 1990 to 29.5% in 2000 (in males from 15.2% to 30.4%, and in females from 12.5% to 23.7%). The most pronounced inequalities were observed in mortality of young and middle-aged populations. Cardiovascular diseases made the most considerable contribution to these inequalities (37.9% in males and 74.0% in females respectively, in 2000). Through the whole period of investigation overall mortality in urban areas was decreasing statistically significantly by 1.74% per year, while in rural areas only insignificant tendency of decline was observed (average annual change –0.48%). The greatest inequalities between urban and rural areas were noted in mortality trends from cancer and external causes of death. In urban populations mortality from external causes was decreasing by 0.37%, and from cancer – by 0.73%, while in rural areas – increasing by 0.98% and 0.79% per year respectively. Both in urban and rural populations age-standardized mortality increased until 1994, the period of the major social and economic changes, and started to decline since 1995, more significantly in urban areas.

Conclusions

Inequalities in mortality of urban and rural populations increased during the period of transition to a market economy, especially in males, mainly due to more rapidly improving health of urban populations.

Standardised assessment of mental health service systems in 5 Eastern and Western European regions

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Objective

Within the evaluation of day hospital treatment in a multi-centre EC-funded research project (EDEN-study) it is of great relevance to describe the components of the whole regional mental health service systems of the study centres' catchment areas. Participating centres are located in East-Germany (Dresden), UK (London), Southern Poland (Wroclaw), East-Slovakian rural Zemplin region (Michalovce) and Czech Republic (Prague). The varying stage of reforming mental health care increases the need to analyse differences in these service systems.

Method

The European Service Mapping Schedule (ESMS) was used to classify the full range of services identified within each of the catchment areas (100.000 – 650.000 residents). Presented data refer to the situation in the year 2000.

Results

The ESMS revealed large differences in service availability and utilization. The Polish and Czech area, and to a lesser degree also the German area, provide a high number of acute hospital-based services (63–90 places/100.000 residents). On the contrary, the capacity for acute admissions in East-London as well as in the Zemplin region is significantly lower (30–32 places/100.000 residents). There is an important West – East difference in the establishment of community-oriented residential and day & structured activity services. E.g. concerning non-acute non-hospital-based residential services there is a range of 58 (London) – 4.7 places/100.000 residents (Wroclaw); the number of service users of non-acute day & structured activity services varies from 18.6 (Zemplin region) – 784.2/100.000 residents (Dresden). Only the 2 Western European regions provide time-limited outreach emergency services.

Conclusion

Especially the comparison and discussion of long-term outcome results in the EDEN-study has to consider the level of establishment and accessibility of community mental health services in the catchment areas. In general, statistical analyses have to detail how they control for centre-specific effects.

Effects of the Mental Health Promoting Program in Slovakia on mental health of boys and girls

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Background

"Promoting Mental and Emotional Health in the ENHPS" is the international comparative research of WHO's Health Promoting Schools project oriented on the effects evaluation of a teachers' training on mental health of children. It is hypothesised that teachers' training would result in improved children's mental health.

Aim

The main aim is to explore the effect of the teachers' training on mental health of children by gender.

Methods

40 teachers of experimental schools and 519 pupils (mean age 11,5 years) were participants of the project. The pupils came from 4 experimental (N=207) and 4 control (N=312) schools in Kosice. The data collection was carried out within one school year (1999–2000) – before the training (T1), 5 months (T2) and 9 months (T3) later. The subjective (GHQ-12), emotional (ABS) well-being and self-esteem (SeS) of experimental and control groups were compared in T1, T2 and T3 separately using unpaired t-tests.

Results

At T1 the control schools had a better subjective and emotional well-being, and self-esteem. The T1 differences were significant on subjective well-being ($p < 0.01$) and self-esteem ($p < 0.05$). At T2 the experimental schools had a better emotional well-being and the control schools had a better subjective well-being and self-esteem. At T3 the experimental schools had a better subjective and emotional well-being and the control schools stayed better only in self-esteem. T2, T3 differences were not significant. In comparison

by gender, boys from the control schools had a better subjective and emotional well-being, and self-esteem at all measurements than boys from the experimental schools. Girls from the control schools had a better self-esteem than girls from the experimental schools at T1, T2 and T3, but they had a better subjective and emotional well-being only at T1. All differences were not significant.

Conclusion

Our findings confirmed a positive effect of the teacher's training on mental health of pupils coming from experimental schools. The comparison by gender indicates that this preventive activity influenced a mental health of girls more than boys.

Intensified Counselling of Patients as a Prerequisite to implementing Pharmaceutical Care: Results of a Databased Quality Circle of Pharmacists in Saxony

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Background

As in many other countries, pharmacists in Germany are obliged to inform and counsel patients. To have occupational regulations does not mean that this task is always fulfilled. Consumer organisations criticise pharmacists for not counselling patients sufficiently.

Aim

To improve the counselling abilities of the pharmacy team by establishing a quality circle of pharmacists and show its effect compared to a control group. Patients with pain have been chosen as a target group due the fact that pain-relievers are one of the most widely used drug groups and due to the interest of the pharmacist to implement pharmaceutical care for patients with chronic pain.

Method

Controlled Intervention Study (intervention group: 18 pharmacists; 10 controls). The circle met 10 times (3/1998 – 3/2000). Data was gained on the pharmacist's individual choice of drug (computer-aided) and on counselling activities (assessment by special short documentation). For evaluation, the baseline documentation was repeated and a process evaluation has been conducted.

Results

The participating pharmacists developed recommendations for the counselling process of patients with headache, migraine, back pain and opioids. A further guideline deals with continuing education within the pharmacy. The guidelines were judged as helpful and encouraging to change practice in 12 of 18 pharmacies. The pre-post-comparison of the counselling activities of the intervention group shows a significant increase from 44,3% to 61,7% ($p < 0,001$; χ^2). The initiative of the staff to inform the patient increased from 27,4% to 34,7%; the counselling of children and adolescents increased from 58,6% to 89,2%. The consultation activity within the control group did not change.

Conclusion

The quality circle concept was widely accepted. The participants highly appreciated both the possibility to exchange experiences with colleagues and to reflect every day routines in a structured manner. This quality assurance project established a basis to implement pharmaceutical care for patients with chronic pain (s. abstract Patients with Pain Part II).

Psychosomatic Performance of Population In Armenia

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Background

It is commonly considered, that a numerous of social factors as well as health trouble may influence mental state, which must be considered in a health care practice

Aim

The main aim of the study is to investigate the impact of socio-demographic characteristics and subjective evaluation of health performance on the mental state of population in Armenia.

Methods

Specially elaborated conformably to the objectives of this study unified questionnaire alongside with SCL-90R, BDI, HADS and

Spilberger anxiety test were introduced to the representative sample of Armenian population (n=395) via primary health care units in 4 regions of Armenia (1988 Armenian disaster area – 2 regions, n=180 and non-disaster area – 2 regions, n=215) during 2001. Raw data were processed in accordance with the routine statistical procedure.

Results

More than 50% of responders were preoccupied with health problems whereas medical aid was inaccessible for 28% of responders for financial reasons. This part of population revealed significantly higher scores on the most of the introduced rating scales. In spite of expectations responders from disaster area revealed essentially less health concern confirmed by testing results under circumstances of substantively poor financial situation. According to research data the steadiest mental reactions to unfavorable influences may be determined as increase in anxiety, depression and somatization level. These indexes of emotional state are higher in Armenian population than in USA, Western Europe and Russia. The results of this study were considered while elaborating advanced postgraduate training programs for primary health care practitioners in Armenia.

Conclusion

Revealed data lead to conclusion that intrapsychic image of malady influences mental state in a greater degree than the fact of presence of somatic disease itself.

Impairments and quality of life in single living patients with myasthenia gravis

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Background

Myasthenia gravis (MG) is a common neuromuscular disease. Progress in medical therapy has continuously increased life expectancy in M.g. patients. Despite this and due to the social problems of single living persons, until now no comprehensive study investigated the situation of MG patients living alone.

Aims

The study tried to analyse impairments and quality of life in single living patients with myasthenia gravis in Germany.

Methods

In collaboration with the German Myasthenia gravis Association, the self-help organization for patients, 2150 patients were asked to work on a mailed questionnaire on health care situation. The questions were related to demographical data, impairments, therapeutical course, use of complementary therapies, illness related costs and quality of life (SF-36). Around 71% responded and altogether 313 of these MG patients reported living alone (proportion females: 82.7%, average age: 61.8 years).

Results

In average, the single living MG patients were significantly six years older than those not living alone, they lived significantly more in bigger towns and this sample included more females. These MG patients suffered longer from MG, showed increased impairments, especially in mobility, and used significantly more often complementary medicine. Additionally, quality of life was reduced in six dimension of the SF-36.

Conclusions

It becomes obvious, that impaired quality of life results from the constellation of living alone, higher age, female gender and longer lasting course of MG. Therefore these MG patients living alone need more attention by health care providers and measures for improving living situation of these patients are still required.

Varicella vaccination in Germany: an analysis with focus on the impact of coverage on age-shifts and the elimination of the disease

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Background/Aim

Varicella is a highly prevalent, vaccine-preventable disease. The aim of this study was to examine the potential clinical and epidemiological effects of different varicella vaccination strategies in Germany with a focus on elimination and the possibility of age-shifts.

Methods

The simulation model EVITA (Economic Varicella Vaccination Tool for Analysis) was developed to analyse clinical, epidemiological and economic effects of varicella and varicella vaccination. It combines an established infectious disease model which describes spread of varicella infection in a population over time with a decision tree describing the course of disease and health care utilisation in case of infection. Data for the German situation were mainly derived from two large epidemiological surveys. The following vaccination strategies were analysed: 1. children strategy (age of vaccination: 15 months, maximum coverage (to be reached within 5 years): 85%), 2. adolescents strategy (11–12 years, 30% coverage), 3. combined strategy. The analytic time horizon was 30 years.

Results

Without universal vaccination 739,000 cases, 40,000 complications, and 5,700 major complications requiring hospitalisation occur each year in Germany. The children strategy prevents more than 82% of these events. Elimination is possible within 18 years and can also be achieved with coverage rates of only 75% due to effects of herd immunity and vaccination at a very young age. For coverage levels higher than 50% no age-shift occurs. The adolescents strategy prevents only 5% of the cases, but 8% of major complications. The combined strategy is slightly more effective than the children strategy alone.

Conclusions

Varicella vaccination of children and adolescents is very effective in reducing the high burden of disease. By targeting on very young children, it is possible to eliminate varicella within an acceptable timeframe. Based on experiences from the USA such coverage rates of 75% and more appear to be achievable. Then, no age-shift occurs.

Perceived health in relation to social and behavioural factors among Lithuanian adult population

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Background

Perceived health is one of the principal indicators for monitoring the health and quality of life of the population. It is associated with a variety of factors, objective and subjective.

Aim

The aim of the study was to assess the relationship between self-perceived health and social and behavioral factors among Lithuanian adult population.

Methods

The study was carried out within the international Finbalt Health Monitor project. Since 1994 four surveys have been conducted. A self-administered questionnaire on health perception, health behaviors and sociodemographic factors was mailed to random samples (3000 in every survey) of population aged 20–64. Response rates varied between 74.4% and 63.8%. Logistic regression was used to assess the effect of social and behavioral factors on perceived health.

Results

The proportion of persons rating their health as “good” or “reasonable good” has increased from 42.4% in men and 30.1% in women in 1994 to 47.5% and 40.2% in 2000 respectively. With increasing age, the number of people assessing their health positively decreased from 76.2% in age 20–24 to 20.9% in age 55–64 in men and from 69.1% to 16.1% in women. Health perception was related to the level of education: the higher the educational level, the better the assessment of health. The number of men rating the health as “good” or “reasonable good” was the lowest among the inhabitants of regional centers. There was no relation between perception of health and place of residence among women.

The higher level of physical activity was associated with better assessment of health. Nonsmoking men rated their health as good more often than smokers did. No association was estimated between smoking and perceived health in women. Overweight women

(BMI \geq 25) assessed their health worse than those with normal weight did.

Conclusion

Perceived health can be used as public health indicator in the evaluation of health policy aimed at reducing socioeconomic differences and promoting healthy lifestyle.

Functional status in relation to socio-economic status in elderly in Cracow

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Introduction

Socio-economic health differences vary during lifetime. In post-communistic countries like Poland, economical changes during the transition period (health care reform, insurance system reform and free market economy) have influenced lives of the most vulnerable social groups, among others elderly. The aim of this study was to assess whether the socio-economic health differences persist into old age in Poland and if there are SES related differences in health by age group and gender.

Methods

Randomly chosen, not institutionalised elderly people aged 65–85 living in Krakow were interviewed by trained interviewers on their socio-economic status (occupation, education, income, house ownership) and functional status – GARS (ADL, IADL). Data consisting of 529 interviews were analysed using GLM and logistic regression (SPSS package ver. 10).

Results

People with higher occupational status, higher level of education, higher proxy income and house owners reported better functional status in comparison to people who are not so well off. Findings support the presence of differences in the pattern of socio-economic inequalities in functional status among age and gender groups.

Conclusion

Socio-economic differences in functional status unfavourable for lower social strata persist among the elderly in Poland. It raises the question why they persist in a previous 'classless' society and what kind of action should be undertaken in order to diminish those differences.

The influence of nocturia on the quality of life

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Background

Previous studies identified an effect of nocturia (two or more micturitions per night) on quality of life. We hypothesize that nocturia indeed affect quality of life but that effect is mediated via sleep. Nocturia and sleep disturbances are clearly associated. To go to the toilet one has to wake up. Lack of sleep is associated with mood disorders, depression and an increase of sleeping during daytime, all of which implies a decrease of quality of life.

Aim

To estimate the influence of nocturia on the quality of life in the Dutch adult population.

Methods

A telephone survey on the prevalence of nocturia was held among a representative sample of 4721 Dutch respondents (response: N=2506: 53%). A written survey on the quality of life and nocturia was held among a weighed sample of 1000 respondents, all previous participants of the telephone survey (response: N=859: 86%). The questionnaire contained questions from the B-LUTS which includes questions on nocturia. Using questions from the RAND-36 respondents were asked about their physical functioning and mental health. Questions from the SWEL were used to ask about sleep disturbances. In addition, questions about socio demographic and health characteristics were asked. The data were analysed using covariance and multivariate regression analysis.

Results

Respondents with nocturia had more sleep disturbances compared to other respondents. The regression model that included nocturia and confounders showed that respondents with nocturia scored lower on the quality of life scales compared to respondents without nocturia. This decreased to a non-significant difference after

including sleep in the model. Therefore there is no direct effect of nocturia on quality of life, the effect is mediated by sleep.

Conclusions

Nocturia is not a symptom that stands on its own. It is accompanied by poorer sleep and consequently by poorer quality of life. Patients with nocturia will probably already be known by their doctor because of other symptoms. It is worthwhile for doctors to routinely check whether or not patients who contact them for sleeping disorders have nocturia. In the Netherlands, this is especially true for older women with a poor health status since they are the most likely to suffer from nocturia.

Level of care decision making in emergency psychiatry departments: a comparative study

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Background

Much research has been done in emergency psychiatry pertaining to level of care decision making. However, most studies did not include more than two levels of care (admission or not). Moreover, in most studies only actual admissions are studied, which are also depending on local circumstances. Therefore, we conducted a study in which the decision making process regarding indicated and actual levels of care was compared in emergency teams in two urban regions.

Aim

To study the process and the outcome of decision making in emergency psychiatry departments and to compare this process in two urban regions.

Methods

A total of 720 emergency psychiatry patients were assessed, using a standardized instrument to assess the severity of psychiatric illness. In addition, information was collected regarding (1) demographics, (2) availability of the mental health care system (3) family variables and (4) clinical variables. Finally, the level of care that was (theoretically) indicated, as well as executed in practice were registered. Using regression analyses, we will describe the associations between the predictor variables and the levels of care and compare the two regions for their decision making process.

Results

The indicated level of care was mainly predicted by severity of psychopathology, suicide risk, and danger for others. A history of psychiatric admissions was also predictive. Regions were comparable in their weighting of most criteria, but differed in weighting psychotic and depressive disorders. Actual admission was mainly associated with indicated level of care. Previous admissions are rising the chance of admission, alcohol or drug abuse work in the opposite direction. Involuntary admission is partly dependent on indicated level of care, but mainly on a perceived lack of motivation for treatment.

Conclusions

The decision making process in emergency psychiatry departments can be better studied by making a distinction between indicated and actual levels of care.

Communication, attitudes and knowledge among Danish hospital staff in relation to immigrants

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Aim

Immigrants form an increasing part of the Danish population and intensive debates are taking place concerning integration of immigrants. Our aim is to illuminate attitudes, knowledge, experiences and communication patterns among hospital staff with regard to the category "immigrant patients". This is done to assess needs for possible interventions and new priorities.

Methods

The study is based on a questionnaire mailed to doctors, nurses and assistant nurses in May 2001 at all clinical departments at Bispebjerg

Hospital, a major general hospital in Copenhagen. Among the 1012 persons included the total response rate was 58%. Variables on contact patterns, knowledge concerning immigrants, attitudes and experiences regarding immigrants' use of health services and illness behaviour as well as communication patterns were analysed for bivariate association with profession, age and gender. Moreover, selected variables were analysed using logistic regression analysis.

Results

A majority of all three professional groups obtain their knowledge on immigrants through the media and patient contact, and less through travels, courses and colleagues. In general, doctors and nurses showed the most positive attitudes towards different statements about immigrants, and assistant nurses the most negative. Doctors and nurses had most frequent contacts with immigrant patients and found their communication more satisfactory compared to assistant nurses. Many health workers expressed complaints about immigrants' inappropriate use of health services, but also seem to some extent to be able to deal with the problems they face. Many expressed the need for an interpreter when none was available and an even larger majority used relatives as interpreters.

Discussion

That doctors and nurses had more positive attitudes towards immigrants than assistant nurses could be explained by their higher education providing a higher 'fundamental safety feeling', or a feeling of not being in a competitive situation with immigrants. Assistant nurses have the least satisfactory communication with immigrant patients, possibly because they have less frequent contacts compared to doctors and nurses, and because they use interpreter less often.

Conclusion

Our study identifies differences in attitudes, contact patterns and communication among hospital staff of different education in relation to immigrant patients. The study provides a foundation for new interventions and priorities within the health care system regarding immigrant patients.

The Hypertension and Diabetes Screening and Awareness Study (HYDRA): Aims, design and methods of an innovative epidemiological approach

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Background and aim

Recent reviews have a number of remarkable deficits with regard to a comprehensive epidemiological characterization of hypertension (HYP) and diabetes mellitus (DM) in primary care. So far there are no sufficiently sound estimates available about the prevalence, severity and associated risk constellations of these patients in primary care, nor about the quality of care they receive or the degree of met and unmet needs of patients. HYDRA is intended to close this gap.

Methods

HYDRA is a large-scale epidemiological research program in primary care, designed to (a) obtain nationally representative prevalence estimates of HYP and DM in Germany, (b) to examine the frequency of high risk constellations in terms of associated co morbid disorders and (c) to evaluate the associated burden in terms of ability, management and treatment and (d) the extent of met and unmet needs. HYDRA is based on a representative nationwide random sample of 1,986 (response rate 71.6%) primary care doctors and uses a 2-stage design. Stage 1 consisted of a pre-study characterization of the participating doctors (qualifications, attitudes, knowledge about diagnosis and treatment etc). Stage 2 consisted of point prevalence assessment of all patients attending their doctors' offices. A total of 45,125 patients (conditional response rate: 87.3%) were enrolled

and completed the study questionnaire (reason for visiting, medical/drug history, health and illness behavior, disability and functioning measures). Doctors completed for each patient a standardized clinical appraisal form (diagnoses, severity, current and past interventions and problems, lab test findings from charts), supplemented by lab tests (blood pressure assessment, urine glucose, microalbuminuria screening).

Conclusion

The poster presents details of the design and assessment strategy of HYDRA and discusses limitations in terms of representativeness, effect of cluster effects and estimates of prevalence.

Influenza-vaccination: an inventory of strategies to reach the target population and optimise vaccination uptake Kroneman, M.^{*1}, Paget, J.²

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Background

Influenza continues to be a considerable health problem of the populations in Europe. Complications of influenza are especially present in elderly patients and patients with chronic conditions such as cardiovascular disorders and respiratory disorders. Vaccination is an effective intervention, however, there is despite the evidence on effectiveness, considerable variation among European countries uptake rates for vaccination. For future pandemic planning at European level, it will be useful to be able to identify the countries ability to reach the patients at risk.

Aim

So far, no information is available about how countries inform and recruit the target population for the influenza-vaccination. Also the vaccination distribution methods are unknown. To gain insight, the following research questions have been formulated:

- Do countries monitor the vaccination rates of the different groups at risk? If yes, how do they monitor and what is the vaccination rate for each group?
- By which methods are the target population informed and recruited and which distribution channels are used for which target groups?

Methods

A questionnaire was sent to key figures in 27 European countries (spring 2002). From the literature, different groups of patients are distinguished that qualify for immunisation based on health status or social position. Based on this information the questionnaire was composed, dealing with practical organization of administration of vaccinations, target group recruitment and vaccination uptake.

Results

Only few countries monitor vaccination rates. Those countries that do monitor vaccination rates can provide age specific rates, but hardly any risk group specific rates. The GP is the most important person in administering vaccinations. Some countries provide extra remuneration for GPs for each vaccination provided. Most countries use mass-media to inform the target population.

Conclusions

A problem in monitoring vaccination rates is the lack of knowledge of population denominators. When the vaccinations of those at risk are monitored and the number of persons belonging to this group is unknown, no rates can be computed.

Illness-related costs and quality of life in patients with osteoporosis Kugler, J.^{*1}, Klewer, J.¹, Seelbach, H.²

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Background

Osteoporosis is the most common bone disease in elderly people, with fractures of the femur neck and vertebral bones. Despite the increasing prevalence of osteoporosis in Western countries, comprehensive studies evaluating medical care, quality of life and illness-related costs in patients with osteoporosis are still lacking.

Aims

The study tried to analyse illness-related costs and quality of life in patients with osteoporosis in Germany.

Methods

In collaboration with the German Osteoporosis Association, the self-help organization for patients, anonymous questionnaires on health care situation and quality of life were mailed to all members. 1225 patients (average age: 67 years; 96% females) returned their questionnaires.

Results

In average, the responding patients suffered since 10 years from osteoporosis. Less than 50% reported having no fractures. In more than 80% of the patients the diagnosis was confirmed by x-ray and analysis of bone density. Around 53% reported being treated by a specialist in orthopedics, more than 40% mentioned additional treatment by a general practitioner, and 30% received treatment from physicians and gynecologists. Approximately 60% took calcium tablets, less than 50% were taking vitamin D and only 24% got pyrophosphates. Around 33% of the patients reported to spend more than 25 EURO monthly due to osteoporosis. A negative correlation between the amount of money spent to ease illness-related problems and general quality of life was found.

Conclusions

The results point to the problem, that medical care for patients with osteoporosis, even in a country like Germany, has to be improved and standardized. Major goal should be reduction of fractures and illness-related costs in patients with osteoporosis, finally to increase their quality of life.

Defining ethnicity in health(care) research

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Introduction

The relationship between ethnicity and health(care) has been drawing growing attention in international research. Different indicators, such as nationality, country of birth and self-identification have been used to define ethnicity. These indicators however have definition/methodological problems. For example, "nationality" is not a good indicator anymore in some European countries, as the immigrants can take the nationality of the host country. Country of birth fails to identify different ethnic groups originating from the same country, and self-identification is subjective and may change according to context and time. Lack of a uniform definition and interchangeable use of different concepts make the comparison of results from research problematic. This is also the case in the Netherlands.

Aim

To develop additional/complementary indicators for measuring ethnicity in health(care) research.

Methods

Based on an international literature survey from different data bases (e.g. Medline, Psych-Info, Sociological Abstracts) different concepts related to ethnicity, its indicators and their definition/methodological problems are reviewed. On the basis of this literature study, a theoretical framework is developed whereby different dimensions of ethnicity and the mechanisms behind the relationship between ethnicity and health(care) are identified. Specific for the Dutch situation, individual proposals are made for the operationalization of ethnic groups for the four biggest immigrant populations in the Netherlands (Turkish, Moroccan, Surinamese and Antilleans).

Results

The concepts of ethnicity and culture are often used interchangeably. Different immigrant groups are defined on the basis of their cultural characteristics as different "ethnic" groups (e.g. self-identification questions), although there are cultural differences also among the host population. This study takes a neutral concept "ethnic origin" as the initial concept to define ethnicity in health(care) research. Ethnic origin refers to one's "roots" and is also a neutral concept in identifying different ethnic (immigrant) groups originating from the same country (e.g. Hindu's, Creols, Javanese immigrants from Surinam]. Based on this concept, we give an overview of why and which population groups from Turkey, Morocco, Surinam and Dutch Antilles should be considered as different ethnic groups. In this approach culture is considered as one of the contextual mechanisms (together with ethnic identity, genetic factors, discrimination and outsider defined ethnicity, migration history) which is influenced by ethnic origin. Proposals for operationalization are made for these contextual mechanisms.

Conclusion

Ethnic origin is proposed as the most neutral definition of ethnicity. A definition of ethnic groups in terms of (inevitably disputable) cultural characteristics is problematic. We propose to see these factors as intermediary between ethnic origin and health(care) behaviour.

Age related policy in cardiology: comparison of health care provision in UK and Italy

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Background

There is evidence that several procedures are frequently provided only in relation to age, older people with coronary heart disease are often not considered for intervention by general practitioners and there is a not favourable tendency in using diagnostic techniques in that age.

Aim

To investigate the influence of age of patient on the appropriate clinical management of cardiovascular diseases in UK and Italy.

Methods

Retrospective analysis of patients' medical case notes (1790 in UK and 2576 in Italy) in cardiology, internal medicine and elderly clinics during the period 1996–1997, considering: exercise tolerance test (ETC), coronary angiography (CA) and coronary artery bypass grafting (CABG).

Results

Older patients and women, independently, were less likely to undergo ETC, particularly for people older than 75 in Italy (OR = 0.161), and for women in UK (OR = 0.61).

Similar trends for age and access to CA achieved significance, with older people in Italy less likely to undergo this procedure (OR = 0.062). Differences by sex were found only in UK (OR = 0.187 for women). In Italy clinical conditions were independent influent factors for having CA (OR = 0.482 for patients with poor Parsonnet score).

Trends for age and sex did not achieve significance for CAGB (OR = 0.815 for older patient in Italy; OR = 0.515 for British women). In Italy clinical conditions were influent factors for having CAGB (OR = 42.032 for patients with very high Parsonnet score).

Conclusions

Clinical management of older patients with cardiac disease in both nations, and of women in UK, may be different from that of younger patients, and of men in UK. One possible explanation would be that these patients are being discriminated against principally because of their age and sex.

Income and health behaviour

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Background

Socio-economic position can be measured with several indicators, which each reflect both the persons general ranking in society and the specific nature of each socio-economic measure. In health behaviour research income has been rarely used socio-economic indicator.

Aim

This study examined the association of income with various forms of health behaviour, before and after controlling for two other socio-economic indicators, social class and educational attainment.

Methods

The data derive from a series of nationwide health behaviour surveys among Finnish adults (sample 5,000 persons aged 15–64 years, response rate 70%). Data from the annual surveys 1993–1999 were linked with socio-economic information from population register using personal identification code. Logistic regression analysis was used to examine health behaviours in income quintiles among men and women.

Results

Smoking showed an inverse income gradient which was steeper in men than in women. Adjusting for occupational class and education weakened the gradient among men and removed it among women. An inverse income gradient was equally found for being overweight but it was steeper for women. The adjustments removed the gradient in men and halved it in women. Non-daily use of vegetables showed a clear inverse income gradient in both genders, but it was removed by the adjustments in men. Use of saturated fat showed an inverse gradient in men only. Heavy alcohol use and physical inactivity showed a modest positive income gradient before and after adjustments.

Conclusions

The association of income with health behaviours was inverse expect for heavy alcohol use and physical inactivity. However, adjusting for occupational class and education explained most of the gradient. The adjusted inverse income gradient was steepest for smoking and non-daily vegetable use. Income differences in health behaviours seem not to be directly related to the costs of these behaviours but are likely to be similar to those for other indicators of socio-economic position.

The shape and magnitude of occupational class inequalities in health across key domains of health: the Helsinki health study
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Background

Although socioeconomic health inequalities are found in working populations, it remains an open question whether the nature of inequalities is similar across various domains of health, and whether these inequalities can be attributed to work related strain.

Aim

We analyse the shape and magnitude of occupational social class inequalities across the medical, functional and subjective domain of health, taking into account the physical and mental strain of work.

Methods

The data derive from the Helsinki Health Study baseline surveys in 2000 and 2001. Each year employees from the City of Helsinki reaching 40, 45, 50, 55 and 60 years received a questionnaire. The pooled data included 6,243 respondents (80% women, response rate 70%). Age, occupational social class, and physical and mental strain of work were included as independent variables. Health outcome variables included nine indicators within the medical, functional and subjective domain of health. Odds ratios and their 95% confidence intervals were calculated.

Results

Occupational class inequalities were found for both women and men for global and physical

health indicators. Statistically significant age-adjusted odds ratios for manual women (as compared to managers) varied from 1.39 (pain) to 2.14 (self rated health), and for men from 1.91 (limiting long-standing illness) to 2.93 (SF-36 physical functioning). Adjusting for physical and mental work strain had but negligible impacts on the age-adjusted odds ratios. For mental health (GHQ-12, SF-36 mental functioning, medically confirmed mental problems) inequalities were non-existent.

