Appendix 1. GREET 2015 checklist, based upon the TIDieR guidance²

BRIEF NAME

1. INTERVENTION: We conducted a cluster randomised trial to compare use of the Informed Health Choices (IHC) primary school resources (intervention) to routine teaching (control) in primary schools in Uganda.

WHY - this educational process

- 2. THEORY: The IHC primary school resources were developed by the investigators between 2013 and 2015 employing user-centred design methods. This included idea generation and prototyping, piloting with observation, user-testing with teachers and learners, and teacher's network feedback in Uganda. Piloting and user-testing were also carried out in Kenya, Rwanda, and Norway. The aim of the design process was to ensure that teachers and children found the learning resources to be engaging and useful.
- 3. LEARNING OBJECTIVES: The objectives were for children to understand and be able to apply <u>key concepts</u>³ for assessing claims about the effects of treatments (any action intended to improve the health of individuals or communities) and to making informed health choices.
- 4. EBP CONTENT: The learning resources focused on 12 key concepts for appraising claims and evidence about treatment effects and applying appraised evidence to personal choices.

WHAT

- 5. MATERIALS: Teachers in the intervention schools attended a two-day introductory workshop. We gave them a teachers' guide prior to participation in the workshops. We gave the intervention schools textbooks and exercise books for the children, activity cards for one of the activities in the textbook and teachers' guide, and a poster with a checklist summarising the 12 key concepts covered by the book. We gave them a song (Think Carefully about Treatments) with lyrics that are another reminder on MP3 players for the final lesson. The textbooks included a story told in a comic book format, instructions for classroom interactive activities, exercises, the checklist, a glossary, and a gameboard on the back of the book for another classroom activity. The textbook included nine chapters with exercises and an activity for each. Two of the investigators took the teachers through each chapter during the introductory workshops. All the materials can be accessed on the IHC website http://www.informedhealthchoices.org/primary-school-resources/.
- 6. EDUCATIONAL STRATEGIES: We designed the materials to be used interactively in the classroom by reading each chapter aloud, doing the activity and, if time allowed, giving the children time to do the exercises. The exercise books could be taken home, if there was not time to do the exercises in the classroom. Educational strategies that we used included repetition of key messages, extensive examples familiar to the children, visual presentation (comic format), messages embedded in a narrative, defining new vocabulary where it is introduced and translating words to Luganda and Swahili, activities that require interaction between students, a highly-structured timetable for teachers, additional explanations and examples for teachers.
- 7. INCENTIVES: The head teacher in each participating school selected the teachers. The teachers were reimbursed for travel costs for the introductory workshop and received meals and refreshment. They were not paid for participating in the workshop and there were no financial incentives for the schools, head teachers, teachers, or children. The evaluation administered at the end of the school term did not count towards the children's school marks or assessment of the teachers or schools.

WHO PROVIDED

8. INSTRUCTORS: The teachers were year-5 teachers. Most (80%) were science teachers. Only 12% had a university degree.

HOW

9. DELIVERY: The nine lessons were delivered in the classroom. The average number of children in each class was 72.

WHERE

10. ENVIRONMENT: The primary schools were in the Central region of Uganda. Most (68%) were in an urban area. Half were public and half were private schools. All the schools were poorly resourced with respect to space (crowded classrooms with too few benches), equipment (little or no access to computers or other electronic equipment), and supplies.

WHEN and HOW MUCH

- 11. SCHEDULE: There was one lesson for each chapter. The nine lessons were taught in a single school term lasting 10 to 12 weeks. Each school decided how to fit the lessons into the term, for the most part they taught one lesson per week.
- 12. A double period (80 minutes) was recommended for each lesson, so that the total amount of class time was nine double periods (12 hours). The amount of time that the children spent on the lessons outside of class varied, but for the most part was little if any, since most teachers did not allow the children to take the textbooks home and most of the exercises were done during the double periods, in most schools. We suggested that the teachers should spend about 20 minutes preparing for each lesson.

PLANNED CHANGES

13. The teachers' guide included options for the teachers, such as different ways of reading the text aloud and different ways of marking the exercises and giving the children feedback.

UNPLANNED CHANGES

14. Each teacher was observed by the research team for one lesson, but no feedback was given to the teachers. Some of the teachers improvised their own activities.

HOW WELL

- 15. ATTENDANCE: Attendance varied. The intervention did not include any strategies for improving attendance.
- 16. Fidelity will be reported in a process evaluation. Teachers completed an evaluation form for each lesson, the research team observed each teacher teaching a lesson, and we interviewed head teachers, teachers and children in six schools. Analysis of these data has not been completed.
- 17. All the classes completed all nine lessons, but not all the children attended all nine lessons and some of the teachers did not use two full periods for each lesson.
- 1. Phillips AC, Lewis LK, McEvoy MP, et al. Development and validation of the guideline for reporting evidence-based practice educational interventions and teaching (GREET). BMC medical education. 2016; 16: 237.
- 2. Hoffmann TC, Glasziou PP, Boutron I, et al. Better reporting of interventions: template for intervention description and replication (TIDieR) checklist and guide. BMJ 2014; 348: g1687.
- 3. Austvoll-Dahlgren A, Oxman AD, Chalmers I, Nsangi A, Glenton C, Lewin S, et al. Key concepts that people need to understand to assess claims about treatment effects. Journal of Evid Based Med 2015; 8: 112-25.