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Mental Health and ASD



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Introduction

Autism spectrum disorder (ASD) is a heterogeneous disorder recognized by deficits in social communication and interaction, in addition to restricted and repetitive behaviors and interests (American Psychiatric Association 2013). ASD is also heterogeneous in terms of which symptom emerges when and when the complete symptom pattern required for a diagnoses become evident. This leads to substantially difficulties in clinical detection and treatment planning. Research show that there is great variability in terms of etiology, behaviors, core symptoms, cognitive skills, adaptive skills, language and communication, the onset of diagnosis and core symptom patterns (Zwaigenbaum et al. 2015). For some, ASD

symptoms required for a diagnosis may first become evident when social demands exceeds the capabilities of the individual (Ozonoff et al. 2015). Additionally, symptoms of ASD may manifest differently depending on other factors, such as the child's cognitive abilities and verbal and nonverbal levels of functioning (Chawarska et al. 2014).

The term “mental health” might be understood widely as the emotional, psychological, and social well-being of humans, as well as having few or no mental health problems. Furthermore, our mental health affects how we regulate ourselves, and how we cope with negative experiences, mending social relationships and make choices in challenging settings (WHO 2018). However, the term is frequently used intertwined with psychiatric conditions, which if present, naturally affects the emotional, psychological, and social well-being of that person. Furthermore, mental health in a wider perspective is also associated with the term Quality of Life (QoL), where aspects of both influence the well-being in all human beings.

Most research conducted on mental health related to autism is focused on issues of well-being, stress, and QoL in parents of individuals with ASD (Factor et al. 2018; Halstead et al. 2018; Leadbitter et al. 2018; Lecavalier et al. 2018; Nordahl-Hansen et al. 2018; Salomone et al. 2018; Schiltz et al. 2018), and it is well established that parents of children with ASD are at a higher risk of experiencing mental health problems often associated with increased levels

of stress, anxiety, and depression (Lecavalier et al. 2018; Nordahl-Hansen et al. 2018; Øien and Eisemann 2016). Currently, it is far less investigations of mental health in individuals with ASD and has for many years been an under-researched topic (Burgess and Gutstein 2007).

In terms of quality of life, research have revealed that individuals with ASD reports lower levels of QoL than those without an ASD diagnosis (Ayres et al. 2017). Aside from studies on the QoL of individuals with ASD, very few studies to date have directly assessed the mental health of individuals with ASD. Increased focus on research related to improving mental health, well-being, and QoL in those with ASD have the potential of revealing factors of importance in terms of preventive interventions for developing psychiatric conditions. As of now, we know far less of how persons with ASD experiences factors in their own life, and how these influences their trajectories to better or worse mental health and QoL.

Current Knowledge

Currently, there is an understanding that having ASD in itself implies significant challenges for those affected and their families, and with a particular strain when ASD is accompanied by other comorbid or coexisting psychiatric conditions such as anxiety, depression, or with having acute and increasing levels of stress (Benson and Karlof 2009; Lai and Oei 2014; Nordahl-Hansen et al. 2018). It is, however, important to highlight that the term mental health comprises far more than the presence or absence of a psychiatric condition (WHO 2018). Mental health is also about the emotional and social well-being, happiness, as well as having a sense of safe and meaningful life.

Also, it is important to distinguish the terms comorbid and coexisting as representing two different terms. *Comorbidity* refers usually to a state when two diagnoses are present and the conditions are related to each other, while *coexisting* refers to when two diagnoses are present without necessarily being related, i.e., being diagnosed with ASD and diabetes are coexisting

conditions, while ASD and intellectual disability (ID) are comorbid conditions (Kaplan et al. 2016).