Conclusions

Hierarchical occupational class inequalities were found for global and physical health indicators, but not for mental health. Systematic differences in inequalities across the key domains of health could not be found. In this employee cohort occupational class inequalities in health were not due to work related strain.

Trends in adolescent substance use in Flanders-Belgium

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Background

This paper presents the final results of the third survey on adolescent substance use in Flanders-Belgium. The figures are based on self reported data (2,103 respondents in 1994; 2,626 respondents in 1998 and 2,068 respondents in 2001), collected in the capital of Belgium – Brussels and in the province Flemish-Brabant.

Aim

The aim of this report is not only to give an outline of substance use prevalence and incidence of adolescents (age 12–22) but also to explore developments in patterns of substance use and to assess whether the perceived use of parents do influence adolescent substance use. While the survey of 1994 studied the relationship between leisure activities and adolescent substance use, correlation of substance use was carried out in 1998 with psychological factors. The relationship of adolescent substance use with (perceived) parental skills and communication with their youngsters, is investigated in 2001.

Methods

A total of 6,797 adolescents of secondary (age 12–18) and higher (age 18–22) education were surveyed via self-reported questionnaire by project personnel during a school activity period. Students were assured for confidentiality. Data was collected in class by a self reporting questionnaire.

Results

Substance use changes during adolescence. Alcohol remains the most consumed substance. While the prevalence rates of illicit drugs increased during the '90s, the prevalence and frequency of pharmaceutical drugs and the frequency of illicit substances is increasing now. The mean age of onset for the substances is mostly situated in early and middle adolescence. Alcohol is early initiated than tobacco. Cannabis and other illicit substance are later initiated than alcohol and pharmaceutical drugs. The mean age is quite stable for most illicit drugs.

Conclusions

If substance use changes during adolescence and increased since the '90s, prevention programs has to be develop in co-operation with parents.

The use of skin-lightening products among foreign women in the Netherlands: prevalence and side-effects

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Background

The use of skin-lightening products is a common though hazardous practice in many African countries that increased over the last three decades. Components such as hydroquinone, corticoids, and mercury are found in OTC products. A previous study showed that it became a common phenomenon in the Netherlands as well.

Aim

The aim of this research was to get to the prevalence figures of the use of those products among women from the main immigrated population groups in the Netherlands, i.e. the Turkish, Moroccan, Surinamese, Indonesian, Antillean, Ghanese and Somali populations. Besides, it was striving to get to the determinants of the use of these products, as well as to the possible side-effects provoked by a long-term use of some of their major components.

Methods

For fulfilling this triple goal researchers made use of the data from a previous survey on the Migrant health behaviour in the Netherlands (2001), of which scope was a representative sample of 1400 respondents from the four main represented ethnic groups in the Netherlands. Besides, a more focused questionnaire was submitted to both users and non-users of all groups in order to find out about the social factors influencing the use of skin-lightening products as well as to get to know more about possible diseases caused by those agents. Respondents were approached via local organizations in a systematic, snow-ball method. The approach adopted for the data-analysis was a case-control analysis. Cases and controls were

matched on age and ethnicity, and the determinants of use were estimated with a logistic regression analysis.

Results

This brought results in terms of a "model-user" whose social and cultural profile was most likely to be matched with the characteristic of using skin-lightening products. Conclusions could also be drawn as to the kinds of products used in the Netherlands, their availability on legal and illegal markets and as to the most common diseases affecting the users of those products. Prevalence figures could also be estimated for all populations.

This research helped digging up the evidence of a real health issue of which importance has been underestimated in the past years.

Explaining socio-economic differences in old-age mortality

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Background

Although socio-economic position is generally related to mortality, due to selective survival and biological ageing this may not be the case in very old age.

Aim

In the present study socio-economic differences in mortality of old and very old people in Germany are addressed. The special focus is on material conditions, psychosocial stress, health-related behaviour, and social support as potential mechanisms behind these differences.

Methods

The empirical analyses were based on data from the multidisciplinary Berlin Aging Study (BAS) and were representative for the 70 years old and older population of Berlin (N=516). Mortality information was obtained from the Berlin City Registry office. Survivor functions since age 70 were drawn using product-limit estimation. The effects of independent variables were estimated with piecewise constant exponential models.

Results

Distinguishing extreme groups of socio-economic advantaged and disadvantaged persons in terms of social class, years of education, income, and house ownership, we found a significantly higher rate of mortality among disadvantaged women compared to advantaged women. A small part of these differences can be explained by variations in health related behaviour and social support. Among men, the advantaged show somewhat lower mortality before age 80 but clearly higher mortality after this age. This pattern cannot be explained by the considered social and psychosocial mechanisms.

Conclusions

The results suggest that socio-economic mortality differences persist into old age. The mortality crossover observed by older men supports the hypothesis of selective survival.

Assessing the medium and long term consequences of an industrial catastrophe: the explosion of a chemical plant (AZF) in Toulouse (France)

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Background

On September, 21, 2001, as a result of the explosion of a chemical plant, Grande-Paroisse (AZF), close to the centre of Toulouse, 30 persons died and 3000 were injured, due to the blast effects. An orange cloud, suspected to be toxic, flew over the city for a few hours. Material damages could be seen in most of the city.

Aim

An epidemiological program was rapidly set-up in order to 1) detect and assess possible toxic effects on the population, 2) evaluate the needs for health care, surveillance or screening in the population and 3) assess the medium and long term impact on the population, with regard to the physical, toxic and mental health effect of the explosion. The goal of the program was to assess the direct

consequences of the catastrophe as well as the indirect impact through job loss, damages to the habitat, familial disruptions, disturbances in schooling.

Methods

In order to detect toxic effects, a risk assessment was performed using data on substances identified on the industrial site. Health information systems (general practitioners; hospital emergencies; antipoison centres ...) were used to detect expected and unexpected health effects. In order to assess the medium term burden of the catastrophe on physical and mental health, other data sources were used such as hospital data, health insurance files on drug and health care consumptions. Specific studies were set-up in highly exposed populations: 1) the working population: a mailed questionnaire was sent to 40.000 of them, with the collaboration of the work-site physicians 2) Two studies were performed among school children. 3) A cross-sectional study in the most damaged neighbourhood is planned for the winter 2002.

Results

Investigations on air, water and soils, as well as data reported through health information systems do not suggest any toxic effect, other than irritative effects due to ammoniac and nitrogen dioxide. Alert systems are however still active. Among the physical impact, audition losses were found to be highly prevalent, leading to a recommendation of a screening in the population close to the explosion. Mental health consequences (post-traumatic stress syndrome, depression) are expected to be large, based on the high level of acute stress symptoms observed during the first four weeks by the GPs and the large number of new prescriptions of psychotropic drugs recorded.

Conclusions

These first results suggest that the impact as measured by a comprehensive epidemiological program will be much larger than that reflected by the initial assessment based on deaths and injuries.

Risk factors of incidence of arterial hypertension in a French working population. The IHPAF study

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Background

Arterial hypertension is one leading cause of morbidity, its prevalence is high and strategies based on therapeutic control have shown the limits of their effectiveness. Primary prevention has thus become a challenge in our countries.

Aim

The goal of the study was to assess the one year incidence of arterial hypertension in a working population and identify risk behavioural as well as occupational risk factors.

Methods

A total of 30.000 workings persons were included in a one year cohort study. They were enrolled by 52 worksite physicians during the annual medical mandatory examination. Data on socio-economic, occupational and cardiovascular risk factors were collected by the occupational physician. Blood pressure (BP) was measured with an automated device (OMRON CP705). If BP was over 140/90 mmHG, subjects were invited for a second visit one month later (participation rate: 79%).

Results

The current analysis concerns 17.430 subjects who were normotensive at the initial visits and were assessed one year later. The incidence rate was 3,12/1000 persons-years in men and 1,37/1000 in women. Risk factors for a higher incidence rate were age, male sex, obesity, alcohol consumption, a low educational level and night, irregular or shift working hours. Those factors were related to incidence in a multivariate analysis including initial BP levels.

Conclusions

Data on incidence in a working population in France have not yet been published. They emphasize possible targets for primary prevention: alcohol consumption, obesity and working conditions. In addition, the social distribution of alcohol intake and obesity in this population suggest to analyse these behavioural factors in their social context.

Health Reports Focussing on Specific Population Groups: a Prerequisite for Target Group Oriented Health Policy

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Issue/problem

Health status and health care are varying according to population group. Different parts of the population may differ in respect to health behaviour, to social background, disease frequency, health care utilisation and health care need. A concept for a comprehensive Health Reporting for Germany (Gesundheitsberichterstattung des Bundes, GBE) on federal level has to consider these differences. By looking into different population groups (age groups, Gender, ethnicity, social status etc) German health reporting provides a detailed analyses of risk factors and health care needs including recommendations for health policy.

Description of the project

The following reports on specific population groups have either been published already, or will be released shortly by the German Health Reporting on national level: Poverty among children and adolescents, Child and Youth Health, Health and Aging, Unemployment and Health, Health of Single Parents, Migration and Health. These reports should be introduced and discussed under the following aspects: data used, specific methodological problems, particular health concerns of the groups studied in comparison to the general population, prevention-relevant results, Gender Mainstreaming as a cross-sectoral task.

Lessons learned

Group-specific health reporting facilitates the participation of those who are concerned. Potential for prevention can be identified by analysing the specific health needs and risk profiles of different groups of the population.

Conclusions

Health reporting in specific population groups should not be restricted to one-off reports, follow-up reports are needed. Gender and social stratification must be taken into consideration when interpreting the results.

Manifestation of socio-economic gradients in overweight in prepubertal children from birth to the age of 5–7 years: Interaction with parental overweight

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Background

There is an inverse SES -(socio-economic status) gradient in overweight children and adults but its onset is unknown.

Aim

To assess the onset of the SES-gradient in overweight in children from birth to the age of 5 to 7 years.

Methods

Cross-sectional and retrospective data analysis of birth weight, BMI at 1 year, at 2 years, at 5–7 years of 1326 children (681 boys and 678 girls, median age: 6.3 years, interquartile range (IQR): 0.4 years), SES, parental BMI (fathers' median age: 37.0 years, IQR: 8.0 years; mothers' median age: 34.0 years, IQR: 6.5 years) and BMI of mothers before pregnancy.

Results

In children there is a positive SES-gradient in birth weight, which is further enhanced by parental overweight. SES-gradients in BMI disappear at the age of 1 and 2 years. By contrast in 5–7-year old children there is an inverse SES-gradient in BMI and overweight, which is further enhanced by parental overweight. Tracking children from birth to the age of 5–7 years show that the distribution of BMI-quartiles at 5–7 years differed from distribution of quartiles of birth weight. This is most pronounced in children from high SES families where parental BMI also had a significant effect.

Conclusions

- SES-gradients in nutritional status show considerable changes during the first years of life.
- The inverse SES-gradient in overweight becomes manifest between the 2nd and the 6th year of life.
- Parental BMI enhances SES-gradients in birth weight and BMI at 5–7 years of age.

Life conditions and health status of the isolated immigrants older than 50

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Issue/Problem

In France, the growing old population is a major public health problem. However the growing old immigrant population is not well known matter Works on old migrants living in housing centres for migrants show that their health status may be altered by specific topics in link with migration. These points have not yet been explored for population living in social centres.

Aim

To set up a life conditions inventory, state of health, and access to health care for growing old immigrants population.

Methods

Counting from Social security of isolated foreign nationality person born before 1950.

Population survey including 395 persons selected by quotas and questioned by billings investigators on their health conditions, their health care access and their own feeling.

Lessons-learned

This population is estimated at about 11 500 persons in Languedoc-Roussillon. It was assessed that this population was rather young, masculine and from Maghreb. Indeed the population is very old, feminine and rather Spanish.

The population survey analysis provide a description: i) felt morbidity, ii) health care need, iii) health care access problems, iv) health and housing conditions, v) isolation of old persons.

Conclusions

This study highlights the a priori discrepancies between this population and the regional situation. Likewise, this study shows that it is possible to study this population in respect of the currently confidentiality rules.

Because of the mistrust and difficulties to meet the target population, the more complex survey set up allowed to achieve a precise description of this population, and it constitutes the basis of well adapted public health actions.

The Hypertension Screening and Awareness Study (HYDRA): Do the approaches for the treatment of hypertension and diabetes mellitus differ between former East and West Germany?

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Background

Recent data from HYDRA indicated relevant differences in the recognition and diagnosis of patients with hypertension (HYP) and/or diabetes mellitus (DM).

Aims

On the basis of the HYDRA database, we sought to determine differences in pharmacological and non-pharmacological treatment of these patients.

Methods

Analysis of data of the cross-sectional epidemiological HYDRA study (1,986 primary care doctors seeing 45,125 patients on a target day in September 2001). Data presented were adjusted for cluster and response bias effects as well as for age and gender.

Results

93% of all patients with the diagnosis of hypertension receive pharmacological treatment. The following groups are most

frequently used (odds ratios in brackets indicate likelihood of significantly increased prescription rates in East as compared to West): ACE inhibitors 45.3% (OR: 1.1), beta blockers 40.0% (OR: 1.3), diuretics 35.2% (OR: 0.8), calcium antagonists 24.8% (1.4), AT1 blockers 15.7%, alpha blockers 3.1% (OR: 1.3), others 4.9%. Most frequent prescribed medications for DM were (OR: significantly increased use in East vs. West): sulfonylureas 30.9%, insulin 26.8% (OR: 0.8), biguanides 23.9% (OR: 0.7), glucosidase inhibitors 11.2%, glitazones 4.6%, others 11.6. Important non-pharmacological measures were used in 72.2%, nutritional advice 63.0% (OR: 1.2), nutritional training 27.4%, and physiotherapy 7.1 (OR: 1.8).

Conclusions

Mostly, only minor differences between former East and West Germany were found.

Measurement of rural deprivation in health care research

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Background

Rural health is a growing concern to health service providers. Investigation of socio-economic factors associated with rural health has proved difficult as commonly used deprivation measures such as car ownership have been criticised for being biased towards urban areas.

Aims

To identify factors associated with rural health in Scotland using Long Standing Illness as a health indicator.

Methods

The Scottish Household Survey dataset (1999, 2000) was split by rurality using the SHS rurality indicator. Several variables were investigated using logistic regression for each rurality, with Long Standing Illness as the dependent variable.

Results

When an identical set of variables are modelled for each data subset the factors found to be significant vary depending on rurality. In remote and rural areas the odds of illness for those who reported no bus service are significantly higher than those who live within 3 minutes of a bus stop (OR= 1.50). Those who rate the area as a "bad" place to live are more likely to be ill than those who rate it as "good" (OR= 2.30). The odds of illness for those with financial worries is twice that of those without (OR= 2.23). People who have lived in their property for more than 5 years are less likely to be ill than those who have moved in the last 2 years (OR= 0.62). These factors are not significant in urban areas. Instead car ownership, educational qualifications and overcrowding are found to be significantly associated with long standing illness.

Conclusions

Factors associated with poor health in rural areas are different to those in urban areas, reflecting a difference in lifestyle, culture and economy. This study shows that financial hardship, lack of public transport, low confidence, insecure housing tenure and/or high rates of migration are highly associated with poor health in rural areas.

Trends and inequalities in avoidable mortality in Scotland

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Background

Although mortality rates have fallen in Scotland in recent years, geographical inequalities between districts in premature mortality have increased.

Aim

This paper aims to examine the extent to which the decrease in mortality can be attributed to decreases in 'avoidable' mortality (Holland, 1997) as opposed to mortality due to other causes. (Avoidable mortality includes death due to e.g. tuberculosis, appendicitis and asthma between the ages of 5 and 44.) It also considers the extent to which inequalities in premature mortality, and recent increases in these inequalities, are attributable to avoidable causes.

Methods

Multilevel Poisson modelling of 270691 deaths under 65 years in Scotland over 20 years between 1979 and 1998. Analysis was at the level of the 56 local government districts (average population in 1998 approximately 91000). Mortality rates were standardised to take account of population age and sex structure.

Results

Between 1979 and 1998 the relative risk of mortality from avoidable causes fell by 52% whilst that for other causes fell by 16%. This meant that whereas 43% of deaths in 1979 could be termed 'avoidable', the same could be said of just 30% of deaths by 1998. There was more variation between districts in the relative risk of mortality from avoidable causes than from other causes, and there was a strong positive correlation between the two ($r=0.74$). Inequalities in avoidable mortality were unchanged whilst those from other causes increased (69% increase in variance from 1979 to 1998), as did the correlation between mortality from avoidable and other causes.

Conclusions

Although there are geographical inequalities in avoidable mortality, these have not changed whilst inequalities among other causes have increased. This means that increasing inequalities in premature mortality are not due to those conditions regarded as being amenable to medical care.

The Global Burden of Disease attributable to low fruit and vegetable intake – What does this mean for public health policy in Europe?

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Introduction

The WHO Global Burden of Disease Comparative Risk Assessment (CRA) Project set out to compare the attributable burden of disease due to major risk factors using common methods. Among the risk factors included were lack of fruit and vegetable consumption, obesity, physical inactivity, smoking, alcohol, cholesterol plus environmental risk factors. The results of these analyses are published in the WHO World Health Report (October 2002).

Methods

This paper will comment upon the methodology of the CRA project for calculating the disease burden due to inadequate fruit and vegetable consumption. This involved systematic reviews and meta-analyses of the impact of low fruit and vegetable intake on 6 main disease outcomes, and calculation of dietary intake for each world region by age and sex based on intake survey data and FAO Food balance sheet data. The difficulties of this approach will be discussed including the scarcity of exposure data, the challenges with identifying interactions with other risk factors especially tobacco, and the lack of knowledge about 'an effect plateau' which could identify the theoretical maximum intake of fruit and vegetables for greatest protection.

Results

The results of these analyses show that inadequate consumption of fruit and vegetables in Europe and world wide contributes to a significant burden of disease. This disease burden is greater than that reported for other major risk factors including physical inactivity and shows that effect of diet reaches the significance of smoking, obesity and alcohol in population health terms. We discuss these results and draw conclusions about what this means for food and nutrition policies in Europe.

The joint OSI-ASPHER Program. Quality Development of Public Health Training Programs in Central and Eastern Europe

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Issue

The purpose of this abstract is to present the joint OSI-ASPHER program which involves public health schools/programs in thirteen Eastern and Central European countries.

The overall goal of the OSI-ASPHER program is to enhance institutional teaching programmes of public health in the Central and Eastern European region through curriculum development, the review of teaching programs by academic peers, and partnerships with other European schools of public health.

Description of the project

Participating schools/institutions benefit from one of two program packages:

- Program Stream 1 "PEER Program".
 - Program Stream 2 "Partnership Program".
- Program Stream 1 aims to strengthen and deepen public health education and training and is offered to institutions likely to complete the ASPHER PEER Review Process.

Program Stream 2 aims to build public health education and training capacity and is targeted at public health teaching programs in the earlier stages of development.

Thirteen countries are concerned by this endeavour as follows:

Stream 1: Armenia, Bulgaria, Croatia, Estonia, Hungary, Lithuania, Poland;

Stream 2: Albania, Georgia, Latvia, Romania, Ukraine, Uzbekistan. Prior to the actual implementation, ASPHER carried out a "Preparation Phase" from September 2000 to July 2001. Its objectives were, from September 2000 to March 2001, to identify and select institutions eligible for participation (this was achieved through a call for Letter of Intent (LOI)), to design assessment guidelines (Preliminary Assessment Document – PAD) with a view to establish the institution's needs and requirements and finally to organise site visits of ASPHER experts. The latter two steps took place from March to June 2001. This preparation phase ended with an application stage from June to July 2001 with selected institutions submitting funding applications to their respective local Open Society Institute (OSI) foundations.

This was followed by ASPHER's own application to OSI in October 2001. In November 2001, OSI informed ASPHER and applicant institutions from Stream 1 and 2 of the outcome of its review.

To conduct this programme which is planned for a 3 year duration, ASPHER has developed two approaches for each of the two streams. Stream 1 "PEER Program" is structured around the three pillars of PAD, MPD (Monitoring PAD for Development) and PEER (Public Health Education European Review).

Stream 2 "Partnership Program" is built around a three-pronged partnership with a Partner A as lead partner responsible for overseeing the development plan, a Partner B as secondary partner responsible for technical support and Partner C as CEEC partner from the Stream 1 program.

The whole OSI-ASPHER Program is overseen by an ad hoc steering committee and will be meta evaluated by an independent evaluator selected by OSI.

Smokers show no preventive benefit from healthy food intake and sports in early atherosclerosis. Results from the Study of Health in Pomerania (SHIP)

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Background

Physical inactivity, unfavorable dietary and lifestyle patterns are related to cardiovascular disease and premature death. Their relationship to atherosclerosis of the carotid arteries and subsequent stroke is unclear.

Aim

The objective of this study was to investigate the association between those behavioral cardiovascular risk factors and asymptomatic atherosclerosis of the carotid arteries in a population of former "East-Germany".

Methods

The Study of Health in Pomerania (SHIP) is a cross-sectional survey in the northeast of Germany. In 1632 individuals aged 45–70 years, high-resolution B-Mode ultrasound was used to assess the mean intima-media thickness (IMT) of the common carotid arteries. Carotid plaques and stenosis were recorded. Physical activity, dietary patterns, cardiovascular risk factors were assessed using standardized instruments. Physically active participants with optimal dietary patterns were classified in the optimal lifestyle group, those inactive with unfavorable diet in the unfavorable group.

Results

After adjustment for gender and age significant decreasing trends were found for both IMT and severe asymptomatic atherosclerosis from unfavorable to optimal dietary patterns and from unfavorable to optimal lifestyle patterns in never smokers, but not in smokers. Regression analysis revealed an increased risk of severe asymptomatic atherosclerosis in subjects with an unfavorable life-

style pattern compared to those with an optimal pattern (Odds Ratio 2.68, 95%CI [1.13; 6.37]), following a significant linear trend.

Conclusions

Physical activity and optimal diet are associated with reduced risk of early atherosclerosis in subjects who never smoked, while no benefit of an otherwise optimal life style is observed in smokers.

Helicobacter pylori infection and gastric cancer: an area-level study

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Background

An association between *Helicobacter pylori* infection and gastric cancer is supported by several case-control studies, especially those nested into cohorts. However, in Africa and in several Asian countries *H. pylori* prevalence does not correlate with gastric cancer rates. Environmental factors such as the consumption of fruits and vegetables, tobacco smoking or alcohol drinking were linked, in a higher or lesser extent, with different stages of gastric carcinogenesis, and it is plausible that at a population level the carcinogenic effect of *H. pylori* infection is modulated by other environmental exposures.

Aim

The aim of this study was to quantify the area-level association between prevalence of *H. pylori* infection and gastric cancer mortality, accounting for alcohol, cigarettes and fruits and vegetables consumption, using a large sample of countries.

Methods

Data from 58 countries (7 African, 10 American, 14 from Asia & Oceania and 27 European) was modeled by linear regression using as dependent variable gastric cancer mortality rates (log-transformed), and as independent variables the *H. pylori* prevalence, fruits and vegetables, alcohol, and cigarettes consumption, as well as interaction terms.

Results

A significant linear relation was observed between gastric cancer mortality and *H. pylori* prevalence both in European ($r=0.76$, $p<0.001$) and American countries ($r=0.81$, $p<0.01$), but not African ($r=0.23$, $p=0.62$) or Asian countries ($r=-0.15$, $p=0.61$). Although a positive association between five continent gastric cancer mortality and the prevalence of *H. pylori* infection ($\beta=0.0054$, $p<0.01$) was observed when all the variables are included in the regression model, statistically significant interactions were observed between *H. pylori* prevalence and the national availability of both alcohol ($\beta_{\text{alcohol}*H. pylori}$ infection = 0.52, $p<0.01$) and tobacco ($\beta_{\text{tobacco}*H. pylori}$ infection = 0.0030, $p<0.01$).

Conclusions

Our results suggest that the unexpected low gastric cancer rates in regions having a high prevalence of *H. pylori* infection may be partially explained by differences in the consumption of alcohol and tobacco.

Dental health among children and young people in Norway

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Introduction

The Board of Health has since the early 1970'es gathered data about the dental health of children and young people. These figures were originally collected to help run Norway's public dental care, which is free for children and teenagers. They may also be of use in health monitoring in general: A linkage between bad nutrition and bad dental health may suggest other health problems in the future for the population of youngsters with very bad dental health.

Methods

The data material consisted of records from the Board of Health, published annually in the form of a report. Data are gathered for 5-year-olds, 12-year-olds and 18-year-olds. The National Council on Nutrition and Physical Activity has gathered data on the percentage of school-children in each municipality who have brought sandwiches to school and/or have brought a piece of fruit to school.

The dental data are also available for the municipal wards of Oslo, while the Oslo Health Study contains figures for the percentage of 15–16-year-olds who consume 4 or more glasses of carbonated

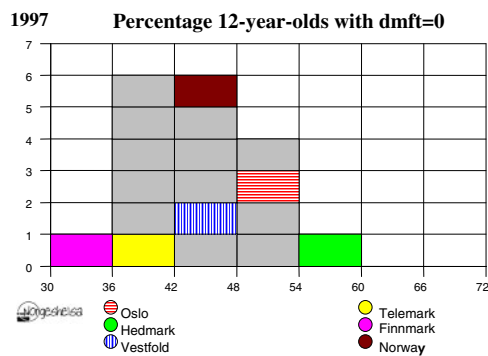


Figure H. Lyshol

beverages (mainly sweetened with sugar) per day. These different figures, on dental health, consumption of sandwiches, fruit and carbonated drinks, will be correlated and analysed.

Results

My preliminary results suggest that dental health varies geographically to a high degree, and that areas where school-children's diet is less than optimal (reliance on snack foods for lunch, low consumption of fruit, high consumption of carbonated drinks) are also areas where children's dental health is bad.

Conclusions

Dental health shows geographical variation, and children's diet not unexpectedly seems to be at least one of the factor determining their dental health. A small subset of children have very bad dental health, and this group seems to warrant further study.

Health benefits of travel to school: evidence from a study of children's car use

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Background

Much chronic disease in adult life has early origins. Heart disease, in particular, develops through patterns set during childhood, including obesity and exercise. We have investigated health dimensions within a study of car use by children being carried out at University College London.

Aim

To compare child activity and travel with measures of 'fitness' predicting future heart disease.

Methods

The study was undertaken in a mixed urban and rural, and relatively affluent, area in South East England in collaboration with local education and health services. Children in nine primary and middle schools (ages 8–13), and their parents, completed self-administered questionnaires about activities and travel; simple bio-metric measurements were made of the children; and, for a (self-selected) sample of these children, 4-day direct measures of physical movement were recorded in diaries and by wearing mobile RT3 monitors.

Results

Data from linked child and parent questionnaires and bio-metric measures were gained for approximately 500 children, and mobile recordings from approximately 120 children. Up to 20% of children could be classified as overweight or obese. Differences between children related to personal characteristics and age, as well as family patterns of travel. The relationship between bio-metric levels and physical activity was explored. Physical movement during travel contributed a significant proportion of all physical activity recorded, and there were differences between mode of travel.

Conclusions

Travel makes an important contribution to ordinary physical activity for children, and may contribute to reducing heart disease in adult life. We will consider the implications of our findings for children's healthy exercise and transport policy.

The Sociology of the WHO-strategy "Health for all" in the view of action theory

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The tension of society and health is investigated by public-health-sciences: epidemiology, psychology, economics and social medicine. How can sociology investigate this tension? The importance of sociology and health sociology will be shown in the context of action theory: the empirical basis of our thesis is the WHO-strategy "Health for all" with its 38 aims. Action theory in the form of rational choice theory differs the analysing of the tension in three levels: micro-, meso- and macro-sociology. Variables of micro-sociology are the social role, identity and norms, those of meso-sociology are groups, interaction, communication, institutions and organizations and those of macro-sociology are the social structure, culture, ideologies, conflicts and social change. Investigating the sociology of the WHO-strategy, we could find rational as well as communication problems. At the micro-level there are the goals 7 to 12: reducing health problems (chronical and infectious diseases, accidents or suicide); 15 to 17: gaining competence and dealing rationally with drugs; 36 to 38: finding personal resources for the health, being a partner of health and finding ethical views of health. At the meso-level are the goals 3 to 6: improving health opportunities for social groups (handicaps, elderly, children, young people und women); 27 to 35: improving the support in hospitals and cities, improving quality and management, research and health-information. At the macro-level are the goals 1 to 2: equal chances in health promotion and quality of life; 13 to 14: health policy and development of health structures; 18 to 26: healthy ecology. In summary, the sociology of the WHO-strategy "Health for all" gives important information of analysing and improving the tension of health and society as a rational choice and communication problem in the context of micro-, meso- and macro-sociology. These are interesting results for the development of public health and sociology.

Challenges of Teaching Health Education in Armenian Schools

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Issue/Problem

Over the past decade Armenia has undergone socio-economic changes. Open borders and broad access to mass media brought liberalized social and cultural norms contributing to Armenian adolescents adopting unhealthy behaviours including tobacco, alcohol, and other substance use and unsafe sexual practices.

A school-based health education program, if properly designed and implemented, could reduce health risk behaviours in adolescents and thus contribute to the health and wellness of this and future generations.

Description of the project

From September 1999 to October 2000, a pilot substance use prevention project was carried out in four schools in the capital city of Armenia, Yerevan. Overall, 230 adolescents aged 13 to 15 were targeted. Social cognitive theory was utilized as a theoretical framework for the curriculum development. Interactive methods of teaching including games, structured discussions facilitated by the teacher, small group activities, role plays, and interviews were employed to implement the curriculum.

