

We Need to Talk About Prevention

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We Need to Talk about Prevention.....

Editorial linked to Rinvall et al (2020)

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Since the turn of the century the study of psychotic experiences in the general population has become a major paradigm in mental health research. We now know that psychotic experiences are a relatively prevalent phenomenon, particularly in children and adolescents (1). They do not occur randomly and are clustered with other psychopathology (2,-4), poor functioning (5,6) and suicidal thoughts and behaviours (4,7). .A systematic review (3) has shown that psychotic experiences in childhood and adolescence are associated with a four-fold increased risk of later psychotic disorder but that evidence for longitudinal associations with non-psychotic disorder is sparse. Recent work has shown that psychotic experiences by themselves appear to have low predictive values and low sensitivity for later psychotic disorder (8) and that a more nuanced approach is needed to harness the predictive power of psychotic experiences.

In this issue of the *Journal*, Rimvall and colleagues (9) exploit the power of the Danish national registries to answer some important questions about the prognostic value of childhood psychotic experiences for mental health disorder and treatment in adolescence. In particular, they are interested in examining the unique predictive power of psychotic experiences compared with researcher-diagnosed psychopathology for subsequent diagnoses and treatment.

Using the Danish personal identification numbers, the researchers carried out record linkage between a national cohort of 11 year old children and two national registers: the Danish National Patient Register and the Prescription Database, to give information on outcomes up to age 17. In this way, Rimvall and colleagues (9) showed that children who reported psychotic experiences at age 11 had a 3-fold increased risk of a subsequent mental health disorder which required attendance at a child and adolescent psychiatry service and a 2.7-fold increased risk of receiving psychotropic medication. This risk was broadly similar to the risk of later psychiatric diagnosis among children who had met criteria at age 11 for a researcher-diagnosed mental disorder assessed using the Development and Well Well-Being Assessment (DAWBA) (10). This shows that children with *either* a DAWBA diagnosis or psychotic experiences at age 11 had an approximately 3-fold increased risk of diagnosis and treatment by child and adolescent mental health services within the subsequent 5-6 years., whereas children who had *both* DAWBA diagnosis and psychotic experiences at age 11 had an almost 8-fold risk of later mental disorder diagnosis and an almost 10-fold increased risk of psychopharmacological

treatment within 5-6 years. These substantial effect sizes for poor adolescent outcomes call into question our “wait and see” approach to childhood mental health problems.

Rimvall and colleagues (9) also found that children with a parental history of mental disorder had a 2-fold increased risk of later mental disorder while children with a family history of parental mental disorder *and* who also reported psychotic experiences had a four-fold increased risk of mental disorder and a six fold increased risk of psychopharmacology treatment. These findings elegantly demonstrate that reporting psychotic experiences in childhood has a synergistic effect on risks posed by either existing psychopathology or parental mental health history.

From the data provided in the paper we estimated that about one in 3 young people who had *both* signs of psychopathology *and* PEs at age 11 developed a treatable mental disorder within the next five years. Therefore it appears that Rimvall and colleagues (9) have identified a peri-pubertal “ultra-high risk” group for subsequent psychiatric outcomes. These risks are manifest in diagnosed disorder, contact with child and adolescent health services and psychopharmacological treatment. It now behoves us to consider how to translate these findings back to clinical practice and in order to do that we must address two further questions. Firstly, how do we identify young people at-risk? Secondly, how can we intervene in young people at risk to prevent later disorder?

The first step is to develop a screening tool to detect children at high risk of later psychopathology which can be easily and efficiently used in school settings. The DAWBA, although an excellent instrument is too protracted to be used in such a setting (the parent interviews alone requiring roughly 50 minutes to complete). The Strengths and Difficulties Questionnaire (SDQ) (11) is a short, well-validated screening tool for children and adolescents at-risk for psychopathology but does not contain any questions on psychotic experiences. The last two decades of evidence have indicated that psychotic experiences have earned their place in the assessment of psychopathology alongside internalising and externalising problems and can no longer be ignored, (12, 13, 14). As indicated by the findings in this issue of the Journal (9), a screening tool based on current psychopathology alone or psychotic experiences alone will fail to identify the majority of those who go on to have a subsequent disorder. Combining information about current psychopathology psychometrics with psychotic experiences will improve the identification of young people at risk of later mental disorder. In addition to psychopathology, such a screening tool could also include information on risk factors for psychopathology, such as adversity and family history of mental disorder.

The ultimate aim of identification of young people at risk is to intervene to prevent mental disorder outcomes and we can do this by targeting known risk factors and by enhancing known protective factors (15) Some clues about protective factors for psychotic experiences have emerged from the recent literature,. Bullying cessation (16) and improving self-concept (17) are both associated with significant reductions in incidence

of psychotic experiences and will confer benefits more broadly in terms of improving well-being. It is known that trauma and childhood adversity increase the risk of mental health problems including psychotic experiences (18,19). Social support from peers has been shown to have a protective effect on psychotic experiences among poly-victimized youth (particularly girls) (20).

The parent-child relationship has emerged as a key target for preventive intervention, particularly in those who have experienced adversity. We have recently shown that parent-child conflict mediates almost half of the relationship between childhood adversity and persisting externalising problems in a general population sample (21). Parental support (“My parents help with decision making”) and parental supervision (“My parents know how my free time is spent”) have been shown to mediate the relationship between adversity and psychotic experiences in adolescents (22) Qualitative work from our group has demonstrated that secure attachment relationships with an adult (parent or non-parent figures) are key to good outcomes in adulthood among young people with early adversity and psychotic experiences (23) Moving outside the family and school domains, higher levels of neighbourhood cohesion are associated with reduced risks of psychotic experiences among poly-victimized youth (24).

These findings give a blueprint to how to approach prevention in youth at-risk of psychopathology. Fostering self-esteem, improving parent-child relationships; promoting secure attachment relationships with trusted others; increasing social and neighbourhood

supports and reducing bullying will all play a part in improving outcomes for young people at-risk of mental disorder.

Screening for learning difficulties in schools and providing additional resource teaching hours is now commonly provided in many countries. Screening children for dental and visual problems and providing early intervention when needed is also accepted practice. Why can't we do the same for mental health difficulties? Alongside more general health promotion initiatives, we should move to a model of indicated and selective prevention in youth (15). Prevention has been proposed as one of the "grand challenges" for global mental health (25) and has been estimated to be highly cost-effective with savings of up to 83 dollars for every one dollar spent on health promotion and prevention (26). Because mental disorders begin in early life there is a large "knock-on" effect of preventing health and social service use in later years (27)

The title of this editorial refers to the novel, "We need to Talk about Kevin" (28), which tells the story of a troubled young man in whom warning signs of mental health problems are ignored until it is too late and tragedy ensues. We cannot continue to ignore the example set by other medical fields, such as cardiology, and oncology because the dividends of prevention are potentially much greater for mental health than for physical health (15, 28). The field of psychiatry should now shift its focus to a public mental health approach and face up to the "grand challenge" of prevention for the sake of our youth and future generations (29).

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