In terms of prevalence of psychiatric conditions found in individuals with ASD, Simonoff et al. (2008) reported that 70% of children with an ASD diagnosis had one comorbid diagnosis, while 41% had two or more (Simonoff et al. 2008). This indicates that psychiatric comorbidities are very common in ASD and often presents in higher proportions that would be expected compared to what is known from prevalence in the general populations. Studies have revealed that the most common psychiatric diagnoses are social anxiety disorder, attention deficit hyperactivity disorder (ADHD), and oppositional defiant disorder (ODD) (Mattila et al. 2010; Simonoff et al. 2008). The increased prevalence of comorbid psychiatric conditions or problems in ASD might indicate that a substantial portion of individuals with ASD have poorer mental health and quality of life due to the consequences of the psychiatric condition/problem. However, we do not know how the interplay between having comorbid conditions and having a feeling of quality of life, well-being, and happiness are. It is a knowledge gap in research on understanding what constitutes factors of importance in a preventive perspective as for the development of poor mental health.

It is important to acknowledge that the heterogeneity in symptom patterns in ASD can manifest in different ways, and symptoms can appear similar to phenomena found in other psychiatric conditions (Kaplan et al. 2016). However, it might be that psychotic-like symptoms in individuals with ASD are better explained as a part of their underlying ASD diagnosis and related to specific cognitive challenges and as such will have different implications for our understanding, treatment, prognosis, and access to services (van Schalkwyk et al. 2015). This highlights the need to be cautious in adding diagnosis in individuals with ASD, as they might be associated with different factors than found in non-ASD individuals and as such require different strategies for treatment. However, it is equally important to provide evidence-based treatment for persons with ASD in the case of having other coexisting clinical problems.

A plausible model of what contributes to good/poor mental health in ASD is bidirectionality, where symptoms related to the core of ASD directly affects socio-emotional well-being negatively, increasing the likelihood for developing psychological problems or conditions such as anxiety and depression, which further spiraling the socio-emotional impairment downwards.

As ASD is recognized by its core deficits in social communication and interaction (American Psychiatric Association 2014), affecting the opportunities they have to establish and maintain social relationships with others, often leading to loneliness and even social anxiety (Bauminger and Kasari 2000; White and Roberson-Nay 2009) (Cacioppo et al. 2006; Leary 1990). Little research has been devoted to understanding the positive mental health development in individuals with ASD, and very few measures have been developed with the purpose of providing how they perceive their own emotional, psychological, and social well-being.

Future Directions

As very few to this date have conducted research on mental health-related phenomena such as the emotional, psychological, and social well-being of individuals with ASD (mental health), future studies should aim at investigating measures that can shed light on mental health in those with an ASD diagnosis. There is, an increasing interest in conduction research on how individuals with ASD perceive their quality of life, and specific measures for this purpose are starting to emerge (Ayres et al. 2017; Burgess and Gutstein 2007; McConachie et al. 2017). There are great difficulties in ascertaining information directly from different subpopulations within the Autism spectrum in regards to ability of an interest in reflecting on quality of life (QoL), emotional, psychological, and social well-being. Many persons within the spectrum have severe intellectual disability and might have little functional language. It is still of paramount importance to develop relevant, valid, and reliable observational measures to use as proxy measures used by parents or other who

know the child well. Expected outcomes would be to understand the interplay between everyday conditions that influences the trajectories of mental health issues (positive or negative). In addition, exploring if children with different symptom patterns constitute different risk markers for a positive or negative development. There has been made some advances in terms of what parents highlights as the most important measures of outcomes to target in interventions (McConachie et al. 2018). Their highest ranked outcomes impacted directly on everyday life and functioning (anxiety, distress, hypersensitivity, sleep problems, happiness, relationships with brothers and sisters, and parent stress) (McConachie et al. 2018). Furthermore, it is important to investigate in further depth how a diagnosis of ASD might not only make them more at risk for developing psychiatric conditions affecting mental health but also how core features of ASD mediate mental health outcomes. More importantly, investigating what constitutes good mental health in individuals with ASD is of great importance to develop new measures.

Longitudinal studies following children and adolescents could potentially provide information on which factors that predict later psychiatric conditions in individuals with ASD and other neurodevelopmental disorders. Such studies could also identify sex-specific information, as well as preventive factors for negative mental health development.

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