Project staff faced considerable challenges at every step. The developers of the curriculum were limited by poor access to quality health education materials, resources and professional expertise and the lack of knowledge of the conditions in local schools. The main challenge to implement the project was connected with the lack of experience of local teachers and teacher trainers in interactive teaching methods.

Lessons learned

In order to develop and implement a school health education program for a country like Armenia that lacks local expertise, the project team should include professional behavioral scientists, specialized teacher trainers and experienced teachers. All stakeholders must work together at every step of the project to achieve positive result.

Conclusion

Teaching health education in Armenian schools is necessary, but challenging. Only a multidisciplinary team of professionals with training in contemporary teaching methods can accomplish the task.

A four-year follow-up study of early versus delayed vocational rehabilitation

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Background

A number of recent studies indicate that the timing is important and that early intervention is more effective than late, while other studies conclude that there is only little empirical support for this wide spread opinion. In a previous study, where the effect of vocational rehabilitation was measured in a 24 months perspective, we found that early rehabilitation had greater effect regarding return to work than late rehabilitation. Against this background we find it to be of the utmost importance to investigate the effects of vocational rehabilitation in a 48-months perspective.

Aim

The aim of this study was to investigate whether early vocational rehabilitation is more effective than rehabilitation initiated at a later stage.

Methods

The study was based on a sample of 612 individuals on long-term sick-leave (≥ 90 days) who had received vocational rehabilitation. A multivariate logistic regression analysis was used to investigate whether time before start of rehabilitation was associated with the outcome.

Results

The study supports the hypothesis that early interventions are more effective than late, but only for women, and more so for the younger women than for the older.

Conclusions

Our finding, that early intervention is important for young women, is a finding that is relevant for a large and constantly increasing number of people on long term sick-leave. Our finding is also an important signal for those working within the field of vocational rehabilitation.

Quality assurance of the primary health care in Bosnia and Herzegovina

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Introduction

The evaluations of the healthcare quality services get based upon the building up of the standards, which enable the measurements and the comparisons, not only the scientific-technical development level, but also the measurement of the effectiveness, economy, adequacy, safety availability, equality, comprehensiveness, satisfaction and the participation of the services users and other general and vital components of the quality process measurement of the healthcare protection and healthcare services. The quality of the primary healthcare protection can be estimated regarding to the structure, the process and the outcome, and the outcome in the system of the healthcare understands the changes in the healthcare condition of the users after provided healthcare services.

Examinees and works methods

For the research is used the sample from 3,000 users of the healthcare protection of several units of the primary healthcare protection of the health centers in Bosnia and Herzegovina. The users are questioned by specially created data carrier with the defined process and outcome variables.

Results

The results are gotten by the processing of the input data into DBMS relation data basis and their crossing of the assigned variables as are for example: the satisfaction with the results of the visits regarding to the working time of the healthcare personnel; the length of waiting for the examination by a physician; the attitude of a physician according to the patient and the treatment; time of the last consulting of a patient with a doctor; the continuity of the creation of the healthcare protection in the same healthcare personnel; kind and the length of the individual treatments and similar, and are supposed tabularly and graphically. DBMS relation

basis is created according to the principle of the simple statistic formulas into MS ACCESS. The parameters majority from the satisfaction estimating scaled according to the criteria WONCA, WHO, and partly modified by the authors, after the performed processing and the analysis show that the patients are well or optimally satisfied with the existing system of the primary healthcare protection organization. The quantitative results only in some criteria show rarely the dissatisfaction, and that in the low percentage, usually in patients with the present more difficult and chronic diseases. The part of the tabular and graphic results is presented and commented in this paper.

Conclusion

The existing primary healthcare protection organization is in Bosnia and Herzegovina, regardless to its instant social-economic and the social status, what means the low level of the separation of the means for the healthcare protection, still always optimal and can be characterized as desired healthcare comfort created by the given financial means. Regarding to that in the course of the realization of the Federal program reconstruction of the healthcare system in Bosnia and Herzegovina and the changes of the up-to-now concept of the free of charge social healthcare protection into the concept of the providing of the services of the family physician whom the socialized healthcare protection into the concept of the providing of the services by means of the family physician whom detain and finance the nongovernmental organizations of Canada, Switzerland, Italy and still other in the post Dayton period, the part of the result presented in this paper can serve as the guideline for the definite corrections of the existing primary healthcare protection system in Bosnia and Herzegovina.

Assessing hospital appropriateness in Italy through the APPRO method

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Background

The APPRO method has been conceived for the external assessment of hospital appropriateness in Lazio region of Italy. Through analysis of administrative data with APR-DRG, it assists in calculating DRG-specific admissibility frequencies of acute care episodes for low-complexity DRGs and amount of certainly inappropriate admissions.

Aim

We analysed with APPRO all hospital episodes assigned during 2000 in Italy to 43 DRGs identified by the Ministry of Health at risk of inappropriateness in acute care setting.

Methods

The base of the study were 3.266.064 discharges abstracts transmitted to the Ministry of Health by all Italian hospitals. Hospital episodes attributed to subgroups of severity of illness and/or of risk of death higher than 1 according to APR-DRG classification were excluded (10,3%). Within the case-mix with minimal severity, amount of certainly unnecessary admissions were identified calculating the DRG-specific ratio between acute admissions and total admissions (acute and day care) and comparing the observed frequencies by region with the national admissibility values.

Results

Admissibility frequencies in acute setting ranged between 22% for DRG 6 ("Carpal tunnel release") e 88% for DRG 160 ("Hernia procedures except inguinal and femoral, age >17 w/o cc). For DRG 6, regional values varied between 1% and 61%. For all the 43 DRGs, certainly inappropriate admissions resulted equal to 176,955 with a range of 182 and 34,412. Northern regions showed better performances in term of appropriateness compared to central and southern regions.

Conclusions

The APPRO method allows to identify tolerated levels of inappropriateness within low complexity hospitalisation and to set up reliable targets for regional planning. The method operates with the necessary caution due to the uncertainty of administrative data, which are not suitable to take into account the social dimension of hospitalisation.

Physical development of children in Russia**Maximova, T.M. ***

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Background

Physical development is a major indicator of health status and trends evaluation are important for Public Health policy for country in period reforms of many aspects population wellbeing.

Methods

For obtaining the data of physical development children in different economic and geographic regions of Russia was providing survey "Children of Russia 2000". The program contains the measurement height and weight by nurses in schools and children gardens (3–14 years), questioning the parents. For better organisation, methodical provision, education the personal and operative co-ordination was create web-site: www.chat.ru/~chi2000. Data of 79968 children were used for calculation variative statistics, BMI, z-score and complex evaluation by Russian standards (centile) for comparison distributions the children in 1991, 1996–97 and 2000–01.

Results

The results performed on unitary methodology demonstrate in the middle of monitoring (1996–97) statistically significant decrease the part of children with normal physical development. Among around 80000 measured in various regions in 2000–01 this part approach correspond level 1991 (table).

Table Trend of physical development children of Russia (%)

Categories of physical development	1991	1996–1997	2000–2001
Normal	68–70	55.2	68.9
Overweight	7–15	13.3	7.9
Underweight	5–10	16.4	10.8
Short height	3–5	7.7	5.2
Tall height	5–7	7.4	7.2

In 2000–01 BMI has peculiarities in marked groups. 79% children assessed as normal according Russian standards have BMI inside 14,0–17,99. Among whole group – 11,2% <14 and 19% >18, in group with overweight – 63,3% >18 and 15,6 >23.

Children from poor families have more frequently underweight and retardation in height.

Conclusion

Survey "Children of Russia 2000" revealed positive trend in physical development in the last years, but some groups of population need real social support for better children development. Our database is open for further statistical and social analysis.

Experiences with a regional independent drug information service for patients: a project of health care research¹**Maywald, U. *, Schindler, C., Kirch, W.**

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Issue/problem

A broad variety of possible problems can appear at patients' side whilst the use of drugs. The drug information service (DIS) helps patients (callers) to solve such drug related problems. The growing number of tablets taken by the elderly often causes anxiety and adverse drug reactions (ADR) and finally affects the quality of life.

Description of the project

Physicians and pharmacists of our institute are responding to all questions in relation to drug use, supported by relevant databases (i.e. Micromedex). The DIC project is a model limited to three years. In the first seven month about 750 patients were advised. After a few weeks each patient received a questionnaire for evaluation.

Lessons-learned

Most questions were related to cardiovascular drugs (25%). 40% of the patients called because of ADR's, followed by 10% because of drug interactions. The majority of patients calling is over 60 years (52%), mainly female (84% vs. 16% male). The fact that some patients were treated by several physicians who were not known to each other appeared to be a problem in only 10% of the cases (e.g. drug interactions or precautions). 40% of the patients talked about the information given by the DIC with their physicians. This

indicates a growing self-confidence of the patients. The majority of 87% of the callers felt well or very well informed.

Conclusions

The DES is capable of giving the patient support to identify the reason of his drug related problems. The information always had to be finally clarified with the physician treating the patient. The DIS gives the patient arguments to communicate with his different specialized physicians. Additionally the DES can identify drugs and patient groups having a predisposition for drug related problems which consecutively may be prevented.

1) supported by the superior authority of statutory health insurances.

Quantitative health impact assessment of waste incineration**McCarthy, M. *, Utley, M., Gallivan, S.**

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Background

Environmental health impact assessments are required for major engineering developments such as industrial works, waste disposal facilities, power stations. While the EIA process is relatively standardised, there is increasing interest in combined environmental, social and health impact assessment.

Aim

To use epidemiological information to assess the health impact of a waste incinerator.

Methods

Data were drawn from a waste incinerator in the south of England. The affected population can be estimated both as those predicted using air plume modelling, and estimates of the population served by the facility. Coefficients of risk were identified for four areas – air, chemicals, transport and noise. A mathematical model (ARMADA) was developed which calculates the expected increase or decrease in population health status, including the cumulative effect of environmental exposure over a defined period.

Results

Running the model provides estimates of changes in mortality and morbidity which will be presented. Extra mortality appears small in comparison with baseline levels; the effects of traffic appear to be as important as the burning of waste.

Conclusion

Quantitative health impact assessment model covers fewer environmental areas than a qualitative approach might, but has potential advantages of objectivity, standardisation (for comparisons), speed and cost. We are working on further applications of the model, including prospective policy assessment and industrial settings. The approach is an innovative contribution to health impact assessment methodology.

Reforming health care financing in Bulgaria: the population perspective**McKee, M. *², Balabanova, D.¹**

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Background

Health financing reform in Bulgaria has been characterised by lack of political consensus on reform direction, economic shocks, and, since 1998, steps towards social insurance. As in other eastern European countries, the reform has been driven by an imperative to embrace new ideas modelled on systems elsewhere, but with little attention to whether these reflect popular values.

Aims

This study explores underlying values, such as views on the role of the state and solidarity, attitudes to, and understanding of compulsory and voluntary insurance, and co-payments. The study identifies general principles (equity, transparency) considered important by the population and practical aspects of implementation of reform (e.g. who should manage contributions).

Methods

Data were obtained from a representative survey (n=1,547) and from 58 in-depth interviews and 6 focus groups with users and health professionals, in 1997.

Results

A majority supports significant state involvement in health care financing, ranging from providing safety net for the poor, through co-subsidising or regulating the social insurance system, to providing

state-financed universal free care (half of all respondents). Collectivist values in Bulgaria remain strong, with support for free access to services regardless of income, age, or health status and progressive funding. There is strong support (especially among the well off) for a social insurance system based on the principle of solidarity and accountability rather than the former tax-based model. The preferred health insurance fund was autonomous, state regulated, financing only health care, and offering optional membership. Voluntary insurance and, less so, co-payments were acceptable if limited to selected services and better off groups.

Conclusions

A health financing system under public control that fits well with values and population preferences, is likely to improve compliance and be more sustainable. Universal health insurance appear to attract most support, but a broader public debate involving less empowered people is needed to resolve misunderstandings and create realistic expectations.

Mother and Child Care Training Program, Syunik Region of Armenia

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Issue/problem

Armenia experienced degradation in its standard of living conditions as the country continues transition from the former Soviet Union. Deteriorating socio-economic conditions resulted in documented malnutrition and health problems. Additional difficulties have occurred in the southern Syunik Region because of isolation due to mountainous terrain and devastation from the 1993–1995 Azerbaijani War.

Project description

The German Technical Cooperation (GTZ) initiated a mass media health education campaign in Syunik from March to May 2002, entitled "Mother and Child Care Training Program". A trainer from the American University of Armenia was included in the campaign, which targeted women. In addition to radio, newspaper, and television announcements on health promotion subjects, the trainer taught nutrition and breastfeeding workshops every weekend alternating sites among five towns. Clinic physicians taught classes and distributed health promotion materials throughout the week in nearby villages. These intensive educational efforts were intended to change behaviors and improve the current situation. The trainer used various teaching techniques to facilitate interactive sessions. A major focus was on the Food Guide Pyramid and its associated tenets. Participants constructed an Armenian Pyramid using locally grown, readily accessible, and inexpensive foods.

Lessons learned

Classes were often crowded because of unanticipated interest. In retrospect, men should have been invited to attend. Inclusion of the local physicians added sustainability.

Conclusions

There were over 300 registrants including approximately 15 physician trainers who taught expanded topics to several thousand villagers. Participants used opportunities to address health concerns. They reported increased knowledge about fat and sugar consumption, food composition, and nutrient requirements across the life span. Physicians reported closer community relationships, increased awareness of health issues, and improved teaching skills and professional knowledge.

Investigation of hospital mortality in three districts (province) of Tuscany from the 1997 to 1999

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Background

Several epidemiological studies indicate geographical variation of mortality in Italy. These variations may be due to population differences (genetic, social behaviour/condition, diet) or health care inequality. In the one hand, health care inequity has been shown in a number of studies in Italy especially comparing regions of the South versus those of the North; on the other hand also studies which

compare close districts have shown important and unexpected results. While population based health data for local area are often unavailable without new and expensive data collection, local hospital discharge data are readily available and accessible. The most important positive aspects of hospital discharges are: the virtually unique existing source of information on a wide range of disease occurrences, and the possibility to compare death and disease together in the analysis of case-fatality. Moreover this routine data collection are a source of epidemiological information, and consequentially a mean to monitor the health status of the population, and an objective tool to compare different health services, results and costs.

Aim

The objective of the study is: (i) to measure the variation of mortality rates for the five most important causes of deaths in 3 districts of Tuscany (Siena, Arezzo and Grosseto) from 1997 to 1999 and (ii) to evaluate differences in health care using proxy indicators available in hospital discharges.

In Italy, for every patient discharged from the hospital (public or private, emergency or planned admission), a record (S.D.O.) is kept. This includes personal and care-related details, such as an identification number, diagnosis code/s using The International Classification of Diseases, 9th Edition (ICD-IX), emergency or planned admission, duration of stay, and the Diagnosis Related Group (D.R.G.). D.R.G. are groupings of diseases, disorders, and procedures that are used by hospitals to classify inpatients into a manageable number of categories and reflect also hospital's resource consumption.

Hypothesising an increased duration of stay, an increased DRG cost and admission to high specialist hospitals, we would expect a smaller number of deaths compared to the situation in which these conditions are missing.

Study design

Case Control study: *Case definition* deaths for a specific disease. *Controls definitions* all inpatients admission for disease a specific disease. *Exposure*: district I, district II, district III (compared with a baseline).

Conclusion

In this stage of the study the five main causes of death have been identified: Heart failure and cardiovascular system, acute pulmonary heart disease, malignant neoplasm of stomach, Cerebrovascular disease, Bronchopneumonia. Early analyses have identified differences between the three districts.

The world-wide dissemination of empirical data from German Public Health Research

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Issue/problem

At the beginning of the 1990s five German Public Health Research Associations were founded. Between 1992 and 2001 about 200 research projects had been realised with support of the Federal Ministry of Education and Research Germany. Therefore, enormous data-sets have been collected on various public health-relevant research issues. Following one objective of the American Public Health paradigm the transfer of research results into praxis and the dissemination of meaningful health-oriented research knowledge is very important. The German Public Health Research Associations feel obliged to broadcast the empirical data as a Public Use File with the purpose of further data analyses.

Description of the project

A Public Use File consists of a comprehensive information pool. Besides a data document with all collected variables the file includes a documentation about the project features as well. The documentation contains the following information: description of methods and study design (inclusive the questionnaire), sample description, list of variables and descriptive statistics, research report and publications.

In 2003 the planned Public Use File and Public Documentation Files will include about 70 projects from different research topics like health promotion and prevention, quality of care systems, epidemiology, information and communication in health care, and group-specific health research. A web server with a divided database, partly protected by a firewall, has been set up to promote the different files and making them accessible for the scientific community. The

Public Use Files data can be ordered via internet and a CD-ROM will supply at self-liquidating charge. A scientific board (leading members of Public Health Associations) decides about the orders, corresponding to the regulations of use.

Lessons-learned

Future research in Public Health could profit from a centralised Public Use Files database. The standardised collection of demographic variables, for instance, could lead to more comparability of research data, making new research questions possible.

Conclusions

The objective of the project is to develop a database, which can be used by other scientists. The advantages of the use of Public Use Files are to provide comprehensive data documentations for further research projects, especially for meta-analyses, secondary analyses and comparative studies. The use of a centralised knowledge base can help to conduct future research in a standardised and comparable manner to create Public Use Files of more research projects.

EUROCHIP: EUROpean Cancer Health Indicators Project

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Issue/problem

In spite of concern about cancer, a cancer monitoring system covering all countries of the European Union has not yet been implemented. However, a large-scale Health Monitoring Programme (HMP) to establish EU health indicators for all diseases has been implemented. The present project EUROCHIP is conceived as a contribution of HMP and proposes to produce a comprehensive list of health indicators pertaining to the control and treatment of cancer, that will contribute to the development of the set of European health surveillance indicators.

Description of the project

The project consists to make available a comprehensive list of indicators that describe cancer in terms of burden, prevention activity, standards of care and cure rates. The project is essentially an intellectual work aimed to reach the maximum consensus on the list. After the lay-out of the list we will check already available data sets to identify the presence of information. Standardized methods of collecting and of examining data validity will be proposed. The present project will choose variables according to the criteria of easy collection, comparability, and country representativeness.

At the moment various international groups of specialists are working on the list of a hundred of indicators classified by three different axis: natural history of disease, study category (demographic and socio-economic factors, health status, determinant of health, health system) and cancer site. For each indicator we compile a form subdivided in three sections: desired indicator (all characteristics of indicators we wish to have), methodology (operational definition of the indicator, possible sources and methodological issues) and availability in different countries. In the current first phase we are compiling the "desired indicator" section starting from those variables with the highest level of importance

Conclusions

This presentation has aims to inform about EUROCHIP and to call for criticisms and suggestions on the ongoing list.

Environmental (In)Justice in Germany: Social Differences Concerning Noise and Air Pollution

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Background

How are the environmental risks distributed across different social groups? Using the term 'environmental justice', it has been stressed in the USA for more than 15 years already that the environmental risks are not distributed equally (i.e. 'just').

Aim

There is no comparable discussion in Germany, and the paper wants to promote its development.

Methods

The analyses are based on the 'Socio-Economic Panel', an annual survey conducted in Germany since 1984 and including about 8,000 person. More specifically, they are based on the surveys from 1986 (West Germany), 1994 and 1999 (West and East Germany), as these included information on noise and air pollution in the residential neighbourhood. The main independent variable is net household income (adjusted for household size and composition), split in four groups with the lower group representing poverty. The main other variables are: East or West Germany; German or other nationality.

Results

The subjective burden was clearly increasing with decreasing income. Looking at the group 'heavy or very heavy burden', in 1999, for example, the prevalence in the lowest income group was about twice as high as in the highest income group (air pollution: 8.7% vs. 4.5%; noise: 9.6% vs. 5.1%). The joint burden 'air pollution plus noise' was reported by 5.5% in the lowest income group and 2.1% in the highest. The association between income and environmental burden was stronger for non-Germans than for Germans, and stronger in East than in West Germany. The associations did not change very much after controlling for age and sex. It is also important to note that this 'environmental inequality' seems to be increasing between 1984 and 1999.

Conclusions

The results indicate that also in Germany the lower status groups are exposed to greater environmental risks, and that regional interventions are necessary in order to reduce this inequality.

Creating a Healthy Respect

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Issue

Healthy Respect, the UK National Health Demonstration Project on young people's sexual health aims to transform the sexual attitudes of young people by introducing initiatives which will bring about positive changes in their behaviour regarding sexual health and relationships.

Description of the project

The project has three focused objectives for improving young people's sexual health:

- increasing young people's self-esteem and confidence;
- reducing teenage pregnancies and
- decreasing the level of sexually transmitted infections amongst young people in Lothian.

The project is creatively delivered through 13 partner agencies working in the fields of sexual health, education and young people's services. This multi-disciplinary approach, coupled with a mass media campaign has enabled the project to effectively reach a wide range of young people, including those traditionally identified as hard to reach.

Lessons-learned

The project's approach fully recognises the importance of increasing self-esteem and confidence amongst our young people to enable them to make and implement informed choices and decisions. This approach is supported by an increase in education and information available to young people and greater access to services.

Conclusions

The ultimate vision of the project is to create a Healthy Respect amongst young people, for themselves and others.

Patient-Doctor Relationships in Armenia

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Background

Doctor-patient relationships in Armenia have changed during the last 10 years. There is a tendency among population to seek care after one's health condition has worsened and health care provider can do little or nothing to manage the case. Fee for medical service, financial constraints, and major declines in earnings are the primary reasons for the population's poor access to utilization of health care. Though financial issues directly or indirectly affect doctor-patient interaction, other factors are also important.

Aim

Aim of the study is to explore factors laying in roots of doctor–patient relationships in Armenia.

Methods

A total of sixteen observations, eight key-informant interviews and four focus group discussions were conducted in May–June 2001. Second year MPH students were involved in data collection for this research.

Results

The research highlighted the following main factors influencing patient–doctor interactions.

Financial issues: Both sides are concordant that non-compliance to treatment, avoiding seeking care, and self-treatment are directly linked to distrust between doctors and patients.

Reputation of clinic and/or doctor: People prefer to visit doctors or clinics familiar to them or referred them by relatives and friends.

Explanation of treatment: Patients would like to know more about their disease, since it would lead to better treatment compliance. Majority of the research participants believe that truth about the terminal diagnosis should be told directly to the patient when s/he asks.

Role of relatives: Relatives participate in selection of health care facility and the doctor; they accompany him/her to the clinic and participate in payment related matters.

Conclusions

Both patients and doctors are dissatisfied with their interactions. Though unity of physiological, social and financial factors forms doctor–patient relationships in Armenia, the main reason for dissatisfaction is linked to lack of financial resources and other social and physiological factors arising from it.

Current Situation of Complementary and Alternative Medicine Use in Germany – Results of the German Federal Health Report of Alternative Diagnostic and Therapeutic Measures

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Background

Complementary and alternative medicine (CAM) steadily increases in popularity. Although a growing amount of publications, press articles and surveys give the impression of a major presence and persuasive attraction of alternative medicine, little is known about the overall situation of CAM in Germany. Reliable and empirically founded databases for health care utilization and prevalence of CAM in Germany are still missing. In the framework of the Federal Health Monitoring conducted by the Robert Koch Institute on behalf of the German Ministry of Health, we compiled a special Federal Health Report on CAM.

Aim

Main purpose of the report is to provide a clearer picture of the current CAM situation in Germany and to disseminate authoritative information to the public and health professionals. In this contribution we will give an overview of the main results, describing the current situation of CAM use.

Methods

Different sources of information have been collected for this report: literature, data bases and postal interviews of different health related institutions including health insurances and societies of the different CAM providers, representative surveys, own study results including a survey and a model project of health insurance funds for CAM.

Results

Besides clarification of conceptual and legal foundations, data will be presented showing actual data of medical and para-medical providers, trends of health expenditures esp. of compulsory sickness insurances, demographics, prevalence, and patterns of CAM utilization, results of population based surveys describing motives for CAM use as well as some comments on the actual research situation.

Conclusions

Despite some common shortcomings of existing data bases, results of the report show evidence for a persistent and probably increasing presence of CAM in health care delivery in Germany. The continuing public demand for CAM combined with still missing sound scientific CAM research will affect and challenge health care delivery for the near future.

Socio-economic conditions, lifestyle factors and self-rated health among men and women in Sweden

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Background

Self-rated health has been found to be a good predictor of morbidity and mortality. Socioeconomic conditions and lifestyle factors have been found to be related with self-rated health, but few studies have investigated these factors simultaneously.

Aim

To study the association between socio-economic conditions, lifestyle factors and self-reported health in a general adult population.

Methods

The association between socio-economic conditions, lifestyle factors, and self-rated health was investigated in a random population sample of 36,048 men and women aged 18–79 years. The data were obtained using a postal survey questionnaire during March–May 2000. The overall response rate was 65%. The area investigated covered 58 municipalities with about one million inhabitants in Central Sweden. Odds ratios for poor self-rated health were calculated for a range of variables adjusting for age group and gender as well as other variables in the model. Separate analyses were conducted among those aged 18–64 years and employed covering also factors associated with working conditions.

Results

The overall prevalence of poor self-rated health was 7% among men and 9% among women. The strongest association with poor self-rated health was found for experiences of being belittled, economic hardship, lack of social support, and unemployment when adjusted for age group, gender and the other measured factors. Educational level was independently associated with self-rated health among men, but not among women. Physical inactivity as well as underweight and obesity were strongly associated with poor self-rated health. Smoking was associated with poor self-rated health only among those employed. Satisfaction with work, control over work and anxiety about losing ones job were other factors that showed an association with self-rated health.

Conclusions

Even though this cross-sectional study does not allow definite conclusions as to which factors are determinants and which consequences of poor self-rated health, it provides a good description of under which circumstances people with poor health live. The strength of this study is that it is representative of a very large population and that a wide range of variables covering socio-economic conditions and lifestyle factors were studied. The findings indicate that socio-economic conditions as well as lifestyle factors are independently related to poor self-rated health.

A methodological approach to analyze the quality of life in multiple sclerosis: the GEDMA study

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Background

Multiple sclerosis (MS) is one of the most important neurological impairments in young and middle-aged adults producing severe repercussions in all spheres of life. So, it is generally recognised that MS affects the quality of life (QoL) experienced by afflicted patients and their families.

Aim

To evaluate patients' quality of life according to their impairments and to analyse their needs of care as well as those of their caregivers.

Methods

Quantitative methodology by a structured personal interview of the patients and their main caregivers, and Qualitative techniques with three focus groups composed of patients, and a fourth of caregivers. The interview was structured in: a) socio-demographical and clinical data; b) quality of life measured with the Spanish version of the Functional Assessment of Multiple Sclerosis; c) needs of care or

technical aid in the daily life and the existence of architectonical barriers; d) the influence of the disease in the educational or working activities, and how the distressing situations affect the state of disease; e) attitudes of the family members towards the disease and how it affects the relationship with their couples; f) emotional and cognitive state; and g) problems and burden on main caregivers.

Results

371 MS patients (68.7% females) from 13 hospitals of Madrid (Spain) were included in the study, the average age being 38.9 ± 10.9 years. 69.5% of them suffered of relapsing MS with a global mean illness duration of 10.3 ± 7.1 years, 42.3% of whom had gait disturbances. According to the interpretation of focus groups, the main concerns of both patients and their caregivers were focused on family and labour lives.

Conclusions

QoL has been considered mainly to be a multidimensional representation of a subjective perception reported by the patient. This multidimensional concept should encompass at least a balanced weight among the following aspects of disabilities: physical, psychological and social functioning.

Using more specific dimensions for the measurement of quality of life in Multiple Sclerosis

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Background

The study of the quality of life in Multiple Sclerosis (MS) should consider the useful of an instrument which includes social, psychological, physical and mental aspects. These dimensions should be the most specific as possible in relation to MS.

Aim

To show the validated dimensions of a specific tool about perceived quality of life 'Functional Assessment of Multiple Sclerosis' (FAMS) in Spanish patients, and verify its consistency.

Methods

371 patients (68.7% females) with MS (clinically defined or with laboratory support, according to Poser's clinical criteria), recruited from 13 Neurology Outpatient Clinics of Hospitals in Madrid (Spain). This study was a first wave of GEDMA survey to obtain a MS cohort, and was carried out by direct interview. We used a questionnaire containing the FAMS scale and other variables related to different aspects (clinical, social, psychological, cognitive, and working ones).

Results

The average age was 38.9 ± 10.9 years with an average score on the Expanded Disability Status Scale (EDSS) of 3.6 ± 2.3 . 69.5% of patients suffered of relapsing MS with a global mean illness duration of 10.3 ± 7.1 years. The average scores of the parameters were higher than these obtained with the original version of FAMS; and the internal consistency of the Spanish version was similar to the original FAMS (0.95 vs 0.94). On the other hand, specific dimensions of symptoms and general state of mind increased their internal consistency when eight items, which were excluded in original factors, were included: seven of them in the former (0.79 vs 0.76) and the rest one in the latter (0.87 vs 0.85).

Conclusions

These results would suggest that the Spanish version of the FAMS scale including specific variables of MS, which do not form part of American Version FAMS, offers a more specific assessment of quality of life.

Too Few or Too Many?

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Issue

The purpose of this paper is to look at Edinburgh's performance against current and proposed targets concerning Coronary Artery Bypass Grafts (CABG) and Angioplasty, both separately and together as Total Revascularisation procedures. The main objective was to estimate the relative need for revascularisation and enable Edinburgh to look at the difference between actual provision and a 'need' adjusted estimated provision.

Description of the project

The main objective was to estimate the relative need for revascularisation and enable Edinburgh to look at the difference between actual provision and a 'need' adjusted estimated provision.

Lothian Health, in Edinburgh, adopted the methodology used and proposed by the Coronary Heart Disease Task Force Group. This methodology looked at CABG and Angioplasty principal procedures performed broken down by specific age/sex groups and Deprivation Category over a five-year period. A 'need' factor was calculated for these breakdowns using Acute Myocardial Infarction Mortality Incidence Rates for Edinburgh against Scotland. 'Need' adjusted figures were devised using the individual 'need' factors and compared to Edinburgh's actual figures to explore any differences.

Lessons-learned

Using this methodology Edinburgh was found to have less overall 'need' than Scotland. Therefore overall revascularisation 'need' is being met but there are differences between the most affluent and most deprived areas in Edinburgh.

Conclusions

Whilst the methodology is open to contention, our work demonstrates that adjusting revascularisation activity for an indicator of need can show important differences in the need for PTCA or CABG within various subgroups of the population. Findings have proven valuable in discussions with our main provider of revascularisation procedures.

Applying stretching to prevent cardiovascular diseases

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Background

Patients with coronary heart disease and signs of reduced heart rate variability (HRV) have an increased risk to suffer sudden cardiac death. The ECG of these patients shows nearly equidistant R-R, indicating reduced vagal and/or increased sympathetic tone. Other cardiac risk factors (e.g. diabetic neuropathy, higher age) are also associated with reduced HRV, while normal or increased HRV indicates good health. Some drugs (e.g. α -blocker), relaxation techniques (e.g. autogenous training) or regular sport activities – reducing sympathetic and/or increasing vagal tone – have well known beneficial effects on health and HRV. Statistical measures of HRV, e.g. calculating the root mean square of successive differences (RMSSD) over 3 min intervals are measures indicating cardiac risk.

Methods

Stretching is a popular technique which is easy to learn and can be performed everywhere. So far, little is known about its effects on cardiac risk. To examine the influence of stretching on HRV – an indicator of cardiac risk – we conducted a pilot study with a sample of 11 healthy men (age: 22–44 years). The participants did a standardized 20 min stretching program (of bigger muscle groups) for a period of 20 days.

Results

Comparing individual data we found that HRV increased significantly. In addition, well-being tended to be higher. The beneficial effects on HRV were more pronounced for older participants.

Conclusion

While in the population higher age is accompanied by reduced HRV and increased cardiac risk, stretching has been found to at least reduce age-related vagal withdrawal. Since the HRV is considered to be a valid indicator of cardiac risk one can conclude that stretching can have cardio protective effects. If future studies confirm our results, stretching should be included in health care programs for the prevention and treatment of cardiovascular diseases.

Medical, behavioural and psychosocial markers for tooth loss

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Introduction

The purpose of the cross-sectional study SHIP (Study of Health in Pomerania) was to investigate the relation between tooth loss and medical, behavioural and psychosocial variables. An epidemiologic

model with interactions was developed to detect high risk groups. In dental literature identification of interactions is rarely but conceptually the most important part of the analysis. Interactions give also additional informations about etiology.

Material and methods

The data of 1785 subjects (age 25–54 years) were analyzed by logistic regression. For the definition of a case we chose the concept to differentiate between common and not common which is established in medical epidemiology. Therefore, a case for tooth loss was defined by not-common tooth loss.

Results

The 3-factor-interaction between gender, education and income yields a high risk group for female with low education and low income. The 2-factor-interaction between gender and family status agree with the psychosocial theory: females suffer generally before, males after divorce. An additional 2-factor-interaction explains the role of the social network. Dose-response-effects were found for smoking and self-related health. Oral behaviour was confounded by caries and periodontitis. The odds ratio without caries/periodontitis: 1.6, with caries/periodontitis: 2.4. Only few medical variables (allergy: OR<1, diabetes, multiple sclerosis) were significant.

Conclusion

Tooth loss is more related to behavioural than to medical causes. The relations of the psychosocial variables corresponds to the psychosocial theory.

Assessing pain from different perspectives: evaluation of three pain measures in patients with a chronic disease

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Background

Pain belongs to one of the most important outcomes in many chronic diseases. Therefore, as objective as possible assessment of pain is necessary for reliable clinical evaluation and effective treatment planning. Along with these considerations the following questions arise: "How to measure pain most objectively?", "When different measures are available which of them is most appropriate?", "What are the differences between the accessible pain instruments?"

Aim

The objective of the present study was to evaluate three commonly used pain measures in patients with rheumatoid arthritis (RA). More in detail, the study evaluates the construct validity of pain instruments and examines relationships between pain, disease activity, disability, and psychological well-being.

Methods

The research sample of the current study was selected through a purposive sampling procedure. The sample consisted of 151 patients (age 20–70 years, mean age 48.9 years) with early RA (≤ 4 years disease duration, mean 22.9 months). Within the study pain was assessed by the Nottingham Health Profile (NHP), the Ritchie Articular Index (RAI), and the McGill Pain Questionnaire (MPQ).

Results

The results of the analyses support the empirical validity of the NHP and the RAI (total variance explained 50.7% and 63.7%, respectively). Less clear is the factor structure of the MPQ (total variance explained 44.8%). Furthermore, the outcomes of multiple regression analysis reveal that pain, as assessed by each of pain instruments, is strongly associated with disability. Pain as measured by the NHP is associated with psychological well-being, whereas pain as measured by the RAI is associated with disease activity.

Conclusions

The results of the current investigation provide support for construct validity of pain measures in RA-patients. Besides, the outcomes shed more light on specific qualities of these instruments, indicating that each of the three measures assesses pain from a different perspective.

Application of the Utility Index to the Study of hospital Patient Migration

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Background

In Italy, the data on patient mobility (PM) are used as a parameter for the correct distribution of financial resources and a rational placement of the sanitary facilities within the regional territory; on the other hand they can serve to estimate the perceived quality of hospital recovery services. With a former work, through statistical models ('Factorial Analysis' and 'Discrete Choice') we found the relative importance of the various motivations generating the PM. This degree of importance is interpreted as an utility index and, at the same time, as an indicator of the quality as perceived by the decision-maker (doctor/patient).

Aim

The aim of this work is to provide to the health planning:

- evaluation of the number of patients which is admitted in a particular hospital rather in an other for the following reasons already selected as important: reputation of the hospital (Rep), waiting list (Temp), closeness of the hospital (Dist).
- the possibility to evaluate the utility (perceived quality) of the hospitals.

Methods

Sample: the data available from the Hospital Release Forms (HRFs) was used to analyse the patients' choices and the assistance provided by all the Local Health Organisations in Piedmont during the year 1997. Then 22135 HRFs for medical DRGs and 22387 for surgical DRGs were examined.

Factorial analysis: in order to quantify the PM with respect to the various motivations we took into consideration the degrees of importance calculated with a sample survey (one of our previous statistical studies).

Discrete Choice: logistic regression was applied (Logit - main effects) in order to estimate a utility function U_i expressing the difference in utility when the patients move from their source Local Health Organisation - LHO to the new one responsible for their hospitalisation, using some variables considered as decisive by the PM.

Results

The factorial analysis attributed a degree of importance of 0.548 to the 'Overall reputation of the hospital', of 0.276 to the 'Direct acquaintance of a doctor', of 0.091 to the 'Distance', of 0.029 to the 'Short waiting list' and of 0.056 to the 'Doctor's advice'. The estimated utility model follows:

$$Utility\ Index\ U_i = -7.48 + 6.08\ Sex + 6.79\ Rep - 0.03\ Time + 0.15\ Dist + 0.001\ Dist^2 + 0.04\ Rep*Dist$$

$$t\text{-ratio}\ (2.24)\ (2.39)\ (3.81)\ (0.39)\ (3.88)\ (4.83)\ (0.29)$$

$$p < 0.134\ 0.122\ 0.051\ 0.543\ 0.048\ 0.028\ 0.033$$

The table shows the utility index (for the various medical pathologies) of every LHO for its patients.

Conclusions

The set of features such as 'good reputation', 'short waiting list' and 'correct allocation of the hospitals' of a LHO is a special common asset, also in a financial sense, as an indicator of the LHO's ability in keeping its own patients and also attracting others from outside its own service area. These characteristics constitute a capital on which depend the LHO survival and the increase of its income.

A continuous investment in these features is thus extremely important in order to be able to offer high quality services; also to

Table N. Nante / Utility index for the various medical pathologies of every LHO for its patients

	LHO1	LHO3	LHO6	LHO7	LHO8	LHO10	LHO11	LHO16	LHO18	LHO19	LHO20	LHO21	LHO22
Men	-0.08	0.09	2.37	1.42	2.47	2.52	3.13	2.15	2.45	1.38	2.66	3.24	3.18
Women	5.89	6.42	8.64	7.5	8.55	8.78	9.33	8.44	8.71	7.73	8.9	9.43	9.38

maintain and defend the position it has achieved against the other LHOs in the market whose patients are the clients.

Is the capitative funding system compatible with the free election of hospital?

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Aim

From the theoretical point of view one of the desirable characteristics of a financing system is the robustness. A financing system is robust when it is resistant to the political interferences. The objective of this work is the study of the implications of the free hospital election on a model of capitative funding for a sanitary provider.

Methods

The study object is centred in some of the surgical interventions on the apparatus locomotive; in short those collections in the GDRs 209, 210, 211, 212 and 230. The geographical scope of the study includes the area sanitary Granada-north, with a total population of 321.475 people. The functional environment is bounded to the service of Traumatology of the Virgen de las Nieves University Hospital. The data have been limited to the exercise 2001. The data source used has been the Basic Minimum Group of Data (BMGD) of this hospital during the signal period and its grouping for GRDs. The carried out analysis is based on the geographical distribution of the demand, the medium cost of the intervention and the number of processes in patient coming from other hospital areas.

Results

On a total of 1.049 cases assisted for the signal pathologies, 259 correspond to patient of other hospital areas. The repercussion of these cases on the total activity of the service supposes 6.15%. From the economic point of view, the patients assisted by free hospital election represent 6.36% of the total cost of the service (978.790 Euro).

Conclusions

Besides the traditional adjustment factors used in the capitative funding systems it should be incorporated the free hospital election as a new corrective element, because this variable introduces a considerable gap among the financing assigned to the hospital and the actual population assisted by this.

Process Evaluation of Meningococcal C Vaccination Campaign in the Netherlands

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Netherlands Association of Community Health Services

Issue

Proces Evaluation of the mass vaccination campaign against meningococcal serogroup C in the Netherlands

Description of the project

Due to the increase of meningococcal C in the Netherlands in 2001, the Ministry of Health decided to introduce meningococcal serogroup C conjugate vaccine (MenC) into the routine immunization schedule in September 2002. In addition, a national campaign was launched offering vaccine to all children older than 12 months and less than 19 years of age, concerning a population of 3,5 million children. Promptly within a two months period, the vaccination campaign was organized by all 42 Public Health Services and many other organizations responsible for vaccine delivery, distribution and administration. Due to segmented availability of the vaccine during the campaign, children in the highest risk groups (12 months to 5 years and 15 to 18 years) were vaccinated before the summer holidays. After the summer children aged 6 to 14 years were vaccinated. This campaign is the largest ever held in the Netherlands (and costs over 90 million Euro). Extensive evaluation of the campaign needs to be done particularly since comparable campaigns for other vaccine preventable diseases might be organized in the future. As part of the process evaluation, at national and regional level the organization and implementation of the campaign will be evaluated.

Lessons learned

Information on the evaluation of processes during the campaign will be collected and presented. Different parts will be evaluated.

Information on beneficial or obstructive factors and fundamental conditions will be collected for the following subjects:

- planning, organisation and implementation at national and local level;
- distributive and logistic processes concerning the vaccine;
- management of the short time period (only two months preparation time);
- personal notification and registration of vaccinated children;
- public information and communication;
- special target groups (i.g. institutionalized children, asylum seekers, homeless);
- finance;
- willingness to cooperate of the regional counterparts (i.g. GP's, hospitals, military, local government).

At this moment the campaign has just started. In November the experiences of the campaign can be presented.

The influence of norms in small groups on heavy use of alcohol among Danes

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Background

In Denmark, total alcohol consumption per person 14 years of age and older has changed little during the last decades. Danes have since 1980 consumed 12 litres of pure alcohol per year on average. Compared to other countries, alcohol consumption among Danes – and especially among young Danes – is very high.

Aim

The aim of this study is to clarify the potential for alcohol prevention programmes in small social groups among youth.

Methods

Data derive from The Danish Health and Morbidity Interview survey 2000 among 16,690 adults and from a self-administered questionnaire survey from 1994–95 on health behaviour among 6,444 students from 331 classes in upper secondary schools. Heavy alcohol consumption is defined as persons who have exceeded the weekly limit of alcohol consumption recommended by the Danish National board of Health (14 standard drinks for women and 21 for men).

Results

From 1994 to 2000, the overall percentage of adult Danes who have exceeded the weekly limit has increased from 10.7% to 11.7%.

Results from analyses among students show that there is a big difference in the proportion of heavy alcohol drinkers between individual classes. There are classes where non of the pupils are heavy drinkers, while in other classes approximately 60% of the pupils are heavy drinkers. This variation is not random ($p < 0.001$ multi-level analysis) and cannot be explained by individual factors or by differences in the composition of socio-demographic characteristics among the pupils in the individual classes (sex, age, socio-economic composition).

Conclusions

The analysis shows that life style is contagious between members in small groups in the same way that an infection disease is. The results also support the hypothesis that behavioural change works through group processes and norm development on a micro level.

When planning alcohol prevention programmes it is therefore essential to include health educational practice which takes the significant influence of peers and behavioural norms in small groups into consideration.

Attitudes and behaviours with regards to androgenic anabolic steroids among male adolescents in a county of Sweden

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Purpose

The aim of this study was to investigate attitudes to androgenic anabolic steroids among male adolescents who have used anabolics compared to those who have not.

Methods

A cross sectional survey was performed in year 2000 in all secondary schools in the county of Halland on the west coast of Sweden. An anonymous multiple-choice questionnaire was distributed to all classes with 14-, 16- and 18-year-old male adolescents. The response rate was 92.7% (n=4049).

Results

Those who admitted having used androgenic anabolic steroids differed in several ways from those who had not. Fewer believed androgenic anabolic steroids to be harmful (OR=0.15, 95% CI 0.08–0.30) and more believed that girls preferred boys with large muscles (OR=6.1, 95% CI 3.4–11.0). They trained more often at gyms (OR=5.6, 95% CI 3.0–10.6), drank more alcohol (OR=4.2, 95% CI 2.0–9.1) and had used narcotic drugs more often (OR=15.3, 95% CI 8.5–27.5) than the other male adolescents. More immigrants had used anabolics than native-born adolescents (OR=4.2, 95% CI 2.2–7.9).

Conclusion

Attitudes towards anabolics differ between users and non-users. These aspects may be beneficial to focus as one part of a more complex intervention programme in order to change these attitudes and decrease the misuse of androgenic anabolic steroids.

Changing health inequalities in east and west Germany since unification

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Background

German unification produced substantial social and economic changes in the east, with new uncertainties and, despite increasing income, rising inequality. This paper explores how these changes impacted on health during the 1990s, in particular income-related health inequalities in east and west Germany and their modulation by psychosocial factors.

Method

Analysis of the changing pattern and the determinants of self-perceived health in both parts of Germany, using data from the German Socio-Economic Panel for 1992 and 1997. Analyses use standard socio-economic variables and derived psychosocial variables, estimate the odds of reporting less than good health and explore how much income-related differentials are modulated by psychosocial factors.

Results

In 1992, 43% of east Germans rated their health as less than good compared with 50% in the west. By 1997, the east-west gap in self-rated health had disappeared, with the prevalence of less than good health increasing to 53% in both parts. Income and education were important determinants; those with less than 60% of median equivalent income being at increased risk of poor health in 1992 compared with the wealthiest category (age-sex adjusted OR_{east} 2.51, 1.57–4.01; OR_{west} 1.71, 1.43–2.06). Adjustment for education reduced the strength of this relationship only slightly. In the west, where the distribution of income was stable, the gradient for income-related health inequalities increased between 1992 and 1997. In contrast, while income inequality increased in the east, the relationship between income and health weakened (1997: OR_{east} 1.91, 1.24–2.94; OR_{west} 2.37, 1.98–2.83). The influence of education remained unchanged. Psychosocial variables were important determinants, mediating effects of income.

Conclusions

The study highlights the complexity of socio-economic determinants of health, with different factors operating in east and west Germany.

An evaluation of medical records documentation in the Adult Cardiology Department at the Nork Marash Medical Center: a cross-sectional study

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Background

Reliable and valid medical records are an irreplaceable source of patient information used for quality assurance, research activities and financial purposes. Literature review indicated that recording of elicited patient information could be incomplete and inaccurate. Therefore, before relying on medical records their adequacy should be evaluated.

Purpose

The study objective was to evaluate the adequacy of patient records in the Adult Cardiology Department (ACD) for use in quality assurance and research purposes.

Methods

The study design was cross-sectional with a sample of 66 patients. The accuracy and completeness of the first-visit structured encounter form (SEF) were assessed comparing the recorded information with observations of patient-cardiologist encounters ("gold standard"). Survey participants were adults admitted to the ACD for the first time. The Committee on Human Research within the College of Health Sciences, American University of Armenia approved the research proposal. The study was conducted in summer, 2001.

Results

The mean agreement was 69.8%. The study indicated excellent agreement for tests performed and ordered, good agreement for patient complaints and physical examination results, and poor agreement for medical history and patient habits. Significant under-recording of patient complaints, medical history, and smoking status was observed. Over-recording of physical examination results was found. Data analysis revealed that SEFs were valid source of information in terms of tests performed and ordered for patients.

Conclusions

The study indicated that the first-visit SEFs could be used as a source of patient information only after appropriate improvements are designed and implemented. It emphasized the necessity of:

- Developing guidelines on patient health assessment;
- Redesigning the first-visit SEFs;
- Training of providers on completing the SEFs;
- Establishing internal evaluation processes at NMMC.

The efficiency of Peer drug prevention program: affiliation to school as a protective factor of drug prevention

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Background

It is now widely accepted, that affiliation to school-bonding with prosocial institutions is important protective factor or mediator, change agent in substance use prevention programs. Based on actual research results, peer drug prevention programs developing life skills have the highest level of efficiency.

Aim

The main aim is to explore the influence of intervention program on affiliation of school as protective factor of alcohol, cigarettes involvement.

Methods

Affiliation to school, in means of adolescent's perception of school and learning, were explored among adolescents (n=303, 50 peer program participants, 125 participant's classmates, 129 without experience with peer programs, mean age 14 years, sample from 10 elementary schools in Kosice, data collected in spring 2001) using semantic differential. Smoking behaviour and alcohol consumption among adolescents were measured using questionnaire. The efficiency of intervention program was explored comparing participants of peer program with their classmates and adolescents without experience. The association between affiliation to school and substance use were explored comparing adolescents with different level of cigarettes and alcohol use. Analysis was made using ANOVA.

Results

Three factors of effectiveness, aesthetic and orientation were identified in perception of stimulus words. The relevance of constructivist theoretical principles were confirmed. Significant differences were found in the predicted direction. Non-smokers and alcohol abstainers perceived school and learning as more effective, aesthetical and with higher level for orientation. Program participants perceived school as more effective than their classmates and others without experience with peer programs.

Conclusion

Affiliation to school is associated with alcohol, cigarettes involvement. Explored peer program supports the affiliation to school.

Influence of public alcohol and tobacco use on General Practitioners' advice: an international comparative study
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Background

Efficacy of advice for substance use is proven in general practice. Studies show high variability of performance. Especially intercountry variability has rarely been taken into account.

Aim

To study the influence of public tobacco and alcohol use and health service characteristics on the general practitioners' involvement in counselling for tobacco and alcohol use.

Methods

A multilevel analysis was performed distinguishing general practice level (workload, assistance, gender and age) and country level (health service characteristics and substance use). Data for practice level were used from 3 survey studies: the task profile study (32 European countries; 1992); a collaborative action in 5 European countries (1996) and a WHO trial (14 countries world wide; 1997). Health services' characteristics were obtained from literature. From WHO and OECD databases consumption (mean litres of pure alcohol / person / year used; mean grams of tobacco consumed / person / year) and percent change were derived for 4-year periods. Dependent variable was self-estimated extent of asking about use.

Results

Variations in asking attributed to country level ranged up to 13% for tobacco and to 15% for alcohol. Only small effects (estimated coefficients 0,001–0,005) were encountered for practice level. Use and changes in use on tobacco consumption influenced practitioner's involvement significantly in one dataset, while use and change in alcohol use influenced asking on alcohol consumption in all surveys (–0,01 to –0,05). Moreover Scandinavian and English background influence practitioners positively and Eastern European country situation negatively.

Conclusions

Practice variables (workload, gender, age) only influence prevention very little when country differences are accounted for. Use and changes in alcohol use influence involvement of general practitioners in health promotion more.

Inequalities in Access to Angiography and Revascularisation in Edinburgh: a Statistical Investigation

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Issue

Addressing health inequalities and utilising evidence-based research are high priorities on Scotland's Public Health agenda. In Lothian, anecdotal concerns had been expressed that there was unequal access to angiography and revascularisation. This study addresses these concerns by exploring geographical differences in rates of angiography and revascularisation for Coronary Heart Disease across geographical areas.

Description of the project

Over a month long period a statistical investigation of this question using routinely available data was conducted. Its objectives were to:

- Highlight the existence of any inequalities of access, and
- Demonstrate the value of routine data.

Expected rates of angiography, coronary artery bypass graft (CABG), percutaneous transluminal coronary angioplasty (PTCA) and total revascularisation for the 7 different geographical units of Lothian, was conducted based on expected level of provision (using total Lothian levels as a baseline) and adjusting for both the population of, and the varying level of CHD (therefore need) in, each area. This produced a summary statistic for the ratio of actual : expected rate for each intervention that was then compared across the localities.

Lessons learned

Results substantiated anecdotal reports that rates of angiography and revascularisation differed across Lothian and indicated that variations could not be explained primarily by differences in levels of need within the localities.

Routine data is a useful tool in evaluating inequalities of access. However this methodology has its limitations: primarily, whilst it can measure actual against expected provision, it cannot assess whether this provision is sufficient.

Conclusions

Providing evidence of geographical inequity confirmed anecdotal speculation, and was used to focus discussion on referral practice providing the impetus for resolution (strategies for which are presently under investigation).

Analysis of routine data is a useful way to indicate inequalities but the method used here has methodological limitations that need to be considered when interpreting findings.

Sleep: A Story Of Financial Governance In Scotland

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Issue

Edinburgh's sleep centre mainly treats individuals with moderate and severe obstructive sleep apnoea (OSA) by CPAP (continuous positive airway pressure) machines.

In 1996 this service was devolved from the National Service Division. Finances were distributed on a per capita, not usage basis, leaving SE Scotland's Health Boards with a financial shortfall. Moreover, the purchase and maintenance costs of CPAP machines are met by the service itself and are continually escalating. In the light of financial pressures, the sleep centre's efficacy was investigated.

Description of the project

This project aimed to investigate both the theoretical basis for treatment, and the practical operations of the sleep centre, over a 3-month period, using a literature review and a randomised, retrospective audit of the sleep centre's practice.

Because of the financial implications of the CPAP machine the literature review had as its objective clarification of the evidence-base supporting this intervention.

The audit aimed to evaluate the sleep centre's adherence to local protocol and draft Scottish Intercollegiate Guideline Network (SIGN) guidelines (through 173 case notes).

Lessons-learned

Decisions of service provision may have to be made, even when there is an unclear evidence-base: the literature review indicates that CPAP is an effective treatment for people with severe, but not mild, OSA. It's efficacy for people with moderate OSA and the threshold for benefit is open to question. Moreover, many of the trials published to date have methodological weaknesses, undermining their reliability. These problems make it difficult to draw firm conclusions about appropriate treatment. Restricting provision to people with severe OSA could reduce treatment costs, though risks withholding benefits from those who may benefit.

The audit confirmed that the sleep centre was adhering to local protocol and draft SIGN guidelines, confirming that internal audit is a useful way to measure service practice.

Conclusions

The literature review and audit did not support a change in present treatment practices at the sleep centre.

Financial pressures are currently being tackled by integrating the sleep centre into normal funding procedures and attempting to fund CPAP machines from prescription budgets.

Intake of Mikronutrients by women during the pregnancy

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Background

Improper nutrition over pregnancy period may lead to health complications such as miscarriage, premature delivery or developmental defect of the child. The purpose of this study was to assess nutritional status of Polish women over pregnancy period with the focus on vitamin intakes.

Methods

Study sample consisted of 234 pregnant women aged 18–35 living in Krakow, who were recruited in the first and second trimester of pregnancy. To assess their nutritional status we used 24-hour dietary recall in the second trimester of pregnancy regarding the kind and amount of food they have eaten the day before. In addition, a subsample of 42 women was interviewed three times during the pregnancy to determine eventually change of dietary habits in this period.

Results

Using ANOVA procedures we noticed that there was no statistical difference in nutrients intakes between trimesters. We found that

26,5% of study population had intake of energy below 90% of requirements and for 47% women the percentage of energy from fats was higher than 30%. We found the deficiencies in vitamins intake – i.e. 79,9% of subjects did not meet recommended intake for thiamin (range of observed intake: 0,4 mg/day – 4,4 mg/day), 74,8% for riboflavin (range: 0,7 mg/day – 8,1 mg/day), and 89,7% for niacin (range: 5,8 mg/day – 95,1 mg/day). Only intake of vitamin C met the requirements (13,2% of women did not meet requirements). Intake of mineral components was also low (except sodium). Especially intake of iron was very low (median: 12,5 mg/day) since 97,5% women had intake of iron below 26 mg/day (recommended value). The results were discussed in the context of vitamin and mineral supplementation ordered by medical doctors.

Conclusions

Current assessment of nutrition intake of micronutrients shows that pregnant women in Poland may be not motivated or instructed properly on healthy diet over the pregnancy period.

What Do People Know about Their Electrocardiogram? Results from a Population-Based Study

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Background

Awareness of one's own health status concerning cardiac risk factors or cardiac symptoms are considered to be essential for prevention and early detection of cardiovascular diseases. No data have been reported with respect to the 'awareness of electrocardiogram (ECG) abnormality' in the general population so far.

Aim

To estimate the 'awareness of ECG abnormality' in the general population.

Methods

The 12 lead resting ECG interpretation was compared with the self-reported ECG information derived from a standardised interview concerning prior ECG examinations. The data were derived from the population-based survey KORA-S2000 conducted in Southern Germany from October 1999 until April 2001 including the ECG examination of 4,174 men and women aged 25 to 74 years. The survey ECGs were analysed by physicians in a standardised manner.

Results

The big majority of the study participants (88.5%) reported that they already have had a previous ECG examination, with 32.9% within the last 12 months. Only 4.6% of the subjects with a prior ECG examination reported that their ECG was 'abnormal'. In contrast, the interpretation of the survey ECG was abnormal in 27.2%. Despite of this obvious underreporting of abnormal ECGs by self-report, in 45.2% of the subjects who reported that their prior ECG was 'abnormal', no significant abnormalities were found in the survey examination. Analyses stratified by age and sex resulted in percentages of persons with unknown prior ECG abnormalities ranging from 3.6% in women aged 25 to 34 years up to 44.5% in men aged 65 to 74 years.

Conclusions

Even when taking into account the time lag between the survey examination and the previous ECG examination, both the high prevalence of unknown ECG abnormalities, and the percentage of self-reported 'abnormal' ECGs unconfirmed in the survey examination, were unexpected in a population benefiting from a health care system that provides a high rate of routinely performed ECG examinations.

Life goal patterns and mental and physical health:

Agency-motivated individuals are healthier than others

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Background

Basic research provides ample evidence for the fact that goals are an important factor for subjective well-being as well as for physical health. In particular, psychological and physical well-being depends on (a) feeling committed to personally relevant goals, (b) the type of goals pursued, and (c) the degree of progress in attaining them.

Aim

A cross-sectional screening study was conducted to examine how different life goal constellations are related to mental health (life satisfaction, anxiety, depression, health belief) and physical health, i.e. heart rate variability.

Method

Data was collected in a sample of 268 adults (143 men, 125 women; age M = 43, SD = 17.0). Cluster analyses were conducted based on the importance and progress ratings of agency life goals (achievement, power, variation) and communion life goals (intimacy, affiliation, altruism).

Results

Three groups were identified which differed in life goal constellations as well as in psychological and physical health. Group 1 pursued only moderately important life goals and made little progress in their attainment. These individuals reported high levels of anxiety and depression and their heart rate variability was reduced. Group 2 was making medium progress in pursuing important life goals. Compared to group 1, these individuals were more healthy in all dimensions of mental and physical health. Individuals of group 3 rated the agency goals of power and variation as very important and was very successful in achieving all six life goals. They scored especially high on life satisfaction and low on depression.

Conclusion

Agency motivated individuals seem to be mentally and physically healthier than persons pursuing other goals. They are more eager to deal with new and exciting experiences and have a stronger desire to exert influence on what happens to them. Physiological data also indicates that they might be more able to deal with stress.

The prevalence and health-related quality of life of musculoskeletal diseases in the general population: an example from the Netherlands

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Background

Population based data on the prevalence of musculoskeletal diseases and the health-related quality of life is scarce. However, this information is needed as also mentioned within the framework of the Bone and Joint Decade 2000–2010.

Aim

To present the prevalence of self-reported musculoskeletal diseases and the quality of life of persons with musculoskeletal diseases, as measured by the SF-36 and the EQ-5D (EuroQol).

Methods

A sample of Dutch inhabitants of 25 years and older (n=3664) participated in a questionnaire survey. Twelve layman descriptions of common musculoskeletal diseases were used to measure the prevalence of diseases as told by a physician. For SF-36 and EQ-5D both commonly used scores standardized differences from the general population were analysed (in order to compare diseases groups and SF-36 en EQ-5D).

Results

Osteoarthritis of knee (men: 11.8%, women 14.2%) was one of the most reported musculoskeletal diseases whereas the figures for self-reported rheumatoid arthritis were relatively low: 2.5% and 4.9% for men and women respectively. The co morbidity of musculoskeletal diseases is high. Those with musculoskeletal diseases have statistically significant lower scores on all SF-36 dimensions compared to those without musculoskeletal disease especially for physical functioning (SF-36 score (standard error)=71.5 (0.6) vs 88.2 (0.5)), role limitations due to physical problems (65.5 (0.9) vs 86.0 (0.8)) and bodily pain (67.9 (0.5) vs 84.4 (0.5)). The worst health-related quality of life patterns were found for osteoarthritis of the hip, osteoporosis, (rheumatoid) arthritis and fibromyalgia. Especially among those with multiple musculoskeletal diseases the quality of life was reduced substantially. Similar results were found for EQ-5D.

Conclusions

Self-reported musculoskeletal diseases are highly prevalent. All musculoskeletal diseases involve a quality of life pattern characterised by pain and reduced physical functioning. The co-existence of musculoskeletal diseases should be taken into account because of its high prevalence and its high impact on health-related quality of life.

Employment security, socio-economic status and long sickness absence spells among the staff of the City of Helsinki

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Purpose

The study aims to examine the associations between employment security and socio-economic status with sickness absence among the staff of the City of Helsinki.

Data and methods

The data include personnel register data and sickness absence data of the City of Helsinki from the year 2000. The number of employees was 7921 men and 27921 women. The frequency of more than 3 days long sickness absence spells was selected as the dependent variable. For long sickness absence spells, the employer requires medical certification. Stepwise Poisson regression analysis was used to analyse relative risks (RR) of long sickness absence spells for different employment security groups and occupational classes.

Results

In the unadjusted model, the RR for long sickness absence spells for temporarily employed men was 0.39 as compared to permanently employed men. For women, the corresponding RR was 0.49. When adjusted for age, education, employment security, occupational class, full-time working and length of employment, the RR was still 0.65 for temporarily employed men and 0.71 for temporarily employed women as compared to the permanently employed. The RR for blue-collar workers was in the fully adjusted model 2.07 for men and 1.75 for women as compared to their upper white-collar peers.

Conclusions

The main findings suggest that employment security is strongly associated with long sickness absence spells. The socio-economic status measured by occupational class explained only a part of the association between employment security and long sickness absence spells.

Growth in childhood and air pollution among preschool children in the Czech Republic

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Background

Growth in childhood is considered to be an important indicator of children's health. The aim of this analysis was to assess the effect of long-term air pollution exposure on growth in childhood in relatively highly polluted areas of the Czech Republic.

Methods

Preschool children 3 to 6 years old attending 21 nurseries in five towns of the Czech Republic were studied. All children registered in the nurseries were considered to be eligible for the study. Parents of children answered a questionnaire on socioeconomic circumstances, life-style of the family, family health history, children's health in the past year and parents' height and weight. Children's height and weight were measured in nurseries by centrally trained staff. Measured heights of children were converted into height-for-age z scores. Mean annual concentrations of nitrogen oxides (NO_x), sulphur dioxide (SO₂) and total suspended particulates (TSP-10) for five towns were obtained from the Czech Hydrometeorology Institute.

Results

2366 questionnaires were completed by parents. Valid measurements of height were available for 2275 children (76% of registered children). The mean height-for-age z score was 0.49 (the Czech children were almost half a standard deviation higher than the US standards). Of the socioeconomic variables, education of parents, number of siblings, and maternal smoking were significantly

associated with height-for-age z score. After the adjustment for birthweight, parental height, socioeconomic variables and parental health history, SO₂ and NO_x were significantly associated with children's height-for-age z score: there was decrease of 0.23 (p=0.01) and 0.19 (p=0.03), respectively, in z scores per 50 microgram/m³ increase in concentrations of NO_x and SO₂.

Conclusions

This study suggests that there is the association between air pollution concentrations and childhood growths among preschool children in the Czech Republic.

Hypertension and diabetes care among primary care doctors in former East and West Germany

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Background and aims

The population-based 1998 German Health Interview and Examination Survey revealed marked differences with regard to the prevalence of both conditions between former East and West Germany. For hypertension (HYP) rates among males were 34.5% (East) and 28.5% (West) (females: 30.1% versus 26.1%). For diabetes mellitus (DM) total prevalence among 18–79 years old males was 6.5% (East) and 4.3% (West) (females: 6.9% versus 5.2%). We aimed to investigate the actual situation on HYP and DM in both regions.

Methods

Findings are based on data from HYDRA, a large-scale epidemiological research program of 1,986 primary care doctors seeing 45,125 patients on a target day in September 2001. Data presented were adjusted for cluster and response bias effects as well as for age and gender (associations).

Results

According to the diagnosis of physicians (clinical global impression [CGI] at least 'mild'), rates of HYP were 40.4% (East) and 31.7% (West; OR: 1.4, CI: 1.3–1.6). However, there was no clinically meaningful difference between measured mean blood pressures: 132.1/80.0 mmHg (East) versus 133.4/80.6 mmHg (West). DM rates were: 15.9% (East) and 11.3% (West; OR: 1.4, CI: 1.2–1.6). The rates of co morbidity of HYP+DM were: 15.9% (East) and 11.3% (West; OR: 1.9; CI: 1.7–2.1).

Control of HYP was rated as 'good' in 66.2% (East) and 60.0% (West), control of DM as 'good' in 61.6% (East) and 56.3% (West). Concomitant diseases more significantly more frequently cited in the East were left ventricular hypertrophy (OR: 1.5, CI: 1.2–1.7) and coronary artery disease (OR: 1.5, CI: 1.3–1.6). Significantly less frequently cited in the East were: heart failure (OR: 0.8, CI: 0.6–0.8), depression (OR: 0.7, CI: 0.6–0.8) and sexual dysfunction (OR: 0.7, CI: 0.6–0.8).

Conclusion

This paper explores potential reasons for existing differences taking into account differences in the health care system and provider characteristics, differences in treatment patterns, and patient attitudes and behaviors.

Among a Group of High School Students Evaluation of Coping with Stress, Dimension of Hopelessness and Suicide Tendency

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Background

Risky behaviours of youth is a serious public health problem spreading all around the world. Some countries are realizing Youth

Risk Behavior Surveys to plan the appropriate health education interventions

Aim

The aim of the study is to determine the dimension of hopelessness and suicide tendency among a group of high school students so that shed light on the health education programs to be applied.

Method

Survey population consisted of 580 students attending 2nd class of three high schools with different characteristics in Keçiören sub-province of Capital Ankara. With selection being made by drawing lots from class lists until one-third of the students in that class is reached 184 students were taken in to the sample group. Data were collected by subjecting the students to a survey form under observation on 1999 (May–June). Survey form is an adaption of the form of CDC's 'Youth Risk Behavior Survey 1999'.

Results

It was found that 87% of the students felt themselves sad and hopeless in the last month. A difference in favor of girl students was found between the groups from the standpoint of trying suicide in earnest. The students in both groups stated that it was difficult for them to rid themselves of stress at home or at school.

Conclusions

Risky behaviours and interacting characteristics have to be analysed with further studies. In developing countries youth risk behavior surveys have to be carried out on national bases also.

Goals as health-relevant construct: their meaning in the context of prevention, treatment motivation and outcome evaluation

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Background

Basic research provides ample evidence for the fact that goals are an important factor for subjective well-being as well as for physical health. Striving for personally meaningful and attainable goals furthers psychological as well as physical well-being. On the other hand, not having meaningful life goals or being unable to achieve them is related to the occurrence of depression and a variety of physical symptoms.

Aim

Our presentation will focus on the relevance of goal constructs for health.

Methods

Medium-range goals as well as life goals were assessed by self-report questionnaires, measuring goal content, goal attributes like importance and progress, and self regulation capacities. Additionally, a wide range of psychological and physical well-being dimensions (depression, SOC, TPF, heart rate variability) were assessed. Data was collected in different clinical and non-clinical samples (e.g. healthy adults, chronic pain patients and patients suffering from psychosomatic disorders).

Results

We found specific patterns of goal constellations for healthy individuals and for patients suffering from different disorders. For healthy individuals, life goals and medium-range were typically matching and they used efficient self regulation strategies. Patients suffering from psychosomatic disorders were unable to attain valuable life goals because their medium range goals were not instrumental for achieving them and their self regulation capacities were found to be deficient. Chronic pain patients had typically reduced their commitment in long-term life goals while they strove primarily to improve on their health, their treatment motivation was relatively low.

Conclusion

Goal units can provide useful information on (a) the prevention of disorders by identifying dysfunctional goal constellations and by improving self regulation capacities, (b) the furthering of treatment motivation and coping processes by taking into account what patients are striving for, and (c) the evaluation of treatment outcomes according to the patients' subjective criteria.

Psychiatric Illness in Homeless Men in Munich, Germany

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Background

While in some countries the prevalence of mental disorders in homeless men is well researched, little is known in Germany about this phenomenon. Even less is known in Germany and other countries about the course of mental disorders in this population.

Aim

The aim of the study was the reliable assessment of the prevalence and course of mental disorders in a representative sample of homeless men in Munich.

Methods

A random sample of 265 homeless men in Munich was assessed in 1994 to 1996 using the Structured Clinical Interview for DSM-IV (SCID-I) for a face-to-face interview. 185 men were traced and re-assessed three years after the first interview, again using the SCID-I. All prevalence rates were weighted according to sector (shelter users, service users, or street dwellers).

Results

Lifetime prevalence rates at first assessment were 9.8% for psychotic disorders, 32.8% for mood disorders, 15.9% for anxiety disorders, and 72.7% for alcohol dependence. One-month prevalence rates were 6.6% for psychotic disorders, 16.3% for mood disorders, 11.6% for anxiety disorders, and 58.4% for alcohol dependence. Except for psychotic disorders 3-year follow-up showed a slight decrease of prevalence rates. High percentages of low school education and divorces were found.

Conclusion

Homeless men show considerably higher prevalence rates of DSM-IV axis I mental disorders than men from the general population. Although there is a decrease after three years, prevalence rates remain very high and still exceed those found in the general population. Concerning health care planning it seems that services for the homeless should be specific for this social group, including a strong outreach component and after care when leaving health care services or services for the homeless.

Which geo-socio-economic factors predict mortality best?

An analysis of small-area mortality rates in Germany

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Background

The reduction of high mortality rates is one of the major public health aims. Therefore, the identification of potential determinants of health resp. premature death is needed. Several studies use socio-economic parameters as determining variables; but also spatial factors seem to have an influence on mortality.

Aim

This study was focused on the analysis of small-area mortality data in Germany. As determinants of the level of mortality rates both socio-economic factors and spatial factors were considered.

Methods

For this ecological study all-cause mortality rates in Germany in 1996 and 1998 were used. The county-based mortality data of the Federal Office of Statistics were age-standardised according to the European Standard Population. Univariate and multiple regression analyses with geo-socio-economic data like population density, unemployment rate, education level, geographical latitude and longitude and state were performed.

Several models (inclusive one spatial linear model) were developed to explain the variation of mortality rates in 1996. The models were fit for the year 1996 and validated with data for 1998.

Results

The multiple regression analyses gave R-Square values of about 71% (p=0,15), when unemployment rate, state, education level and y-coordinates were included into the model. As best socio-economic predictor the unemployment rate was identified. In general, models fit best when spatial components were included.

Conclusions

The comparison of the fitted models showed that the integration of a spatial component into the data set gave better results for

predicting mortality rates in 1996 than just using socio-economic variables. Nevertheless, the unemployment rate had the highest association with the mortality rates. However, the results of this study can be used for the identification of regions, where suitable public health programs should be established to reduce mortality rates.

The impact of working conditions on the socioeconomic health differences: Helsinki Health Study

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Background and aim

Reasons behind the socioeconomic health differences are largely unknown. The aim of the paper was to study the impact of different dimensions of working conditions on the association between occupational social class and health.

Data and methods

The data derive from the Helsinki Health Study baseline surveys in 2000, 2001 and 2002. Each year employees from the City of Helsinki reaching 40, 45, 50, 55 and 60 years received a questionnaire. The pooled data included 10,000 respondents (80% women, average response rate 70%). Outcome variables were self-rated health, limiting long-standing illness and mental health (GHQ12). Independent factors were different categories of working conditions, such as job strain, job control, job demands, hazardous work and organisational fairness as well as occupational social class. Age-adjusted prevalence and logistic regression analysis were used.

Results

The relationship between occupational social class and self-rated health as well as limiting long-standing illness attenuated when job control was adjusted for. However, when job demands were adjusted the corresponding relationship strengthened. Differences in mental health disappeared when job demands were adjusted for, but remained when only job controls were adjusted for. Organisational fairness was related to health, but did not affect the socioeconomic health differences.

Conclusions

The impact of working conditions on socioeconomic health differences varied depending on the measure of working condition. All in all, working conditions did not explain the socioeconomic health differences.

To enhance the technical capabilities in establishing an early warning system for emerging infectious diseases

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Issue/problem

Observations and measurements have been the lifeblood of public health practice! The goal of surveillance is the acquisition of good hard data. No country is an island whilst microbes are reproducing somewhere in the World.

There is a lack of advanced laboratory resources without appropriate trained personnel. There is a need for better utilization of information by enlightened policymakers.

Project goals/objectives

The project will establish:

- A cadre of health professionals who are trained to detect sentinel diseases using clinical observation or its symptomatology.
- Equip laboratories to identify and classify specific infectious agents (ICD-9 protocols).
- Design a data system that can: (i) report the incidence and prevalence of diseases and (ii) print out meaningful reports.
- Draw up protocols that will direct appropriate responsive activities.

Lessons-learned

1. 911 calls in New York City recognized the 1999–2000 Influenza epidemic two weeks before the official announcement.
2. Monitoring sales for over the counter drugs and requests for stool exams established an outbreak of gastroenteritis disease in the community.
3. GIS – software gives early detection of epidemics in a community.
4. Sandia National Laboratory – RSVP project is an example of successful monitoring of diseases.
5. Surveillance of dead crows gave warning of West Nile encephalitis

Summary

Everyone is vulnerable to infectious diseases whether naturally occurring or man-made.

1. Communication is the key for the public to maintain trust. Example, Guinea Worm, West Nile encephalitis and Anthrax.
2. Mechanisms must be set up for performing and responding correctly. Example, Smallpox, Measles Polio eradication.
3. Political will and financial support is important to establish protocols. Example, Malaria, TB, Cholera, Influenza global monitoring, and HIV/AIDS.

Conclusion

Disease transmission and the evolution of new or drug resistant microorganisms are rampant. This project aims to establish the laboratory resources to combat this invasion. The surveillance system for Central and Eastern Europe is the first line of defense and will put this region in the forefront of the solutions for future outbreaks.

Social differences in health and in use of health care services in the Swedish and Danish Oeresund-region

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Background

An important aspect of the Nordic welfare societies is the redistribution of resources between groups with different levels of income, wealth and health through heavy taxation and rather easy and relatively free access to the health care system, or access with a limited cost to the user. The aim of the presentation is to compare socio-economic gradients in health care use in the Swedish and the Danish part of the Oeresundregion.

Methods

Surveys have been conducted during 1999 and 2000 in both the Swedish and the Danish region that allow cross-national comparison. In Scania the sample consisted of app. 25000 persons aged 18–80, and the response rate was 59% producing an effective sample of 15000. In the Danish region the sample consisted of app. 7000 within the same age ranges. The response rate was 74% producing an effective sample of 5200.

Results

In Denmark app 80% of the general population in the Danish part perceive their health as good or really good, whereas it is only 71% in the Swedish part. In Denmark the differences between salaried employees and unskilled workers was app. 10% and in Sweden the difference between comparable groups were similar. In Denmark 46% of the population compared to 40% in Sweden had consulted a physician during the last 3 months with similar age- and gender gradients. Ongoing analyses studies the effect of socio-economic status on the use of health care services controlled for the effect of differences in health.

Conclusion

It is anticipated that the analyses will show comparable results indicating a similar redistributive effect in Sweden and Denmark thereby contributing to an overall evaluation of the health care systems in Denmark and Sweden.

Is breast and cervical screening uptake low among ethnic minorities in the UK? The need for routine data

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Issue

At present there is no routine data-collection system to measure how cervical and breast-screening uptake may vary with ethnicity in the UK. However, there are concerns that ethnic minority women have a lower uptake of these services than the general population.

Description of the project

A literature review was conducted over 3 months. This aimed to identify all articles published since 1990 (regardless of study design), which have quantified the uptake of breast and cervical screening among ethnic women in the UK.

Its objective was to assess to what extent the existing evidence supports the concern over low uptake of breast and cervical cancer screening services by ethnic minority women, and, in doing so, evaluate the efficiency of present data-collection systems for this subject.

There was a lack of published information on this topic. The few studies that have been published have methodological weakness that may undermine their reliability. There is also an emphasis on local

studies that prevents the generalisation of findings and there is great variation in study outcomes between different localities.

There are however consistent findings that some ethnic minority women do have lower uptake of breast and cervical screening services than general women, although women from other ethnic minorities may have a higher uptake than the indigenous population.

Lessons-learned

Because there is a likelihood that, among some ethnic minority populations in some areas uptake of screening may be lower than the general population, it is important to identify where this disparity exists so that it can be addressed.

However, with the absence of routine data, the lack of clear outcomes and the local context of most research, monitoring of ethnic inequalities in screening uptake currently depends on further local ad-hoc surveys.

Conclusions

There is a need for systems to be designed to allow the use of routine data sources to collect reliable data on ethnic variations in breast and cervical screening uptake.

Haemodialysis In Lothian: Working in partnership to choose the optimum location

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Issue

Partnership working and patient participation are bywords in the Scotland's National Health Service (NHS). Lothian NHS Board's decision to expand haemodialysis provision provided an opportunity to incorporate these principles of partnership working and patient participation in the development of a hospital service that, in the past, would have included only doctors and managers. This review discusses the option appraisal methodology, results and evaluates the process.

Description of the project

After a comprehensive needs assessment it was decided to expand Lothian's haemodialysis services. There were 5 potential locations. This study of stakeholder preferences (alongside a contemporaneous feasibility study not reviewed here) evaluates which site best met valued outcomes.

A steering-group was chosen to reflect the diverse range of interests upon which expansion would touch, including a patient representative. Standards (desired outcome or 'benefit criteria') against which each potential site would be assessed were detailed and weighted in ways that gave equal consideration to each group member's opinions. Each option was 'scored' against these criteria by the group. A sensitivity analysis was undertaken to ensure that variations in weighting or scoring did not greatly changed the preferred option.

Lessons-learned

This method proved an effective technique to decide the location of new services through partnership working.

Conclusions

The above process produced two sites that were clearly preferred above all others. Preferences did not change with sensitivity analysis, substantiating the reliability of this result. The preferred options coincided with the outcome of the contemporaneous feasibility study so haemodialysis was expanded into these two identified sites.

Does a low back pain coping programme influence the physical fitness?

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Background/Aim

The aim of the study, which is part of the research project 'Prophylaxis of chronic low back pain' at the Technical University of Dresden, was to clarify, if physical or psychical coping strategies of low back pain influence the physical fitness.

Basis of this assumption is the thesis, that due to a improved coping resp. avoidance strategy of low back pain the physical activity is

increased caused by a modified pattern of behaviour. This should be reflected in anthropometrical parameters ('BMI') and in those of physical fitness.

Methods

In 182 patients at 4 groups with different treatments ('info' only with information concerning the meaning of back pain and it's avoidance versus 'phys' with traditional physical low back pain training programme, 'combi' with combination of traditional low back pain training programme and psychological conditioning and 'psych' with only psychological training) anthropometrical (Body-Mass-Index, body fat) and cardiopulmonary parameters (physical work capacity) were examined in the beginning and one year later at the end of the observation period.

Results

The anthropometrical data as BMI and body fat were in the 'normal' range and showed in the final examination a slight but significant increase compared with the data one year ago. The PWC 130 as an indicator of the cardiopulmonary fitness was found to be improved (not significantly). without differences between the treatments. The data show sex-specific changes of the physical fitness.

Conclusion

The way of coping regime, i.e. 'Info' versus another low back pain programmes, seems to be of secondary importance concerning the improvement of physical fitness.

Burden on Multiple Sclerosis Patients' caregivers: data from the GEDMA study

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Background

The knowledge about the burden of Multiple Sclerosis (MS) patients' caregivers is scarce. The Zarit burden scale (BS) has been validated in Spain in caregivers of demented elders as well as in other psychiatric disorders. Nevertheless, this scale has not been applied to MS patients' caregivers.

Aim

To analyse (1) the burden on MS patients' caregivers through the implementation of the Spanish version of BS, and (2) the relationship between the health related quality of life (HRQoL) of patients and the burden of their caregivers.

Methods

The BS was applied to MS patients' caregivers recruited from 13 hospitals of Madrid (Spain), selected to participate in a specific cohort of MS (Gedma study). In those patients, who required daily assistance, their primary caregivers were interviewed using the BS and other variables, such as caregiver age, relationship to the patient, the years of care, and the daily time of care. Patients' HRQoL was measured by a Spanish version of Functional Assessment of Multiple Sclerosis (FAMS) instrument.

Results

Ninety-one caregivers (61F/30M, mean age 51.5+14.10, 49 spouses, 26 parents, 8 offspring, 5 siblings, and 3 others) completed the interview. More than 80% of the caregivers had dedicated more than three years to the care of the patient. Zarit burden scale scores were: 49 (53.8%) not burden, 20 (22.0%) mild burden, and 22 (24.2%) intensive burden. There was a positive correlation between most of the dimensions of the FAMS instrument and the carers' burden: mobility (p=0.015), symptoms (p=0.361), emotional well-being (p=0.053), general contentment (p=0.006), thinking/fatigue (p=0.044), and family/social well-being (p=0.001).

Conclusions

This study suggests that MS patients' caregivers may perceive less burden than those of demented patients. MS patient's QoL was strongly correlated with most of the dimensions of the FAMS scale. This correlation may indicate that a better perceived QoL of the patient is related to a decrease in the caregiver burden.

The association between workplace lunch and daily diet

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Background

There is a long tradition of eating lunch at organised workplace restaurants in Finland. Little is known, however, about characteristics of those eating lunch at workplace restaurants and whether workplace lunch is associated with the quality of daily diet.

Aim

To describe those who eat lunch at workplace restaurants, and to examine the association between workplace lunch and quality of diet.

Methods

The data derive from the Helsinki Health Study survey in 2001. Employees from the City of Helsinki reaching 40, 45, 50, 55 and 60 years during study year received a questionnaire including data on meal pattern and food habits. The data include 578 men and 2413 women (response rate 70%). We used different food habits as outcome variables in analysis of variance and logistic regression models. Age, marital status, family structure, working time, educational level and worksite lunch pattern were included as independent variables.

Results

Possibility to eat lunch at workplace restaurant was reported by 74% of men and 67% of women, and 43% of all men and 33% of women used this opportunity during workdays. Those with higher educational level and those regularly working at daytime ate more often lunch at workplace restaurants than those with lower educational level and irregular working times. There were no differences in age, marital status and family structure between workplace restaurant users and others. Those eating lunch at workplace restaurants ate more often rice, pasta, potatoes, fresh and cooked vegetables and fish than others. Workplace lunch was positively associated with daily consumption of vegetables even after adjusting for other independent variables.

Conclusions

Eating lunch at workplace restaurants seems to improve the quality of the diet. Those who eat workplace lunch use more vegetables regardless of educational level, family structure, marital status, age and working time.

Appropriateness of hospital care for immigrants in Rome, Italy

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Background

A higher frequency of inappropriate hospitalisation has been reported in Italy among disadvantaged groups of population.

Aim

The aims of this study were to analyse differences between resident and immigrant population in: 1) utilisation of selected surgical procedures at risk of clinical inappropriateness; and 2) frequency of acute hospitalisation for 43 DRGs identified by the Ministry of Health at risk of organisational inappropriateness.

Methods

Data derive from the regional Hospital Information System, year 2000.

We calculated standardised hospitalisation rates among resident and migrant population for appendectomy or for hysterectomy performed for benign disorders of the uterus. The resident population was stratified by education level. Differences among groups are presented as rate ratios and 95% confidence intervals.

The frequencies of acute hospitalisation, among migrant and resident populations, were calculated for the 43 DRGs including only minimal severity episodes according to APR-DRG classification system. The χ^2 test was used to compare frequencies for both genders, separately for medical and surgical DRGs.

Results

Migrants have a significantly higher rate of hospitalisation for appendectomy compared to the resident population. Among residents, there was an inverse association with education level. Hysterectomy rates were instead lower for migrants (13,3 x 10,000; CI 95% 11,2–15,7) when compared to residents (18,4 x 10,000; CI 95% 17,9–19,0).

Frequencies of acute episodes for the 43 DRGs were significantly higher ($p < 0.001$) among migrants, except for medical admissions of women.

Conclusions

Migrant population is more vulnerable to appendectomy, usually performed in emergency setting without barrier in access. On the other hand, they show a lower risk of hysterectomy, usually carried

out as elective surgery. Immigrants have also more difficult access to day care for treatments likely to be inappropriate in acute setting. Day care, especially day-surgery, requires a set of social endowments that foreign citizens barely have.

Co-morbidity in patients with rheumatoid arthritis: impact on health related quality of life

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Background

Rheumatoid arthritis (RA) is a chronic, inflammatory disease with long-term consequences for daily functioning and health related quality of life (HRQoL). Comorbidity is a common problem in RA and other chronic diseases.

Aim

To describe the extent of somatic comorbid conditions in patients with RA and to assess the impact of comorbidity on HRQoL.

Methods

A two-year follow-up study (1997–1999) on health and quality of life was conducted among RA patients with varying disease duration. Data were collected at baseline and at 2 years of follow-up by means of questionnaires and by clinical examination. Comorbidity was measured by a self-administered questionnaire, adapted from the National Statistics, including 17 chronic diseases. HRQoL was assessed with the RAND-36. The disease-specific impact of incident comorbid conditions on HRQoL was investigated by means of multiple linear regression analyses.

Results

A total of 679 patients participated (mean age at baseline 59.6 years (SD 13.8), 71% female). The mean disease duration at baseline was 8.7 years (range: 0–55.8). 56% of our patients reported at baseline at least one comorbid condition. Significant differences with age and sex adjusted prevalence rates in the Dutch population were present. We demonstrated that only some conditions, i.e. chronic pulmonary disease, heart diseases, gastrointestinal diseases, cancer and dizziness with falling, but not all resulted in adverse changes in HRQoL. Among patients with RA, the impact of co morbidity on HRQoL depends on the type of comorbid diseases and on the dimension of quality of life.

Conclusion

Our results indicate that measuring comorbidity by a summary count, assuming an overall equally large effect of each comorbid condition, will not uncover the real impact. Our results sustain the relevance for health care providers to be aware of specific comorbid conditions, exposing RA-patients at risk for additional, not RA-dependent, impairment of HRQoL.

The Context of Physical Activity and Health: Results from a Comparative Study

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Background

The concept of “health enhancing physical activity” has in recent years resulted in recommendations for adults to be at least 30 minutes physically active per day. Such recommendations are based on the assumption that extended calorie expenditures are responsible for the known benefits of physical activity on health. On the other hand, the concept of “health enhancing physical activity” does not distinguish between the context of physical activity (e.g. at work, for transportation, at home, for leisure time) and thus assumes that any type of physical activity is beneficial for individual health.

Aim

The purpose of this study is to investigate relationships between the context of physical activity and subjective health.

Methods

Data stem from an EU-funded project (European Physical Activity Surveillance System) on physical activity monitoring in 8 Member States (Belgium, Finland, France, Germany, Italy, Netherlands, Spain, United Kingdom). In each nation about 600 interviews (4995 interviews in total) with household residents selected by random sampling were conducted in the year 2000 by phone. The standardised questionnaire included questions on physical activity in the last 7 days (International Physical Activity Questionnaire), context of physical activity, and subjective health.

Results

Results of multivariate logistic regression indicate differences between context of physical activity and subjective health. For men, physical activity at work (RR 1.47) and during leisure time (RR 2.42) was positively associated to a good subjective health status, while physical activity at home (RR 1.15) or for the purpose of transportation (RR 1.30) was not. For women, only physical activity during leisure time activities was positively related to a good subjective health (RR 2.15).

Conclusions

Results suggest that the context of physical activity is important if health benefits of regular physical activity are considered. Especially women seem to benefit from leisure time physical activity, rather than physical activity in other contexts. Current recommendations regarding physical activity are neglecting such contextual effects of physical activity on health.

Public Health Research in Poland

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Introduction

In Poland, the research regarding public health has a long history and had been undertaken by a number of eminent scientists. After World War II the direction of public health research has changed in view of the development of epidemiologic studies of civilisation-linked diseases, mostly cardiovascular diseases and cancer, and research into social and environmental determinants of health. These studies are conducted by medical universities, technical universities and research institutes, particularly the ones subordinate to the Ministry of Health.

Aim

The aim of the present study was to make a review of public health research activities in Poland, with special emphasis on studies in environmental epidemiology and on environmental determinants of health and their contribution to the development of public health policy in Poland.

Methods

The review was based on the analysis of the contents of database run by the State Committee of Scientific Research and information obtained from the Contact Point for the 5th Framework Programme of the European Union referring to the period from 1995 to 2002.

Results

The review has yielded a comprehensive report on public health research in Poland between 1995 and 2002, including the organisational aspect, that will be presented during the conference. Analysing the data from the review, one cannot fail to notice that the research on public health contributed to significant changes in the health policy in Poland. This refers mainly to the amendments to the Health Insurance Act introduced within 1998–2001, the legal regulations concerning environmental hazards, e.g. on chemical substances and preparations (2000), on wastes and waste disposal (2001), as well as on environmental protection (2001), contagious diseases control (2001), and occupational health services (1997); all of which made grounds for the reduction of adverse environmental health effects. However, some of the findings have not been translated into practical activities. It seems that for a proper implementation of the results of public health research, an integrated approach towards public health and relevant complex regulation is necessary.

Public health information in Switzerland

Salinas, L.A. *

Issue/problem

The difficult task is to provide readily understandable information on different public health topics.

Description

In Switzerland, as probably in most other countries, there is lack of suitable public health information coming from reliable sources. For

several years now, Pharma Information has published a booklet with complete statistical data and current topics covering the main issues. The goal is to provide well-balanced and readily understandable information that reaches the entire population.

Lessons-learned

During the 1980s, this publication was aimed mainly at health care professionals. But, nowadays there is a need to inform the population at large. People who have in-depth knowledge of their own health care system enjoy many advantages, for instance being able to choose the most suitable health care insurance or paying less for the medicines they need. But the well-informed citizen also wants to know which changes and reforms have been introduced in order to improve health care. For instance, most people are not aware of the recently decision to introduce new taxes for reimbursable drugs or of their right to receive cantonal health care subsidies if their economic situation warrants such support. Statistical figures on the available health care resources in the country, government expenditure on health care or mortality and morbidity data are of interest not only to health care professionals.

Conclusion

There is therefore a pressing need to compile and supply such information on public health care in Switzerland. Government publications reach experts only and information prepared by newspapers and by the press and popular magazines may be not complete enough and often have political bias. A serious and professional publication to keep the public informed is thus highly desirable.

That is why *Pharma Information* decided to publish a booklet with reliable information on public health in the early 1980s. At that time the 8000 copies were intended to health care professionals only. We now have a circulation of 60000 copies, which we send not only to physicians and pharmacists, but also to patient organisations, schools and to a selected number of private persons. And we have to increase the print or reprint the booklet every year to keep up with demand. A couple of years ago, we also created a website where the whole booklet can be down-loaded. Last year about 1500 users down-loaded the whole booklet or part of it. Many people also call us to request information by phone. The printed booklet and the oral or written information are free of charge.

Mental health and food habits among employees

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Background and aim

Poor mental health may have deteriorous effects on health-related habits such as eating behaviour, and poor dietary habits may further impair mental health. Relatively little, however, is known about these issues outside clinical or laboratory settings. Therefore we aimed at examining food habits and mental health among employed middle-aged women and men.

Methods

A survey including data on mental health and intake of various food items was collected in 2000–2001 from 40, 45, 50, 55 and 60 years old women (n=4991) and men (n=1252), employed by the City of Helsinki. The subjects' mental health was assessed by the GHQ-12 and categorised into poor mental health (score 3–12) and 'normal' mental health (score 0–2). Multivariable analyses using logistic regression were conducted using this GHQ grouping as an independent variable to predict food habits, controlling simultaneously for age, marital status, educational level and occupational status. All analyses were done separately for women and men.

Results

Women having poor mental health were more likely to skip breakfast and less likely to report consuming fresh vegetables, fresh fruits, low-fat milk and coffee on daily basis, and cereals or porridges at least five times a week. Men having poor mental health reported consuming less fresh fruits and rye bread. There were no associations between mental health and consumption of other food items including fish, meat, visible fats, sweet snacks, potatoes, rice and pasta. Poor mental health was also associated with weight fluctuation and high intake of alcohol among both genders, and also with smoking in women.

Conclusions

Poor mental health is associated with impaired nutritional quality of the diet. Follow-up studies are needed to further clarify the causal relationships.

Health Education for Preventing Hypertension by Municipalities in Japan

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Background

To decrease the circulatory diseases, measures against hypertension are very important. In "Health Japan 21" which is Japanese health promotion framework, health education about hypertension is one of the major methods of reducing the circulatory diseases.

Aim

Health education about preventing hypertension by municipalities was surveyed to evaluate their efforts.

Methods

A questionnaire was sent to all municipalities in Japan. It was asking their health education about hypertension.

Results

1530 out of 3246 municipalities replied to the questionnaire. There were three types of health education (lectures, courses and individual advices). 17.8% of municipalities held lectures. They were held 6.0 times in a year. 32.9% of municipalities had courses. They were held 2.3 times in a year. Participants of courses are chiefly selected by results of screening tests by municipalities. 53.1% of municipalities gave individual advices. These advices were mainly provided to participants of their screening tests. 57.6% of municipalities answered that main method of health education would be given by individual advices in the near future

These results showed that Japanese health education by municipalities chiefly depend on results of their screening tests. However large parts of participants in the screening tests by municipalities are the aged. It is very difficult for the aged to change their bad habits such as too much intake of salt. Only 20.1% of municipalities provide information of health education to health offices in enterprises that give another screening test to employees. Individual advices can give more adequate supports, but efficiency to diffuse information of hypertension is low. To disseminate knowledge about preventing hypertension, more effective health education should be developed.

Conclusions

New strategies of health education should be developed to diffuse knowledge about preventing hypertension.

Can improvement of the utilisation of preventive medical assessments in childhood influence the measles vaccination coverage? A prevalence study in the district of Warendorf, Germany

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Introduction

Measles vaccination coverage is relatively low in Germany in comparison to other European countries. In the district of Warendorf in the Muenster region of Northrhine-Westphalia mean measles vaccination coverage at the point of entry in the primary school system was 92,7% in the years 1996 to 2001. However, there were major variations between the district areas, which resulted in areas with very low herd immunity.

Regional and national programs are being set up to improve measles vaccination coverage in Germany. An indirect way to increase vaccination coverage could be a further improvement of the utilisation of preventive medical assessments in childhood, which are offered to all children up to the age of five years and are paid for by the statutory sick funds. These assessments could be used to communicate the importance of vaccination to the parents and to take the opportunity to vaccinate the child during the assessment. Two assessments (U1 and U2) are performed in the hospital after birth, the other six (U3 to U9) up to the age of five years.

Aims and objectives

This study has been performed to determine the association between utilisation of preventive medical assessments in childhood and measles vaccination coverage using routinely available data in the district of Warendorf, Germany.

Design

Prevalence survey, based on data of the mandatory medical school

entry assessments by the child- and youth health department of the community health service in 2001. Exposition status was defined as participation in all assessments from U3 to U9. Outcome was defined as having received the first shot of measles vaccination at the point of school entry, as suggested by the then valid vaccination recommendations.

Results

Documentation on utilisation of the preventive assessments and measles vaccination was available on 2532 of 3222 children (78,6%), who were assessed in 2001. The odds ratio for having participated in all preventive examinations when having received the first shot of measles vaccination at the point of school entry was 2.11 (95% CI: 1.46–3.03).

Discussion

Children, who participated in all preventive assessments up to the age of five showed a significantly higher vaccination coverage against measles than children, who did not regularly participate. Taking into account the assumption, that children with documentation of utilisation and vaccination tend to show a higher utilisation of the assessments and show higher vaccination coverage, the OR should even increase, when documentation for all children could be analysed. The selection bias by having analysed predominantly the "better cared for" children results in an decrease of the OR. As this study shows, this OR still points to a significant difference.

Conclusion

Promotion of the utilisation of the preventive medical assessments in childhood provides an additional field for interventions to increase measles coverage in Germany. This is particularly helpful for intervention planning in districts with comparatively high vaccination coverage, where "classic" approaches to increase vaccination coverage would only gain marginal effects.

Influence of socio-economic status on hospital readmissions rates in a cohort of women previously surgically treated for breast cancer in Rome, Italy

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Background

Poor survival and different access to care have been found associated with low socio-economic status, but the evidence in Italy has not been fully evaluated.

Aims

To evaluate the association between socio economic status (SES) and hospital readmissions after breast cancer surgery.

Methods

From the regional hospital discharge database a cohort of 3032 women (mean age 59 yrs.) living in Rome (Italy), undergoing their first surgery for breast cancer between 1.1.1997 and 30.6.1998, was selected on the basis of ICD9CM classification. A small area SES index, was attributed to each subject*. Hospital readmissions, from the first hospitalisation and the 31.12.00, were distinguished in three categories: 1) those with codes of breast cancer (ICD-9-CM code: 174.0–174.9; 233.0; 238.3 239.3) and breast surgery (ICD-9-CM codes=85.0–85.4) (BS); 2) those with a diagnosis of breast cancer with any specific surgical procedure (BC) and 3) all other hospitalisation (OH). Logistic regression was run to estimate the risk of readmissions according to socio-economic status taking into account the kind of initial surgery (conservative; non-conservative), severity of tumour (localized, non-localized) and age. Vital status ascertainment as of June 2002 is ongoing.

Results

A total of 2875 women were followed (95% of the cohort). We found that 7% of the women had at least one BS readmission, 11% at least one BC readmission and 32% at least one OH readmission. Logistic multivariate analysis, pooling BS and BC categories, showed that higher social class (OR=0.8 class I vs class IV), localized cancer (OR=0.5) and a previous conservative surgery (OR=0.8) correspond to a lower risk of readmissions. Social class effect lowered when readmission categories are considered separately.

Conclusions

Low social class seems to be associated with higher rates of readmissions after breast surgery, taking into account patient's age,

type of surgery and severity of tumour. Our results suggest the need for removing social inequalities and improving quality of care for breast cancer in Italy.

* Michelozzi P, Perucci C, Forastiere F, Fusco D, Ancona C, Dell'Orco V. Inequality in health: socioeconomic differentials in mortality in Rome, 1990-95. *J Epidemiol Community Health* 1999;53:687-693.

The educational concept "Bewegte Grundschule" and its Influence on the neuromuscular constitution and spine statics of children in primary school

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Background

The intention of the educational concept "Bewegte Grundschule" ('school in motion') is not only to change school education in general but also, literally, to replace sitting by movement. Movement of the pupils during classes is used to support teaching.

Aim

In addition, the program aims to mediate physical exercise as a fundamental part of healthy living and more specifically, to improve posture, coordination and physical control.

Methods

During the period of 1996-2000 the program "Bewegte Grundschule" was installed and scientifically controlled in four primary schools in Saxony and in one school in Rhineland-Palatinate.

In this work, anthropometric values, strength and mobility (functional muscle tests by Janda, Kendall) as well as posture (video recording of standardised positions which allows the analysis of the sagittal spine relief) were studied. 183 children at the five test schools and for comparison, 88 children at four control schools were included in the analysis. Measurements were taken at the beginning of the first year and at the respective ends of the first to fourth year.

Results

Data revealed that the children of the schools which participated in the program showed a better development with respect to coordination, muscle strength and posture during the first four years of primary school.

Conclusion

The program "Bewegte Grundschule" contributes to a better coordination, muscle strength and posture during the first four years in children of primary schools.

Development of an epidemiologic model for tooth loss based on the data of the Study of Health in Pomerania

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Introduction

In literature tooth loss is caused by caries and periodontitis. But caries and periodontitis are only necessary but not sufficient conditions for tooth loss. Tooth loss is the end point, not a disease. The diseases are caries and periodontitis. Therefore, there are no risk factors for tooth loss, there are only prognostic factors for caries and periodontitis. Based on the psychosocial literature we hypothesize a process for the takeover of precaution between caries/periodontitis on the one hand and tooth loss on the other hand. In contrast to Gilbert et al. and Slade et al. the psychosocial variables in our model are closer to tooth loss than clinical variables. Further more, in cohort studies prevalence cases are to be defined to exclude these prevalence cases. The concept to define prevalence cases by edentulousness is not correct. Tooth loss is not edentulousness. In young age groups there are incidence cases for tooth loss but no prevalence cases for edentulousness. Without defining and excluding prevalence cases it is not possible to decide, whether the hypothesized cause preceded the occurrence of the disease.

Material and methods

We compare a prediction model and three risk models (biomedical, behavioural and sociological model) with and without modelling interactions.

Results

Depending on the model we have different results.

Conclusion

The dental literature shows no sufficient established concepts in epidemiologic research. A model for tooth loss is to be discussed as well as the statistical realization. Interactions are to be included to model psychosocial knowledge. In risk models instead of prediction models the intensity instead of the cumulation of the disease (caries, periodontitis) is to be preferred.

Medical technology and the „normal“ delivery: the use of obstetrical interventions intra partum in Germany

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Background

German women in their reproductive years are a healthy population. We could expect a high rate of uncomplicated, spontaneous births with little need of medical intervention. Nevertheless, overall intervention rates in Germany are among the highest of all European countries.

Aim

The purpose of this study is to explore the occurrence and extent of obstetrical interventions during normal and risk deliveries during the last 16 years. Of particular interest is the number of interventions for the low risk majority.

Methods

This study is conducted as a retrospective secondary analysis of the Lower Saxony Perinatal Survey 1984-1999 containing more than 70,000 births per year with more than 150 items for every birth.

After sampling the whole group in two subgroups: one group of women „at risk“, another of „normal“ women (low risk) following the WHO guidelines for normal birth, the rates of obstetrical interventions were compared by descriptive statistics.

Results

The analysis demonstrates an increase in almost all obstetrical interventions over the time with a remarkable extend in the normal group.

Conclusion

Due to its extent of data analysed (more than 1 million births are included), and its focus on „normal“ birth, the study is highly innovative.

Performance managing health improvement: communicating NHS performance to the public in Edinburgh

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Issue

At the end of October 2001, the Scottish Executive Department of Health (SEDoH) circulated a document introducing a new way of assessing the performance of National Health Service (NHS) in Scotland's Unified Boards (the strategic bodies charged with delivering health improvement). This reflected a shift of focus from hitting financial targets to quantifying real health improvement in local populations. This move was welcomed as a means to expand on the limited information provided by clinical indicators such as hospital waiting lists and utilise the excellent range of routine data collected in Scotland on mortality, morbidity, deprivation and hospital activity.

The performance assessment framework (PAF) is now the mandatory, core framework for assessing NHS performance in Scotland. We are also free to develop additional indicators and measures which reflect local circumstances, and to report these locally. As such, all unified boards will be required to analyse, monitor and disseminate the baselines against which to measure the PAF indicators, report on progress against targets regularly, and, more importantly perhaps, to convey intelligibly to the public we serve.

Description of the project

As part of this process, the NHS in Edinburgh has produced an innovative 'traffic lights' reporting system to highlight areas where performance in Lothian is either extremely good, is within acceptable limits or requires attention in relation to the PAF indicators. These results have been conveyed to the public through a variety of innovative mediums including online documentation, dissemina-

tion of CDROMs containing significant background data and documentation, freephone contact numbers and email-based feedback alongside the traditional consultative measures such as focus groups, public meetings and printed material.

Lessons-learned

The use of a traffic light system to highlight areas of differing performance is a simple and effective means of communicating local performance to the general public. Care should be taken to explain any results that may be misleading due to the complexities of the health care system and the inherent idiosyncrasies of certain performance measures.

Conclusions

An open and transparent feedback of local performance results is well received by the public through a variety of media.

Cost-utility-analysis of two treatments of back pain

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Background

Back pain is among the most common causes for employees' absence from work, for early retirements and corresponding compensation claims. At the same time, it is often the cause of considerable losses in quality of life of the concerned individuals. Until now, however, we know very little about the utilities or cost-utility ratios of many treatments that are commonly prescribed for patients with back pain – such as, e.g. the so-called back schools. Therefore a rational allocation of resources is difficult within this treatment domain.

Aim

In this study, the utilities of two variants of back schools – i.e. (a) the standard ('classic') back school and (b) a combination of the standard back school and a psychological training to better cope with back pain – are compared. In the case that the new variant (b) is more effective, its incremental cost-utility ratio will be calculated and discussed.

Design and methods

The two treatments were performed in two cities of Saxony in 1999–2001 under real-life conditions: the treatments were offered by a German health insurer for its members. Both treatments lasted 10x90 minutes, while 146 individuals took part in treatment (a) whereas 115 individuals participated in treatment (b). Groups of 8–12 participants were randomly assigned to the treatment alternatives. The participants were interviewed four times: before the beginning of the treatment, after the end of the treatment, and six months as well as nine months after the end of the treatment. The utilities of the treatments were operationalised as quality-adjusted life years (QALYs); the level of the quality of life was measured with the aid of the EuroQol-questionnaire.

Results

Calculating QALYs from participants' answers to the quality-of-life-VAS of the EuroQol-questionnaire, it becomes evident that the participants of the new treatment variant (b) gain a significantly greater amount of QALYs during the time period in question than the participants of the standard variant ($p < 0.05$).

Discussion

The incremental cost-utility ratio of the new variant (b) is at such a favourable, i.e. low level that a rational decision maker – e.g. a health insurer maximizing its members' health or quality of life with a given amount of money – should offer the new variant (b) extensively.

The Class Moves! Posture, movement and relaxation in the European classroom

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Issue

The Class Moves! programme is originally developed in The Netherlands and consists of a number of playful relaxation exercises for use with primary school children of all ages integrated in the classroom practice, where often focus is set upon effort. The programme aims to encourage children to engage in different types of physical exercise on a daily basis and are an invitation for taking pleasure out of moving.

Description of the project

In 1998 a steering group was formed with national co-ordinators of the ENHPS network from Scotland, Wales, Belgium, Germany and The Netherlands in order to test and evaluate The Class Moves! in

these countries. The European Commission contributed financially to the project through the Socrates/Comenius programme. Implementation, use and results have been evaluated by different research institutes. Studies were largely qualitative and used detailed research, involving pilot schools in the respective countries.

Lessons-learned

The studies show that the programme is adaptable to the school and classroom settings in the different countries. The results of the studies support the objectives of the authors: encouraging children to engage in different types of physical exercises on a daily basis; daily alternation between effort and relaxation; increasing motivation; improvement of concentration and atmosphere; raising positive physical awareness; and encouraging sensori-motor development. Findings from the evaluation studies also demonstrate that the physical activities promote the interpersonal skills of the children.

Conclusions

The Class Moves! programme can be seen as one example of an increasing number of diverse approaches that aim to promote physical activity among young people and facilitate physical, cognitive, social and emotional benefits.

Treating back pain in early stages of chronification

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Background

Preventing the chronification of back pain is an unresolved issue. Classical back schools provoke only small and short time effects. Cognitive psychotherapy and multimodal treatments are effective only for patients with chronified back pain and severe impairment. Hence there is a lack in the effective treatment of patients in the early stages of chronification.

Aim

Development and evaluation of a treatment program to prevent back pain chronification

Design and methods

We conducted a quasi-experimental intervention study targeting adult individuals with acute back pain. 387 individuals have been treated with four different interventions: classical back school (PHYS, $n=146$), a psychological program that consists of cognitive-behavioural methods to enhance pleasant activities, modify dysfunctional attitudes and practice relaxation techniques (PSYCH, $n=62$), a combination of back school and psychological training (KOMBI, $n=115$) and information on back pain (INFO, $n=64$). The net time to be spent on the programs was 15 hours (6 hours for INFO). To test the effectiveness of the interventions, pre-test and post-test assessments and follow-ups at six and nine months were conducted.

Results

The average age of the participants was 42 years. Women comprised 67% of the sample. 72% of the sample were currently working full time or part time. The mean back pain duration was 8,9 years. During the treatments, the participants showed significant improvement regarding pain intensity and physical and psychological impairment with intraclass-effect sizes ranging from .34 to .68 at post-test. The effects at the nine months follow-up ranged from 0.43 to 1.28. No differential effectiveness for the different treatments could be established.

Discussion

This study reports promising results in treating individuals with back pain in an early stage of chronification. Possible explanations for the absence of differential effects and the surprisingly positive outcome at follow-up will be discussed.

Health and social consequences of sickness absence: a general population study over five years

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Background

Despite the high levels and rapid increase in sickness absence the evidence base regarding the effects of sick-leave is scarce. There are few studies focusing on the consequences for the individual.

Aim

The aim of this longitudinal study was to analyse the consequences of sickness absence in relation to self-perceived bodily health, alcohol consumption and divorces but also how these factors predicted sickness absence.

Methods

This longitudinal study "Women and alcohol in Göteborg" (WAG) is based on a general population sample (n=3130). Structured interviews were performed and analysed 1990 and 1995 with women born 1925, 1935, 1944, 1955 and 1965, (n=399). Data from sickness absence registers were collected for 286 of these women for 1991–95, divided into three groups, no sick-leave (n=184), sick-leave 1–90 days (n=57), sick-leave >90 days (n=45). Answers about self-perceived bodily health, alcohol consumption and divorces from the interviews in 1990 and in 1995 were analysed. Alcohol consumption was defined as high episodic drinking (HED=60 or 72 g alcohol/occasion during the last year, depending on age group).

Results

Poor self-perceived health in 1990 did not predict increased sickness absence over the five years. After follow-up there was an association between poor self-perceived health and increased number of sick-leave days. A significant difference was found between being divorced and future sickness absence. Sickness absence did not seem to be a predictor for divorces. We found a small trend towards higher occurrence of HED in groups with more sick-leave days. However there were a strong significant association between HED and subsequent sickness absence.

Conclusions

Ideally sickness absence should lead to better health. However long term sick-leave was associated with poor self-perceived health and HED in follow up. More research is needed to explain the causal mechanisms.

Socio-economic status and varicosis of the legs: results of a population-based cross-sectional study

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Background

Varicosis of the legs belongs to the most frequent diseases in Germany. The last comprehensive population-based German study was conducted in Tübingen in 1979. Since then, diagnostic methods have substantially improved by the introduction of duplex sonography. Here we report the association between socio-economic status and the prevalence of varicosis.

Methods

We conducted a population-based cross-sectional study in Bonn and its surrounding rural area (Recruitment period: 11/2000–12/2001; response: 59%; study participants: n=3072 subjects, 18 to 80 years of age; investigation: standardized medical history, physical examination, duplex sonography of veins of the legs). The definition of varicosis of the leg is based upon the CEAP-Classification. Participants were defined as having varicosis if the clinical classification was at least C3, excluding those showing spider-bursts exclusively. Socio-economic status was assessed by three dimensions: highest school degree, highest post school education degree and income. We derived an aggregated index for the socio-economic status (3 categories: lower, middle, upper class) according to Winkler et al. as has been used in the German National Health Examination Survey in 1998. We used multiple logistic regression to model the prevalence of varicosis and calculated odds ratios (OR) and 95% confidence intervals (95% CI).

Results

There were 304 study participants (10%) showing a varicosis as defined above. 12% belonged to the lower, 43% to the middle, 40% to the upper social class (5% missing class). The multiple regression including all following variables showed: Age (reference: 18–29 years): 30–39 yrs: OR=3.1 (1.0–9.5), 40–49 yrs: OR=7.8 (2.7–22.1), 50–59 yrs: 15.5 (5.6–43.2), 60–69 yrs: 21.8 (7.9–60.1), 70–80 yrs: 31.3 (11.2–87.1); Sex (reference: males): OR=1.2 (0.9–1.6); Socio-economic status (reference: upper class): lower class: OR=2.0 (1.4–3.0), middle class: OR=1.3 (0.9–1.7). We found similar results for the separate dimensions of the socio-economic status.

Conclusions

The prevalence of varicosis of the legs is associated with a lower socio-economic status.

EDEN study – evaluation of psychopathology improvement, treatment satisfaction and life quality in two different therapeutic models

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Background

EDEN study (European Day hospital EvaluatioN) is multicentric randomised controlled study which collects data from five different European countries – Germany, Great Britain, Poland, Slovakia, Czech Republic. This study compares hospitalisation and day care treatment in patients with acute mental disorder.

Aims

To compare improvement of psychopathology, treatment satisfaction and quality of life between group of patients in day care and group of hospitalised patients.

Method

We assessed 210 psychiatric patients admitted to Psychiatric Clinic Prague, who fulfilled EDEN inclusion criteria. Patients were randomised half to half to day care and hospitalisation. We used BPRS (Brief Psychiatric Rating Scale) for evaluation of improvement of psychopathology, MANSA (Manchester Short Assessment of Quality of Life) for assessment of life quality and CAT questionnaire (Client's Scale for Assessment of Treatment) for evaluation of treatment satisfaction. Patients were interviewed in 3 time periods – T1 (at admission), T2 (one week after admission) and T4 (at discharge).

Results

We assume that there was similar improvement in psychopathology according to BPRS in both groups. Patients in day care are more satisfied with treatment and have improvement of some aspects of life quality.

Conclusion

Day care is for a big group of patients with psychiatric disorder comparable to classical hospitalisation. Psychiatric day care treatment enables bigger social integration of patients with acute mental disorder.

Childhood injuries in Lithuania: trends and implications for prevention

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Background

Injuries are a major public health problem, and in Lithuania they are the most common cause of death among children and adolescents accounting for 42.2% in boys and 27.4% in girls' mortality structure.

Aim

To analyze trends of mortality and morbidity from external causes among children and adolescents in Lithuania in 1988–2000.

Methods

Information about the population and the deceased 0–19 years old from external causes (ICD-9 codes E800 – E999) was obtained from computerized database of Lithuanian Department of Statistics. Numbers of admissions to health care institutions due to external causes of children under 14 years old were obtained from Lithuanian Health Information Center. Mortality rates were calculated per 100 000, morbidity – per 1000 population and age-standardized using European standard population. Mortality and morbidity trends were assessed by coefficient of logarithmic regression.

Results

Analysis of age-standardized mortality from external causes demonstrated the tendency of decrease both for boys and girls till the age of 14. The considerable fluctuations were noted in 1992–1995, which coincided with the most dramatic changes in socio-politic and economic life of the country.

At the age group till 19 years old significant decrease was registered. Mortality from external causes was decreasing by 2.17% annually among boys (p<0.05). Decreasing tendency was noted among girls. However, number of admissions due to external causes to health care institutions of children under 14 years old was increasing statistically significantly by 3.54% per year.

Number of hospitalizations due to injuries was also increasing 2.4% annually (p<0.05).

Conclusions

Mortality from external causes among children and adolescents had decreasing tendency, in Lithuania in 1988–2000, nevertheless number of admissions to medical care institutions and hospitalizations due to injuries was increasing.

Lithuanian children still face very high risk of dying and to be injured from accidents, so injury prevention strategies involving multiple different operational levels and different participants are of the major importance in Lithuania.

Monitoring of routinely collected data in computer-based patient records used for health technology assessment: the example of laparoscopic (hemi-) fundoplication

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Issue/Problem

Sometimes, new surgical techniques are introduced on a low level of evidence due to interests of industry, demand of patients, and innovative physicians. Monitoring outcome using routinely collected data from computer-based patient records may provide hints concerning the effectiveness of new techniques in daily practise. We studied this approach to health technology assessment in the field of minimally invasive surgery, in which the transition from open to laparoscopic (hemi-) fundoplication took place within the last ten years.

Description of the project

Our department of general surgery uses a computer-based patient record for the documentation of data about the patients and the provided care since 1990. The number of (hemi-) fundoplications increased from 2 in 1991 to 15 in 1998. To evaluate the introduction of the new minimally invasive method we compared two groups: open approach (n=19, 1991–1997) vs. laparoscopic approach (n=18, 1997–1998). There was no difference in the patient's age. The laparoscopic approach was more frequent in female. The operation time was longer and the length of stay shorter with minimally invasive surgery. There were 3 re-operations with the laparoscopic and 1 re-operation with the open approach. There was a shift of indication from hiatal hernia to gastroesophageal reflux disease.

Lessons-learned

Our retrospective analysis reveals changes concerning the treatment strategies. It could be assumed that there was a technological driven extension of the indication for surgery. At the same time there is to concede a learning curve for the induction of the laparoscopic approach. These results require further analyses for the definite evaluation of this new technology. Especially post learning curve data from experienced centres of excellence as well as morbidity trends including conservative strategies in reflux disease should then be taken into account.

Conclusions

From our point of view monitoring of routinely collected data could be an additional method in health technology assessment.

What role does counselling about drugs and pharmaceutical products play in the information services of self-help organisations – the German Crohn's and Colitis Foundation (DCCV) and the German Rheuma-League (Deutsche Rheuma-Liga)

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Issue

Large numbers of patients have become either members of self-help organisations (SHO's) or else use the information services provided by them. Those services constitute the core of the workload of most SHO's.

Description of the project

In the two SHO's we look at, different approaches are used, to ascertain that the information given meets the needs of the patients. In the DCCV the annual conventions have been monitored for the last three years by questionnaires focussing on information needs and on the personal relevance of the information offered. In addition some of the lay-counsellors keep accurate track of the topics covered in individual contacts. In the Rheuma-League data on the major themes of lay-counselling and the way of communication have been collected. Lay-counsellors can access physicians engaged in several boards and committees of the Rheuma-League.

Lessons-learned

When patients get in touch with SHO's the topics 'standard treatment options' and 'new pharmaceutical therapies' are more often relevant than any other themes. Patients want "in depth information" that exceeds what they expect to get from their physician. They rely on the material provided by SHO's in part because they regard it as being unbiased by economical interests.

Conclusions

Information on therapeutic options in general and especially on possible medications is a major topic in the services provided by self-help organisations. Because the needs of patients might go beyond the knowledge of lay-counsellors, standardised training for counsellors and standardised info-handouts on medications can help to meet those needs. To this end the integration of SHO's in the current German governmental projects of competence-networking can be seen as a useful support for the SHO's.

Development and Evaluation of a Local Health Care Co-operative (LHCC) Health Profile using routine primary and secondary care data

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Issue/problem

The development of "tools" to assist LHCCs and communities to plan, implement and monitor health services is a recognised government priority. Ordinarily, data is available in discrete packets of information scattered among many different sources within health and government institutions. The aim of this project is to develop and evaluate a health profile using pharmacoepidemiological and public health data from primary and secondary care.

Description of the project

Initially, funding for 3 years was obtained to develop health profiles for 2 LHCCs (total population ~ 225,000) in NHS Lothian (Edinburgh, Scotland). Prescribing data and public health data were identified and collated to form a core data set from which a health profile was developed. Proxies for chronic diseases managed and treated in primary care were identified from the prescribing data e.g. lithium, glyceryl trinitrate, thyroxine. Each LHCC received data for their own population and a comparator of aggregated data from several LHCCs that make up the health board. One year after starting the project, initial drafts of the health profile have received positive feedback from the pilot LHCCs. The LHCC management and other users will evaluate the health profile at the end of the project. After the evaluation, it is hoped that the health profile will be further implemented to other LHCCs in Scotland through the Information and Statistics Division, NHS Scotland.

Lessons-learned

The LHCC health profile is unique because it includes information from primary and secondary care data sources. Prescribing data is often not used in community profiles because the information is difficult to obtain. Also, interpreting prescribing data, to make it functional with other information, is problematic.

Conclusions

Health profiles could prove to be a useful tool in assessing local health care needs by combining prescribing and public health data.

Legally induced abortion in Croatia – public health implications

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Introduction

Abortion still represents quite a frequent mode of family planning or of solving undesirable pregnancy, which should be strongly discouraged due to the numerous complications and sequels that may accompany the procedure.

Methods

According to the Act on Health Measures Ensuring the Right of Free Decision on Childbearing, article 15, item 2, abortion can be legally performed without permission issued by the respective commission in case of <10-week gestation. According to the same Act abortion can only be performed at authorized inpatient medical institutions.

Aim

The aim of the paper is to present the pattern of induced abortion in the Republic of Croatia during the 1990–2000 period, and to try to predict trends of legally induced abortions on the basis of these data.

Results

Certain success has been achieved in the Republic of Croatia, as the rate of legally induced abortions has been considerably reduced over the last decade. A nearly fivefold decrease in the number of legally induced abortions was recorded between 1990 and 2000.

Conclusions

The low use of contraceptive measures in a country where these are provided free of charge and where the population should be highly motivated for abortion restriction, indicates that the majority of the population, especially women of reproductive age, are inadequately informed on their right for free contraceptive measures. The prevention of undesirable pregnancy and development of truly humane relationship between the sexes require continuous and programmed health education activities to prevent the development of risk factors that contribute to this unfavorable phenomenon.

Future prevalence and costs of stroke in the Netherlands

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Background

In the near future the number of stroke patients and as a consequence related health care costs are expected to rise. It is the purpose of this study to estimate this expected increase in terms of prevalence, incidence and healthcare costs.

Aim

What are current and the future costs of stroke in the Netherlands? What are the future developments in the number of stroke patients and related care? And what are the consequences of the expected changes in the treatment of stroke patients?

Methods

A dynamic multi-state life table is used, which combines demographic projections and existing stroke morbidity and mortality data. It projects future changes in the number of stroke patients in several scenarios. To obtain estimates for related costs of care these are combined with data on costs of stroke patients. In the scenarios, assumptions have been made on demographical, epidemiological and medical technological developments.

Results

Demographic changes in the population lead to an increase in costs for stroke of about 33% in 2015 as compared with 1995. Extrapolating past trends in the prevalence of hypertension and in stroke incidence results in an increase of 48%. Taking into account the trend in hospital days leads to a 46% increase of the costs.

Conclusions

Our estimations showed a substantial increase in the number of CVD patients and related costs in the next 15 year. The largest part of this increase will be unavoidable because of the ageing of the population. In reducing the costs of stroke emphasis should be on more efficient treatment.

Use of oral health care services in adult Finns according to dental health

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Aim

The aim of the study was to analyse Finnish adults' use of oral health care services according to dental health.

Methods

The data were obtained from a national Health 2000 survey including Finnish adults aged 30 years or over. The sample size was 8028 of which 79% were interviewed and clinically examined in 2000–2001. Detailed descriptions of the survey is presented in www.ktl.fi/health2000/index.uk.html. Weighting of the sample was based on port-stratification with sex, age and region. All the figures presented are adjusted by age and sex, and p-values are based on χ^2 -test between the groups.

Results

55% of the studied had visited a dentist during the past year, and mean number of visits were 2.5. Persons reporting good or fairly good oral health (64%) were more frequent visitors compared with persons reporting fair or poor oral health (40%, $p < 0.001$). This was the case also concerning regular check-ups, the correspondent figures being 67% and 31%. Their mean number of visits during 12 months were 2.4 and 2.8. The following groups according to clinically examined dental health had visited a dentist during the past year: 62% of dentate adults, 15% of edentulous, 52% of those having untreated caries, 60% of those not having caries, 63% of those having periodontal disease, and 62% of those not having periodontal disease. Adults having untreated caries or periodontal disease were less often regular dental care visitors compared with those not having caries or periodontal disease ($p < 0.001$ and $p = 0.03$).

Conclusions

Self-reported and clinically examined oral health were equally associated with use of oral health care services. Those having better oral health had both been more frequent dental visitors during the past year, and had more often adopted regular attendance pattern compared with persons having worse dental health.

How to cope with coeliac disease in everyday life: experiences of Swedish women and men

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Background

The prevalence of coeliac disease in Sweden is 0.4% with a higher frequency among women. Women report worse quality of life than men.

Aim

To explore problems of everyday life in relation to coeliac disease.

Methods

We interviewed 32 women and 12 men, in the age of 20–40 years. The "Critical Incident Technique" was chosen together with a questionnaire on health and eating habits. The interviewee described critical incidents, or problems in their everyday life, which consequences these problems caused, how they coped and possible preventive actions.

Results

In the ongoing qualitative analysis the experiences of coeliac disease and the everyday life problems are analysed and categorised. Our preliminary finding is two major and different attitudes to cope and live with the coeliac disease. One group of interviewees had accepted their life situation and almost ignored the disease in combination with a rash attitude. The other group communicated that the disease had absorbed their whole life situation reflected in a restricted life style and in some cases a feeling of shame, which influenced their social life. Questions that we will deepen in the ongoing analyses are to what extent the consequences are different for women and men and there are different ways among women and men to cope with the disease.

Conclusions

With "The Critical Incident Technique" we have made a structured inventory of perceived problems and experiences associated with the coeliac disease. With increased knowledge on gender differences better information can be given to persons with newly diagnosed disease.

Public Health Assessment of the Impact of Industrial Emissions in the Lodz Region

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Background

The region of Lodz (voivodship), one of 16 administrative regions in Poland, went through major structural changes of the industry during last decade. It became therefore necessary for the public health authority to recognise the new profile of industrial emissions to the environment and to assess their potential impact on public health in the region. Relevant research project was designed and carried out upon a request of the head of the region, financed by the grant KBN/PBZ-001 from the Committee of Scientific Research (KBN).

Aim

The aim of the study was to investigate levels of emissions from the industrial enterprises to the environment and to assess their potential impact on health of the exposed population. This presentation concentrates on the assessment of the impact of emissions and exposures to the ambient air.

Methods

Emission data obtained from the Regional Environment Protection Inspection were used to select 47 industrial settings which, according to the adopted criteria, qualified as the greatest air polluters and were further assessed with regard to their environmental and health impacts. Air concentrations of emitted pollutants were assessed using dispersion model. Potential health risk assessment was based on calculated toxic risk indicators (WR_{TD}) and indicators of additional unit cancer risk (URi). Spatial distribution of toxic and carcinogenic risks have been presented on maps using ArcInfo computer programme.

Emissions of mixtures of chemicals from seven industrial enterprise created air concentrations which exceeded TLV values in inhabited areas. In addition, emissions from several enterprises in the city of Lodz superimpose and cause exposures of about 40.000 people to concentrations above TLVs, bringing about increased toxic risk for these people.

Emissions of carcinogens from four industrial enterprises in the region (excluding city of Lodz) create risk of cancer at the risk level above 1×10^{-6} for about 200 000 inhabitants, and in the city of Lodz for about 400 000 people.

Results

The results of the study indicate that environmental impact assessment applied in the decision process concerning new industrial investments does not sufficiently take into account protection of public health. Criteria of health risks created by industrial pollution must be adequately integrated within the environmental impact assessment procedures.

Ideation: A Theory Based Evaluation of the 'Green Path' Campaign for Reproductive Health, Armenia, 2000

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Background

Missing from the behavioral science literature are predictive models integrating the theories of diffusion and behavior change, needed, as both relate to understanding the impact of information-education-communication (IEC) campaigns.

In June 2000, the Johns Hopkins University Population Communications Services launched the USAID funded *Green Path* IEC campaign. The Center for Health Services Research and Development of the American University of Armenia evaluated the program.

Aim

In addition to assessing the program's impact, the evaluation tested a mathematical approach to describing the theory underlying the program's design.

Methods

A representative panel of 1,212 married women (18–35) was surveyed prior to and following the 6-month campaign. An additional 236 post intervention controls were included.

Results

The campaign was a success: the campaign was widely seen, attitudes were positively influenced, attendance at family planning cabinets increased 84%, and use of modern contraceptive methods increased 4.6%.

Changes in ideation were positively correlated with changes in behavior; adoption and maintenance of the desired behavior were associated with increased levels of exposure to campaign messages; the elements of ideation were significantly higher among adopters and those continuing to use modern contraceptives; and models of ideation, intention, and use conformed to expectations.

The model for ideation explained only 17% of the observed variation. The models predicting intention and use were more robust, explaining 35–50% of the observed variation. Similar strength was observed for naive models that made use of only baseline data.

Conclusions

Improvements are needed in measuring the underlying constructs; a number of important predictors are yet to be identified; and the models may also be useful in predicting impact from baseline data. Despite these limitations, this evidence supports the conceptual framework. More emphasis is needed on utilizing theory-based designs in program evaluation, as the theoretical principles are more broadly generalizable across programs.

Tablet, Iron Brew and Deep Fried Mars Bars

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Issue

Scotland has one of the poorest records for dental public health in the developed world with chronic dental disease often starting in early childhood. National research has also revealed increasing inequalities in dental health with the poorest 10% of children suffering over 50% of the total dental decay in the population. Only a minority of pre-school children are registered with a dentist, with particularly low rates in the poorest communities, and there is evidence of increasing difficulty in accessing free dental treatment.

Description of Project

The Pre-school Dental Registration Project was a two year pilot project developed to address some of the key determinants of dental health inequalities and inequity in access to care. Two Health Visitor Co-ordinators visited dentists to identify those who were able to register and provide free dental treatment to pre-school children. This information and dental public health messages were then successfully delivered to parents via their Health Visitor. Areas that had limited access to free dental services were also identified and this information was fed back into health care planning.

Lessons Learned

In addition to identifying areas with limited NHS dental care provision, a crucial secondary component to the success of the project was ongoing process evaluation. This provided mechanisms for the Health Visitor Co-ordinators to incorporate suggestions from health professionals and address identified barriers to progress as the project developed. These barriers centred predominantly on communication. In response the project team developed new health promotion materials and introduced systems to improve communication pathways, at both an individual and structural level, by and between primary and secondary dental care providers, other health professionals and parents.

Conclusions

Improving dental registration rates therefore requires a multi-dimensional initiative that addresses individual issues and communication systems in addition to structural factors such as levels of service provision. This is best achieved by a programme that employs an action research methodology that is flexible and can address issues as they are identified.

Implementation of Health Care Reform in Armenia: Viewed From Inside

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Issue/problem

The paper describes the comprehensive reform program in Armenia and especially focuses on its key element that defines the main directions of activities. After demonstrating the logic of the investigation, the paper recapitulates the information about results of these reforms that do not appear to meet all the objectives of health care policy. The reform process has encountered resistance, because the economic decline has placed many institutions in jeopardy and made the accomplishment of main reforms extremely difficult. Frequent changes of health ministers do not ensure sustainability of reform directions. The most challenging problem that must be faced involves the drastic decrease in access even to the most essential health care services. Funding shortages often mean that even vulnerable groups have to pay. Thus, the principle of equity with respect to financing and access is undermined.

The paper indicates that the gains in freedom have been accompanied by the losses of many basic economic and social services that the population had come to enjoy and expect. There is now a serious risk that reformers may throw out the baby with the bath water.

Humanitarian aid and international assistance programs are often poorly coordinated and do not always address the country's real needs, or are inappropriately distributed among health care facilities and the population.

Methods

For exploring these problems analytical and statistical methods have been used. A new way to increase public funds of the health sector is offered.

Results

The paper proposes to implement many interchangeable opportunities for learning in transitional countries and brings to attention the necessity to develop a mechanism for shared learning at the international level. These are outlined briefly at the end of the paper. The paper concludes and summarizes the range of recommendations which are most relevant to other developing countries.

Health of Kosovar returnees from Switzerland

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A collaborative study between the International Organisation for Migration, the Department of Community Medicine and the Department of Psychiatry of the Geneva University Hospitals.

Sponsored by the Geneva Foundation for Health in War and the Humanitarian Fund of the Geneva University Hospitals.

Background

Following the peace agreement in Kosovo, June 1999, there was a massive return of refugees from Switzerland and other host countries. Before flight and during their cyclic journey, refugees experience repetitive stresses.

Studies conducted in Kosovo immediately after the war have shown significant rates of mental health problems in residents. The specific situation of returnees from European countries and its evolution in time is unknown. This is of concern for the emerging health system and for countries of asylum.

Aim

Describe the subjective health, rate of post traumatic stress syndrome and self-reported utilisation of health services of returnees from Switzerland.

Measured dimensions of health are correlated with trauma before departure, conditions of asylum in the host country and present socio-economic status.

Methods

A sample of over 300 households of returnees from Switzerland was randomly selected.

An extensive questionnaire was designed to assess subjective health (SF-36), PTSD (M.I.N.I.), utilisation of health services, present living conditions, migration history, trauma and losses.

Home interviews were conducted in autumn 2001 on all members of selected households over 16. Interviewers were recruited among psychosocial counsellors graduated from the IOM training program.

Results

319 households were visited, with an average number of 6.3 family members. A total of 1013 people were interviewed or 95% over 16. The total number of Swiss returnees among interviewed persons was 550. Data analysis is ongoing.

Conclusions

War trauma still has a major impact on the health of the population of Kosovo.

Favourable conditions in the country of asylum, such as family reunion, living in individual housing or obtaining work, show an association with better health status on return.

Mental health problems and in particular PTSD are associated with an increase utilisation and uncovered demand for ambulatory and hospital care; this results in costs for the country and for the affected families.

Eligibility to acute day treatment: characteristics of the patients

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Background

During last decades, the role of community psychiatry has been growing, offering different types of psychiatric care. Among them partial hospitalization has been developed, becoming the supplementary care for mentally ill. It has been proposed that many of acute psychiatric patients could be treated in acute day hospital instead the traditional inpatient care.

Aim

The main objective of the ongoing EU randomised, controlled study EDEN (European Day Hospital Evaluation) is to assess the efficacy of psychiatric treatment in a day hospital setting in 5 centres. The presented results are based on data set from one of the participating centres, Wrocław in Poland. The clinical, legal and socio-demographical characteristics of the acute psychiatric patients eligible to be treated in day care were analysed.

Methods

Patients were randomly admitted into day or inpatient care. Analysed data were collected since 12.2000 till 31.11.2001 (first year of the project) from both randomised samples, using the Client Service Receipt Inventory (CSRI). The characteristics of excluded, refused patients were presented.

Results

During the index-period N=802 acute psychiatric patients were admitted into the psychiatric hospital. There were N=479 (59,7%) of excluded patients due to legal or other non-clinical reasons. Eligibility criteria fulfilled N=230 (28,7%) of patients. Among them, 75 patients (9,35%) refused, 155 (19,3%) were randomized, 94 females and 42 males, mean age 42,0 (20–64 years).

Conclusions

The knowledge about characteristics and clinical, socio-demographical and legal features of the acute psychiatric patients may encourage the choice of kind of psychiatric care. One third of hospitalized patients can be offered the alternative, acute day treatment.

Pharmaceutical care for patients with chronic pain. Experiences of patients and pharmacists from a study in Saxon pharmacies

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Background

Health care and drug utilisation research studies point out deficits in services and treatment of patients with pain (BMBF 2001). Therefore the Saxon chamber of pharmacists set up a project to improve counselling abilities of pharmacists and services for patients suffering from chronic pain.

Aim

To implement pharmaceutical care for patients with chronic pain within the everyday practice of a pharmacy, to explore the experiences of pharmacists and to assess the benefit for patients.

Methods

Feasibility study (October 2000 – March 2002) with 16 pharmacists. Recruitment of five patients. Instruments: Manual for baseline assessment, monitoring and evaluation assessment; special "pain diaries" for patients, form for drug assessment. Evaluation: pre-post comparison of baseline and evaluation documentation, written interviews with patients and pharmacists.

Results

38 patients (mean age: 54 y) were recruited, 28 evaluated (3 stopped the consultations, 7 started later). Most of the patients suffered from migraine and musculoskeletal pain. 60% of the patients suffered from pain longer than 10 years. According to 10 of 16 pharmacists, it was very difficult to recruit patients. 9 pharmacists stated that it was possible to integrate the services into everyday practice and 12 could think of counselling more patients. The patients (n=28, response rate 100%) were all but one very satisfied with this new service; 82% stated that they had found the suitable institution for their problem. Pain could be influenced positively in half of the patients. 25 patients would again make use of this service, 22 patients would recommend it to others.

Conclusions

To date, patients are not used to this service. Pharmacists themselves must be convinced that they have something to offer, otherwise it will remain difficult to implement pharmaceutical care. Besides, pharmaceutical care has to be embedded in counselling activities of the whole pharmacy staff.

Cardiovascular risk factors in Turkish immigrants with type 2 diabetes mellitus: do they resemble the Dutch patients?

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Aim

To compare 1) prevalence of cardiovascular risk factors between Turkish and Dutch type 2 diabetes patients, 2) to predict differences in cardiovascular risk.

Design

A cross-sectional study was performed using databases from three Dutch studies on type 2 diabetes involving a total of 107 general practices in Rotterdam, Utrecht and Zwolle. 147 Turkish diabetes patients were matched on age and gender with 294 Dutch diabetes patients (1 :2 match).

Main outcome measures

Plasma lipids (total cholesterol, high density lipoprotein (HDL) cholesterol, low density lipoprotein (LDL) cholesterol, triglyceride), blood pressure, smoking and the 10-year absolute risk on a cardiovascular disease.

Results

Total cholesterol in Turkish diabetics was lower than in Dutch (5.4 versus 5.9 Mmol/l). HDL cholesterol was particularly lower in Turkish male patients (0.94 versus 1.08 mmol/l), but the ratio between total cholesterol and HDL cholesterol in Turkish male and female patients was similar as the ratio in Dutch patients (5.4 versus 5.4). The 10 years absolute risk on cardiovascular disease in both Turkish and Dutch male patients was 24%, the risk in Turkish versus Dutch females was 13% versus 15% (NS). Total/HDL cholesterol in Turkish immigrants increases more sharply with age compared to the Dutch.

Conclusion

The absolute risk on cardiovascular disease in Turkish type 2 diabetes patients resembles the risk in Dutch diabetes patients although some differences in risk patterns exist. Turkish patients have lower HDL-cholesterols and lower LDL-cholesterols compared to the Dutch patients. Particularly in elderly Turkish male patients plasma lipids become a risk factor of great importance.

Quality assurance of counselling in a community pharmacy: project of a quality circle

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Issue/problem

To establish a pharmaceutical quality circle concept on a short documentation base in a community pharmacy, in order to develop practical guidelines for counselling concerning patients with pain and to evaluate the effects of this quality assurance work on the counselling behaviour.

Description of the project

Objective: A one-group pre test-post test plan was conducted to compare the counselling behaviour before and after the quality circle (intervention).

Setting: A community pharmacy in Saxony, Germany.

Methods

A short documentation form was used to obtain personal data of patient and staff, drug data, content of counselling, drug recommendation and reasons for not counselling for each patient contact. Documentation was carried out by two pharmacists and five pharmaceutical clerks over a period of some consecutive working days before and after each of the quality circles.

Lessons-learned

Four quality circle sessions took place from May 1999 to March 2000:

- Self-medication with pain-relievers;
- Back pain and rheumatic complaints;
- Headache and migraine;
- Opioid therapy.

In accordance with evidence-based medicine the participants developed practical guidelines for drug selection, content of counselling and question asking. Due to the implementation of these guidelines into consultation services there was a trend to change the counselling behaviour:

49.0% of all patients with pain (N=318 patient contacts) were given advice before the quality circle sessions which increased to 54.3% (N=315) after those. The average number of items in an advisory talk changed from 2.46 before (N=156 advisory talks) to 2.91 afterwards (N=171), an increase by 18.3%.

Conclusions

The advanced education in this pharmaceutical quality circle is shown to be an instrument to develop practical guidelines for counselling and to improve the extent and the intensity of advice giving to patients with pain in a community pharmacy.

Urban health in the Netherlands

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Background and aim

The inhabitants of the larger cities in the Netherlands are on average less healthy than the rest of the Dutch population. Commissioned by the Ministry of Health, Welfare and Sports we studied the background of this phenomenon. We focused on a broad description of the health gap as well as on the opportunities to dissolve it. Our research questions were:

- How healthy is the Dutch urban population?
- What do we do about the current health problems in urban areas?

Methods

The health of the urban population was described by various contributions by Dutch researchers and institutes. Recent data from many sources were used to describe and analyse the health differences both between and within cities. Additional analyses have been performed when necessary. Content analysis of policy reports in combination with interviews with policy makers was used to construct a view of current health policies in Dutch cities.

Results

Inhabitants of the big cities perceive their health worse than people do elsewhere, report more psychiatric disorders and die at a younger age than elsewhere. Mortality in urban areas is 11 percent higher than elsewhere. This difference in health is particularly due to the accumulation of health problems in deprived urban areas. The risk of dying before the age of 65 in a deprived neighbourhood is 50% higher as compared to that risk in a wealthy neighbourhood. This is a consequence of the socio-demographic composition of deprived areas: overrepresentation of low social class and ethnic minorities, both groups having relatively more health problems. Multilevel analysis indicated that living in a deprived neighbourhood is a risk factor in itself. Thus the neighbourhood is not only the place to find health deprived groups, but also a cause of their health deprivation.

Conclusion

In order to tackle the current Dutch urban health problems, the public health and health care sector need to co-operate with other policy sectors. A local approach is necessary, using existing opportunities. Today many local health promotion initiatives are already focusing on inhabitants of deprived urban areas, although the quality of these projects can be improved. It is of great importance that successful projects are followed by a more widespread implementation and a structural embodiment. The appearance of our report was followed by a statement by our national government mentioning a plan of action to reduce socio-economic inequalities in health.

Public trust in health care in the Netherlands

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Background

In health care there is an information gap between patients and care givers. Generally patients depend on the care givers' knowledge. Therefore patients mostly have difficulty to judge the quality of care they receive. This means patients have to trust the care givers about doing their best. This makes trust an important issue in health care. Trust can be divided in two forms, interpersonal and public trust. Interpersonal trust is described as trust placed by one person in another person. Public trust is trust placed by a person in societal institutions. These types of trust are related and interdependent.

Aim

The aim of this study is to gain insight in the development of public trust in health care in the Netherlands over the past five years.

Methods

Every year, since 1997, data about public trust in health care was collected by sending a postal questionnaire to the "Health Care Consumerspanel". This panel consists of 1500 households and forms a representative sample of the Dutch population. Respondents were asked about the extent in which they trust the entire system of health care services, at present and in the future. Besides, questions were asked about trust placed in professional groups and institutions in health care. The data were analysed with SPSS.

Results

Trust in general health care at present is higher than trust in health care in the future. Over the years levels of trust at present and in the future show only little variation.

Trust in professional groups shows that most trust is put in general practitioners, dentists and pharmacists. Practitioners of complementary medicine are less trusted. Among the institutions, hospitals are most trusted. On the contrary mental health institutions are least trusted.

In both categories these outcomes do not change much over the years.

Conclusions

Trust in health care remains relatively stable, although in the same period debates about e.g. waiting lists came up. There seems to be more trust in personal health services (GP, dentists, pharmacist) than in institutions, such as hospitals. Complementary medicine is more trusted if it is practiced by physicians compared to non-physicians. The explanation of these results asks for more theoretical and empirical analysis.

Bringing the pieces together: Netherlands Public Health Federation

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In the Netherlands many organisations and professionals were separately dealing with Public Health (PH). As a result of that, much information and expertise wasn't shared and knowledge did not increase. Furthermore the PH-field was relatively poor in advocacy for health issues to politicians and weak in expressing the common demands on national level. The low percentage health budget spent on PH-subjects, a percentage that has even decreased the last five years, can be seen as the result of the above mentioned.

Keeping this situation in mind the chairs of three main professional PH-organisations initiated the set-up of a national federation. All relevant institutions and organisations were asked to join this initiative and a few meetings were organised. Supported by the vast majority of relevant institutions and organisations the Netherlands Public Health Federation (NPHF) officially started in august 2000. From that moment on institutions and organisations were asked to subscribe the goals of the federation and to become a formal member

including a membership fee. At this moment the federation has 28 members (13 institutions and 15 professional organisations). In 2002 the NPHF itself became a member of the European Public Health Association and the World Federation of Public Health Associations.

The NPHF formulated a number of expressive opinions on important subjects and is regarded as the most important platform for public health policy in the Netherlands. In autumn 2001 the NPHF launched 10 policy notes for a healthier society, which can be used by politicians in formulating their election programme for the Lower House elections in May 2002. Concerning public health we have seen changes in some of the election programs due our 10 notes for better public health. At the poster presentation we will also mention the actions took place after the elections.

Focus group interviews: what do migrants think is important in Dutch hospitals

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Background

The Rotterdam area has a high percentage of ethnic minorities (predominantly Moroccans, Turks, Cape Verdians, Surinamese, Antilleans). Various studies showed that patient's cultural background influences the importance of different aspects of the quality of hospital care.

Aim

Aim of this study is to investigate what the largest migrant groups consider as important in the cure and care process in the hospital.

Method

In April/May 2001 we organised fifteen focus group interviews. Participants were selected through a snowball method and had to have a contact with any hospital during the past 12 months. Focus group interviews were held in the mother tongue of each group. The discussion leaders had the same ethnic background as the participants and used a topic list. All interviews were tape-recorded, translated and typed out verbatim. Quotations in the texts were analysed and coded into coherent themes, representing aspects of quality of care. For this the ATLAS program has been used.

Results

The discussed aspects of care can be distinguished in non-ethnic specific (100) and ethnic specific aspects (27). The most frequently mentioned non-ethnic specific aspects were: 1) the doctor takes my health-complaints seriously (5% of the coded quotations); 2) the doctor takes sufficient time to speak with me (4%); 3) sufficiently checks my need for information (3%).

The most frequently mentioned ethnic specific aspects were: 1) presence of an interpreter (8%); 2) an employee of the hospital with the same ethnicity, speaks my language (5%); 3) the doctor is informed about cultural differences when giving disease information (3%).

Conclusion

Besides the known non-ethnic specific aspects of care, the ethnic patients perceive also other aspects as important. These other aspects have to do with communication difficulties and culture differences.

The use of prescribed and non-prescribed medication by Dutch children

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Background

Most research on the use of medication focuses on adults. Children, however, use medication too, most of which is prescribed by GPs. Children also use non-prescribed medication (f.e. bought in the drugstore), but the extent to which is not known. Moreover, it is not known to what extent children's drug use (prescribed and non-prescribed) varies by sex, age, health status and parents' social status.

Research problem

This study seeks to answer the following questions:

- What prescribed and non-prescribed medication do children (age: 0 to 12 years) use? Does this medication vary by age, sex, health status and parents' social status (insurance, income, educational level)?
- To what extent is the use of non-prescribed medication a complement to or a substitute for prescribed medication? Are there

differences by age, sex, health status and parents' social status (insurance, income, educational level)?

Data and Methods

Data are used from the Second Dutch National Survey on Morbidity and Interventions in General Practice, which includes 104 general practices. These practices register all prescriptions, providing detailed insight into the medication prescribed by GP's to children under age 12. All patients of these practices received a census form including 10 questions on for example educational level, health status and type of insurance. These data are linked with the prescription data. Moreover, a sample of 2,263 parents was interviewed about their child under age 12. This interview included questions on the use of non-prescribed and prescribed medication as well as on health and socio-demographic characteristics.

Results and conclusion

Preliminary descriptive analyses on the interview data showed that the drugs most frequently prescribed to children by GP's are drugs for respiratory diseases and drugs for skin problems. Almost 20% of the children use prescribed drugs. The use of non-prescribed medication mainly consists of painkillers and was used by almost one third of the children during the two weeks before the interview. OLS-regression analyses showed that there were no significant differences between boys and girls. Younger children (0 to 3 years old) less often use non-prescribed medication than older children. Children with private health insurance use more non-prescribed medication than children with public in health insurance. The preliminary conclusion is that there are differences between groups of children with respect to the use of medication. These differences mainly refer to the use of non-prescribed medication.

Health expectancy according to socio-economic status in the Netherlands

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Background

Health expectancy calculations combine the information on mortality with that on morbidity or disability. It shows in one figure the differences between (sub)populations. Within the framework of the publication of the third Public Health Status and Forecasts document, TNO Prevention and Health calculated healthy life expectancy and disability free life expectancy according to socio-economic status in the Netherlands.

Aim

Aim of the study is to describe the existing socio-economic differences in health expectancy in the Netherlands.

Methods

Since there are no mortality data according to socio-economic status in the Netherlands results from four longitudinal Dutch studies were used to calculate the life expectancy according to socio-economic status.

Data on the health of the population were based on the Health Interview Survey, conducted by Statistic Netherlands. In order to have enough mass per category we combined the Health interview surveys over the years 1995–1999. For the healthy life expectancy calculations we used the question on perceived health. For the disability free life expectancy calculation we distinguished three types of disabilities (visus, hearing and ADL/mobility). The Sullivan method was used.

Results

Results are confidential yet, but will be public at the EUPHA meeting in Dresden in November 2002.

Conclusion

The higher the socio-economic status, the greater the life expectancy and health expectancy. The differences according to educational level in the Netherlands are in the same order of magnitude as in other European countries, like the Scandinavian countries, UK, Belgium and France.

Investigating explanations of socio-economic inequalities in health: the Dutch GLOBE study

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Background

The GLOBE study is a prospective cohort study specifically aimed at increasing the understanding of the explanation of socio-economic inequalities in health in the Netherlands.

Aims

To review the returns of the study after ten years of follow up, and to describe the studies' contribution to the development of policy measures aimed at the reduction of inequalities in health in our country.

Methods

Prospective cohort study which started in 1991 with a baseline postal survey sent to 27.070 people (response rate 70.1% or n=18973). Two sub-samples of respondents to the postal survey were subsequently interviewed in 1991 (response 79.4% and 72.3%, a total of 5667 respondents). Baseline data collection included measures of socio-economic position, health and five categories of possible explanatory factors: health-related behaviour, material circumstances, psychosocial characteristics, health care utilisation and childhood circumstances. Follow-up of the cohort involved repeated postal surveys and interviews, and routinely collected data on hospital admissions, cancer incidence and mortality by cause of death.

Results

Compared with higher socio-economic groups, lower socio-economic groups were worse off in terms of the prevalence of poor self reported health (perceived general health, health complaints, chronic conditions, disabilities), the incidence of myocardial infarction and all-cause mortality. The higher prevalence of adverse material circumstances, unhealthy behaviour, adverse psychosocial characteristics, and adverse childhood circumstances in the lower socio-economic groups was important in the explanation of socio-economic inequalities in health. Socio-economic differences in health care utilisation did not contribute to the explanation of socio-economic inequalities in health.

Conclusions

The GLOBE study updated and increased descriptive evidence and contributed significantly to our understanding of the explanation of socio-economic inequalities in health in the Netherlands. Study results were a main source of information in the development of policy measures aimed at the reduction of these inequalities.

Quality of needs assessment for care and assistive devices from a client's perspective

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Background

Like in many other European countries, health care policy makers in The Netherlands are looking for new ways to organize different health care services. To facilitate a more objective, independent and integral assessment for individuals in need of (nursing) home care or assistive devices, the Dutch government introduced 85 Regional Individual Needs Assessment Agencies (RIOs). The introduction process in 1998 didn't go smoothly. RIOs were criticized for bureaucracy, waiting lists and other problems related to the assessment procedures.

Aim

The aim of the study was to develop an instrument to measure the quality of needs assessment by RIOs from a client's perspective.

Methods

A combination of qualitative and quantitative methods was used. All data were collected in november 2001. Almost 400 quality aspects covering different phases of the needs assessment process were derived from interviews with key-figures and five focus-group discussions with (representatives of) patients. 68 aspects were included in the quantitative part of the development study. Questionnaires were sent to 2940 clients of four RIOs (response rate 55%).

Results

The process of item selection and scale optimization, based on PCA and reliability analyses, resulted in 10 quality-dimensions, with alpha-coefficients between .64 and .88. Professional competence and courtesy during assessment received the highest importance scores (7.7 on 1–10 scale). Important areas for quality improvement were telephone applications for assessment, the final assessment-advice and information. Importance ratings were combined with performance scores into quality improvement indices.

Conclusions

The instrument proved to be reliable, valid and useful for RIO-clients with a demand for (nursing) home care and assistive devices. RIOs participating in the development study adopted the results as part of their total quality management process. The measurement instrument can be used in future national representative benchmark studies or in evaluative studies on quality improvement.

Health care for asylum seekers in the Netherlands

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Introduction

In the Netherlands there are about 85.000 asylum seekers from different parts of the world. The National Organisation of Municipal Health Authorities (GGD Nederland) has the responsibility for the preventive medical care for asylum seekers. All curative care for asylum seekers is to be provided by the regular medical services (GP's, specialists, etc.) and the medical professionals in the asylum seekers centres have preventive tasks, such as guiding asylum seekers to the most appropriate regular health care providers. GP's are the regular health care providers who have been visited most frequently by asylum seekers. The presented health problems by asylum seekers and the way health care providers handle them was never monitored in the Netherlands. The aim of this study was to monitor the way primary health care is given to asylum seekers, to study the workload of GP's in giving care for this group of patients and to get insight in possible bottlenecks.

Methods

Data was collected by GP's (n=39) and nurses (n=72) who are connected to 30 different asylum seekers centres spread over the whole country. For each consultation with an asylum seeker, GP's and nurses filled in a registration form. Items were: characteristics of the patient (sex and age) and the contact (duration and sort), reasons for encounter, diagnosis and interventions. Comparisons were made with consultations with 'regular' patients and patients of ethnic minorities in the Netherlands. Diagnoses and reasons for encounter were coded according to the International Classification of Primary Care for general practice. Complementary, questionnaires are sent to all GP's (n=371) and nurses (n=350) who provide health care for asylum seekers. The questionnaires provide explaining factors for differences in contacts with asylum seekers between different GP's and nurses.

Results

The group of asylum seekers in our research spanned young adulthood to middle age and consists of more men than women originating from 68 different countries. Compared to regular patients in general practice, asylum seekers present more psychological problems and more problems with respect to the digestive system. Mostly the asylum seeker is guided to the GP by the medical professionals in the asylum seekers centres (72%). The GP's experienced the emotional load in providing health care for asylum seekers higher than for regular patients. They think that the often presented traumatic experiences by asylum seekers are difficult to handle. The difficult communication with asylum seekers does not facilitate the process of care. In one fourth of the contacts with asylum seekers GP's need an interpreter but they can't always get one on the right moment and communicate with the help of gesture-language.

Conclusions

The main conclusions are that asylum seekers present different and overall more complex problems to health care providers than regular patients. The most experienced bottlenecks by GP's in providing care for asylum seekers are: problems with handling the presented traumatic experiences, getting unwanted juridical questions from asylum seekers, a difficult communication and lack of time.

The prescription of NSAID's by general practitioners for osteoarthritis in older people, in Belgium. Is there accordance with the guidelines?

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Background

It is well documented in the literature that NSAID's (non-steroidal anti-inflammatory drugs) have negative side effects, especially on the gastro-intestinal and renal system. Older people are even more vulnerable to these side effects. In order to reduce the burden of those effects, the scientific guidelines propose Paracetamol as a good alternative for pain relief in patients with osteoarthritis. Ibuprofen is presented in the same guidelines as the safest NSAID.

Aim

The aim of the study was to assess the agreement of the delivered care to older patients with osteoarthritis by GP's in Belgium, more specifically regarding the prescribed drugs, with these guidelines.

Methods

In the beginning of 2001, data on delivered care and prescribed drugs were registered from patients with osteoarthritis, 60 years and above, who contacted their general practitioner (GP) over a period of five weeks. GP's could deliberately participate and were not randomly selected. The number of participating doctors was 387. Data collection was possible either through registration forms or electronically (extraction from the electronic medical record). Indicators were developed to measure the correspondence of the registered care with the guidelines on the management of osteoarthritis. A questionnaire was sent to all participating GP's to obtain complementary information. Results were fed back to all participating GP's.

Results

Of the 15.000 recorded patients with osteoarthritis, 28.8% received Paracetamol, while 61.6% received an NSAID. The most prescribed NSAID in the study was Piroxicam, with high gastrointestinal toxicity. According to GP's, the two most frequent reasons for the choice of NSAID's over Paracetamol were "higher efficacy" and "choice of patient".

Conclusions

The prescription of NSAID's by general practitioners for osteoarthritis in older people in Belgium has poor accordance with the guidelines. These findings may encourage GP's to work on quality of care.

Development of occupational health integrated in public health in Flanders

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Issue/problem

Due to constitutional reform in Belgium the Flemish Community became competent for preventive health care. The authors were requested by the Flemish Preventive Health Care Administration to draft in 6 months a preliminary version of a Decree on Occupational Health (OH) in the Flemish Community.

Methods

1) developing discussion documents (inventory of national and international rules guidelines and recommendations; memorandum of understanding; decree proper);
2) meetings with Steering Committee and Working Group composed of Health Administration Officials; academics and OH professionals.

Results

Our age requires moving from "health at work" to "workers' health". Main innovations of the proposal are: (1) extension to self-employed and potential workers; (2) including general health; (3) rejection of disability concept; (4) strong integration of health and environmental surveillance; (5) stress on ethics, including privacy, autonomy, professional integrity; (6) client (= worker) centred quality control; (7) stress on data collection and analysis for routine OH, research and public health policy.

Conclusions

The main challenges in developing legislation on OH in Flanders seem: (1) the differences of approach and lack of cooperation between the ministries of health and labour in Belgium; (2) the complicated structure of the Belgian state with responsibilities for labour at the Federal; for preventive health care at the Community and the environment at the Regional level: (3) convincing all stakeholders of the necessity of a new approach.

Urban-rural differences in access to GP services Verheij, R.A. *¹, Uiters, E.H. ¹, Westert, G.P.², Devillé, W.¹

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Background

Urban health care seems to be in a crisis in the Netherlands. There are too few GPs; their workload is too high; many are burnt-out; and within a few years a large part of the population will have to do without a GP. At least, this is the picture we get from the media and from GPs themselves. Our question is, whether this has yet led to under-utilization of GP services in urban areas. Given one's health status, is an urban resident as likely to receive GP services as residents elsewhere in the Netherlands? In other words: is the accessibility of GP services in large cities worse than elsewhere?

Aim

Assess whether urban residents are less likely to receive GP services.

Methods

Health interview survey in Nivel's Dutch National Survey of General Practice (2001/2); representative sample aged 18+, N=9684; response rate 65%, with control variables age, gender, education, perceived general health. The explanatory variable is use of GP services in past two months. Utilization was analyzed by means of logistic regression for higher and lower educated groups separately.

Results

Preliminary results show that – after controlling for need factors – urban residents generally are more likely to have used GP services than residents of other areas. This suggests overutilization rather than under utilization in urban areas. However, specific analyses on the two subgroups indicates that overutilization occurs mainly in the lower educated subgroup.

Conclusions

These preliminary results suggest that access to GP services is not worse in our large cities as compared to elsewhere. On the contrary, taking differences in health into account, lower socioeconomic groups receive more GP care than their higher educated counterparts. However, these preliminary analyses include only the non-migrant population. Further analyses will include the migrant population as well.

Informing the patient: a mutual responsibility

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Background

Nurses provide patients with information about nursing care and medical interventions, and they observe and coordinate the transfer of medical information from physicians to patients. Collaboration between nurses and physicians seems prerequisite to do justice to the patient right of informed consent. Without protocols and guidelines about their mutual responsibilities, nurses and physicians run the risk of providing patients with double, conflicting or no information at all.

Aim

The study aims to give insight into the roles that nurses play with respect to the transfer of information to patients and their experiences in the collaboration with physicians.

Methods

A questionnaire was sent to nurses from various care sectors. The nurses were randomly selected from the Dutch register for Nurses (BIG-register). Because it was known that the register also contains the names of non-active nurses a total of 240 nurses was selected to arrive at a sample of 80 nurses. 81 questionnaires were filled out and returned (net response of 33%).

Results

Nurses state that they inform patients extensively about nursing care and medical interventions. They also state that they play an important role in the observation and coordination of the medical information that physicians provide the patient with. Despite of this, few care institutions seem to have written protocols about the mutual responsibilities of physicians and nurses concerning the information transfer to patients. The nurses claim that the mutual responsibilities are mostly clear to them. On the other hand, more than 60% claims to have differences of opinion with physicians about these responsibilities. Nurses who collaborate with many physicians have significantly more differences of opinion about who is responsible for providing patients with information, than nurses who collaborate with fewer physicians.

Conclusions

The many differences of opinion between nurses and physicians about their mutual responsibilities concerning the information transfer to patients needs further consideration. Either nurses or physicians or both obviously do not have a clear understanding of these responsibilities. Care institutions and professional organisations should make the division of responsibilities more clear by providing written guidelines and protocols.

Lifestyle conditions of the association of citizen participation with self-rated health: converging evidence from two independent studies

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Background

Besides its potential health impact by optimising health-related policy and environments, social participation of citizens has been argued to have positive effects on individual health as well, albeit with varied empirical underpinnings. Some studies have e.g. found enhanced levels of stress for people reporting political participation. However, studies of how other lifestyle factors such as health behaviours or social-cognitive factors may influence associations of participation and health are rare.

Aim

To test for associations of political and other social participation with individual self-rated health, and for specific lifestyle conditions that bolster this association.

Methods

Study 1: A total of N=3343 adults aged 18 years or older were surveyed within the Biomed2-project MAREPS between October 1997 and May 1998 via a semi-standardized interview schedule in Belgium, Finland, Germany, the Netherlands, Spain, and Switzerland. Study 2: A total of 1077 adults aged 25 to 74 were surveyed within a follow-up to the KORA-Survey 2000 between March 2000 and August 2001 via a semi-standardized interview in the Region of Augsburg (Germany).

Results

In Study 1, the largest difference in self-rated health between people reporting vs. disclaiming participation (assessed by a four item-scale indicating different political activities, e.g. within a political party) was found among those simultaneously reporting both physical activity and a strong control belief regarding the community decisions affecting their health. In Study 2, analogous results emerged using a more general measure of participation (i.e., being involved in at least one formal social activity such as clubs or professional organizations) and of control beliefs (namely, internal health locus of control).

Conclusions

Participation in political and other social activities seems to be associated with health as an active lifestyle-parameter. Simultaneously, that health-related control beliefs bolster the association of participation and health highlights the importance of empowerment strategies in health promotion.

Unemployment and other risk indicators preceding early cause-specific death

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Background

Loss of job may result in reduced control of the life situation and in a long-term perspective an increased risk of illness. Several studies have shown an association between unemployment and mortality, but the nature of this association is not clear.

Aim

To analyze to what extent unemployment predict early death from specific causes among women and men, and if the relation between unemployment and mortality is further strengthened by the presence of other risk indicators.

Methods

The study population comprised subjects of the Swedish Twin Registry born 1926–58. Information about unemployment and other factors was obtained by a mailed questionnaire in 1973 and deaths 1973–96 were ascertained through the Swedish Causes of Death Registry. All subjects, reporting a main occupation with a job title were included (9, 500 women and 11, 132 men), and cause specific mortality was analyzed. In the analyses, confounding from social, behavioural, health and personality factors as well as factors during early childhood was taken into account using Cox proportional hazards regression.

Results

Unemployment was associated with an increased total mortality for both women (RR 1.4) and men (1.3) after adjustment for several potential confounding factors. In addition, unemployment was in particular linked with suicides for women (RR=2.7) and undetermined causes of death for men (RR=5.8). Among women, use of tranquilizers and sleeping pills and among men low education and long lasting or serious illness strengthened the association between unemployment and mortality.

Conclusion

The results of this study further support that unemployment has an important influence on the risk of early mortality that cannot be explained by confounding from other factors. This increased risk seems to be of comparable importance in both genders and to be modified by social, behavioral and health related factors.

Age in clinical trials**Wagemakers, M.A.E. ***

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Introduction

The majority of medicines are still only developed and assessed for use in adult populations: the group aged 18–65 is over represented in clinical trials. This leads to the risk of inefficacy and/or (unexpected) adverse effects on the elderly and children.

Objective

This study was to explore the role of age in clinical studies. To encourage the performance of clinical studies in all relevant age groups, the recommendations based on the results are actively brought to the attention of all stakeholders.

Methods

Data were obtained by extensive study of literature, analyses of advertisements for recruiting patients for clinical research and by interviews with experts representing various organisations like the Dutch Evaluation Board on Medicines, pharmaceutical companies, universities and patient organisations.

Results

In clinical trials, patients are selected by setting age limits. In this way, the participation of children and the elderly is prevented. When no age limits are used, the elderly are often excluded due to selection-bias: if selected on health status, the selected persons are usually younger than the ones not-selected. Methodological and financial problems are the main reason clinical trials are not performed on all age groups. For the elderly, imaging also plays a role. Where children are concerned, ethical dilemmas like informed consent need to be faced. In practice, about half of all medicines for children are used off-label due to the failure to perform the necessary tests and trials to adapt medicinal products to the needs of children. At the moment there are some initiatives to improve the availability of suitable medicines for children. The European Commission proposes regulatory actions on Paediatric medicinal products.

Conclusion and discussion

Just like children, the elderly also deserve suitable medicines. To encourage more research on the elderly, a set of regulatory actions is needed as well. The group aged 65 and older consumes about one third of all medicines. Clinical studies should include more elderly. By adapting the selection criteria for clinical studies, not only more elderly patients can participate, but the population benefiting from the results will also increase.

Methodological and practical problems in doing clinical research on the elderly should be analysed, and solutions to the problems should be gathered and made available.

The Prevalence of Eye Diseases in a Random Sample of Ophthalmologists in Northrhine and Brandenburg
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Background

Recent analyses of the German National Health Examination Survey from 1998 showed that the prevalence rates of self-reported visual disturbances that needed correction by eye glasses or contact lenses are higher among women than men (Stang & Jöckel, 2001). Here we present results of two random samples of ophthalmologists (private practitioners) in the area of Northrhine (NR; West-Germany: 30 ophthalmologists) and Brandenburg (BRB; East-Germany: 30 ophthalmologists) including data from 58.387 patients/NR and 51.285 patients/BRB.

Methods

We analysed all diagnoses codes (International Classification of Diseases, 10th revision) of the patients that were seen by the ophthalmologists for the period October-December 2000 in both regions. We stratified the prevalence rates by age (10-year groups), sex and region.

Results

The prevalence of refractory errors (ICD10: H52) showed a bimodal distribution by age. Prevalence rates peak at ages 10–19 years and 50–69 years and were higher among women than men in both NR and BRB especially for the age group 20–29 years (NR: men 71.7%, women 78.3%; BRB: men 70.4%, women: 80.9%). We observed a different sex-specific pattern regarding diabetes mellitus related eye diseases. In both regions, the overall and age-specific prevalence rates were higher among men than women for all types of diabetes mellitus (type I, II, unspecified types). The prevalence rate of eye or orbita injuries (ICD10: S05) was higher among men than women and peaked at ages 20–39 years. For the diagnoses conjunctivitis (ICD10: H10), strabismus (ICD10: H50), cataracta senilis (ICD10: H25) and glaucoma (ICD10: H40) we did not observe any sex-specific differences.

Conclusions

These data confirm the finding of higher prevalence rates of refractory errors among women in Germany. However, the prevalence rates of specific diagnoses do not show a consistent sex-specific pattern. The consistently higher prevalence of diabetes mellitus-related eye diseases in men deserves further studies.

Patterns of internet use among patients with prostate cancer
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Background

The Internet becomes increasingly indispensable as a source of information for clinical questions, research, education and patients' interests.

Aim

To evaluate the Internet as a source of medical information for patients with colorectal cancer. The present survey examines the use and the influence of the Internet and other mass media on tumour patients.

Methods

From 07.02.2001 to 23.11.2001, 272 patients with prostate cancer which were referred to the Dept. of Radiotherapy were analysed using a 36-item questionnaire developed in Freiburg.

Results

Mean age of all patients (n=272): 69 years (range: 35–83 years). Level of education (n=247): secondary school 57% (n=142), A-level or college / university: 42% (n=103), other or missing: 1% (n=2). Occupation (n=258): pensioner: 78% (n=201), employees: 10.5% (n=28), worker: 4% (n=10), self-employee: 5% (n=13), houseman: 0.5% (n=1), other or missing: 2% (n=5). Access to computer (n=255): yes: 16% (n=42), no: 69% (n=176), access to Internet: 15% (n=37). Frequency of Internet use (n=30): weekly: 0% (n=0), monthly: 13% (n=4), occasionally: 37% (n=11), rare: 20% (n=6), never: 30% (n=9).

Reasons of not having/using a computer or the Internet (n=161): fear of high tech: 17% (n=27), too time-consuming: 5% (n=9), too

expensive: 25% (n=40), other reasons: 53% (n=85). Making use of other information sources than the doctor treating the patient (n=230): 46% (n=106). If the layman-system was used as an information source they used as an information source (n=96): Internet: 20% (n=20), other prostate cancer patients: 31% (n=31). Reliability of informations: ARD+ZDF (n=215): high: 54% (n=108), Internet (n=118): high: 22% (n=26), taxidriver (n=152): high: 11% (n=17).

Conclusions

The importance of the medium Internet as a source of information for tumor patients with prostate cancer in Freiburg is currently still low but likely to increase. The percentage of internetuser in the "normal population" over 50 years is only about 16%. Only 5% of our patients have visited the homepage of the department of radiotherapy at the University Clinic of Freiburg (<http://www.ukl.uni-freiburg.de/rad/strahlen/homede.html> or short cut: <http://go.to/radiotherapy>). The demographic structure and a further spread of Internet-access will lead to a gain of popularity of the Internet among prostate cancer patients.

Maternal mortality as an indicator of obstetric care in Europe

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Background

Maternal mortality is a rare event in Europe, with ratios ranging from 3–13 maternal deaths per 100,000 live births. Confidential enquiries in several European countries have attributed maternal deaths to sub-standard care in 40–66% of cases reviewed, indicating that it continues to represent a source of concern with respect to preventable deaths among women of reproductive age. This analysis addresses the usefulness of the MMR as an indicator of obstetric care in the context of low overall levels of maternal mortality.

Aim

We explore whether variation in the level of MMR among European countries reflects differences in obstetric care.

Methods

The data presented in this analysis originate from the European Concerted Action on Mothers' Mortality and Severe morbidity (MOMS) conducted in 13 countries to describe the circumstances and measurement issues surrounding maternal mortality in Europe. We present the results of a multivariable analysis of 290 obstetric deaths occurring between 1992 and 1995 that controls for characteristics including: cause of death, moment of death, place of death, pregnancy outcome, women's age and nationality.

Results

Cause specific ratios associated with hemorrhage were 2.2 deaths per 100,000 live births in higher MMR countries, compared with 0.8 in lower MMR countries. Similarly, higher MMR countries have higher rates of intra-partum deaths (1.5 compared to 0.5/100,000 live births) and higher rates of death among older mothers (41.8 compared to 23.8/100,000 live births) when compared to lower MMR countries in Europe.

Conclusions

Despite low rates of maternal mortality in Europe, between country differences follow recognizable patterns with respect to cause and timing of death, and maternal age. In addition to representing an important indicator of health status in a country, differences in MMR among European countries may provide insight to where obstetric care plays a role maternal deaths.

Dietary guidance in the primary health care sector by dietician or general practitioner?

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Background and aim

Obesity is a major public health problem because of the associated risk of diabetes, dyslipidemia and insulin resistance. This study compares the health effects of dietary guidance for obese patients given by a general practitioner (GP) or a dietician. In addition patient- and GP perspectives as well as organisation is analysed.

Methods

Fifty-five GPs participated in a randomised trial. GPs were randomised either to give dietary guidance themselves or to refer obese patients to a dietician. Guidance included 3 consultations and 2 controls during 12 months. In total 504 patients were included. Physiological parameters and surveys measured health effects and attitudes among patients. GPs answered questionnaires and participated in focus groups.

Results

In total 27% of the GPs' patients were eligible for inclusion. GPs included more patients for referral to dietician (n=312) than for guidance by themselves (n=192). Dieticians systematically performed guidance according to the protocol; practitioners had great difficulty pursuing the protocol. In both groups 68% (n=339) completed the intervention, which took place from May 2000 to December 2001.

Patients counselled by dietician were more satisfied with guidance than patients counselled by GP (p<0.0001), had better self-rated quality of life (p=0.0121), higher weight loss (mean 4.3 kg vs. 2.1 kg, p=0.0143), obtained better self-rated knowledge on diet (p<0.0001), had more self-reported changes in their diet (p=0.0024), and had a self-reported higher level of physical activity (p=0.0157). GP patients had a higher increase in HDL (mean 0.14 mmol/l vs. 0.05 mmol/l, p=0.0011) and more stopped smoking (p=0.0329).

Conclusions

Many obese patients in primary care need dietary guidance. There are organisational advantages in referring patients to a dietician. Patients prefer dietician to GP for counselling and the health outcome is generally better at dietician.

The national information service for allied healthcare in the Netherlands

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In order to provide up-to-date information about the precise nature of the work of allied healthcare professionals in the Netherlands, Nivel has set up the national information service for allied healthcare (LIPZ). This service started to collect computerised data on a monthly base since September 2001. The data are gathered on a continuous basis by 134 therapists working in 80 private practices for physiotherapy and exercise therapy. The data contains information on which patients are referred by which practitioners as well as information on the condition and the subsequent treatment. This knowledge is important in policy-making for government, health-care insurers and professional associations.

Results

A comparison of the data on the participation therapist, with all therapists working in primary health care practices indicate a good fit in term of gender, age and year of graduation.

Preliminary results are presented from the first year of registration. Figures will be presented for the following issues:

- which categories of patients use allied health services (patient profile);
- which factors determine the demand for allied health services (referring practitioner and reason for referral);
- characteristics of the health problem and its professional description;
- aspects of the treatment plan and the extent of the care provided;
- result of the treatment.

Pretesting of an index system for assessing dental prosthetic treatment need

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Background/Aim

A modern professional view on prosthetic treatment need strongly emphasizes health gain, secondary prevention, quality of life (QOL) and patient's perception. However, valid instruments for the assessment of treatment need and different therapies under consideration of these aspects are unknown. This study aimed at pretesting a newly developed index system.

Methods

The comprehensive Prosthetic Treatment Need Index (PTNI) is based on three parameters: health gain and oral-health-related QOL

(professional assessment) as well as subjective need (patient). The professionally determined parameters are scored as follows: 0=no benefit; 1=benefit questionable or unknown; 2=benefit probable; 3=benefit evident. From these parameters a comprehensive need score can be calculated ranging from 0 (no need), 1 (low need, indication of therapy in few cases), 2 (moderate need, relative indication of therapy) to 3 (high need, absolute indication of therapy). The index is intended to be used on the individual patient as well as on the populational level. For pretesting, 20 dentists receiving standardized information were asked to score different treatments for six frequent clinical situations. For each case three different therapy options had to be scored for health gain and QOL, so that 18 therapy options were evaluated.

Results

The over-all median of the range of scores for the 18 therapy options among the 20 dentists was 2 which is extremely high regarding the highest possible value 3. The median of the interquartile range of the scores was 1 which was found 14 times for health gain and 16 times for QOL.

Conclusions

The study indicated substantial inter-individual variations in scoring health gain and QOL among dental professionals. These findings confirm the well-known variations in dental therapy. Furthermore, the lacking evidence concerning health gain and improvement of QOL achievable by prosthetic treatment is obvious. However, after further development the instrument might be useful on an individual and populational level and therefore exhibits a strong Public Health dimension.

Success factors for hospital affiliated groups under special consideration of GR-DRG compensation

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Background

While the number of public hospitals decreased by approximately 20 percent between 1990 and 1997 the number of private hospitals

increased by 18 percent. This trend continued in 2001 as private hospital affiliated groups extended their presence on the German hospital market. Changing general conditions, e.g. German Refine Diagnosis Related Groups (GR-DRG), will intensify this trend and lead to concentration in the hospital market.

Aim

Objective of presentation is a survey of the success factors for hospital affiliated groups under special consideration of GR-DRG compensation in the context of the concentration process in the German hospital market. The following key criteria are perceived as highly relevant: objectives, strategy, organization and processes, resources (patient, funds, personnel, infrastructure), leadership (personnel and culture).

Methods

- Theoretic reference framework: 'decision oriented approach' according to Heinen (situation, objective, strategy, measure).
- Thematic reference framework: comparable development in other industries and the hospital market in United States of America.
- Empirical method: expert interviews (interview guide) or survey (questionnaire) based on criteria catalog. Relevant interview/survey partners would be medical and economic executives of private and public hospital affiliated groups, of single hospitals and other companies in health care sector.

Results (exemplary expected)

- Which target system (cost reduction, quality improvement) is promising in the medium to long term?
- Which strategic positioning ensures hospital affiliated groups a successful and rapid growth in the competitive German hospital market?
- What is the future design of the organizational structure to interfere with the emerging heaviness, inflexibility and extended decision paths as a consequence of increasing size of enterprise?
- What is the anticipated design of primary, secondary and tertiary health care processes to realize synergetic effects (economies of scale) within a fast growing hospital affiliated group?

Conclusions

The presentation analyze the expected turn in German hospital market and will find success factors and give some guidelines for growing hospital affiliated groups.