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The outcomes of adolescent mental disorders

AUTHORS

Rohan Borschmann, PhD[1,2,3,4], George Patton, MD[1,5]

[1] Centre for Adolescent Health, Murdoch Children's Research Institute; Royal Children's Hospital, 50 Flemington Road, Parkville VIC 3052, Melbourne, AUSTRALIA

[2] Centre for Mental Health, Melbourne School of Population and Global Health; University of Melbourne, AUSTRALIA

[3] Health Services and Population Research Department; Institute of Psychiatry, Psychology & Neuroscience; King's College London, UK

[4] Department of Psychiatry; University of Melbourne, AUSTRALIA

[5] Department of Paediatrics; University of Melbourne, AUSTRALIA

CORRESPONDING AUTHOR

Dr. Rohan Borschmann

Centre for Adolescent Health, Murdoch Children's Research Institute

Royal Children's Hospital, Flemington Road, Parkville VIC 3052, Australia

(t): +61 (3) 9936-6152

(e): rohan.borschmann@mcri.edu.au

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Adolescence has, throughout human history, been viewed as a time of social and emotional upheaval. Much more recently, neuroscience has provided insights into why this may be so. Puberty triggers a new phase in neurodevelopment that continues into the mid-twenties and is accompanied by great shifts in emotional experiences.[1] It is therefore not surprising that early symptoms of many mental disorders emerge during the adolescent and young adult years, with around half beginning by the mid-teens.[2] It is perhaps a further reason why mental disorders in adolescents appear very common, with recent research suggesting that a majority of adolescents fulfil criteria for at least one mental disorder at some point during their teens.[3]

Perhaps because adolescent emotional and behavioural problems were accepted as very common and assumed to therefore have little clinical significance, adolescents have traditionally been overlooked in clinical and public health responses to mental disorders. Yet, as Eva Asselmann and her colleagues have noted in this volume, mental disorders during adolescence and young adulthood have the potential to disrupt essential early social role transitions to independence and adulthood, including the move from education into employment, formation of life partnerships and achieving financial independence.[4] Previous epidemiological studies have illustrated some of these poor outcomes: adolescents who experience common mental disorders during their mid-to-late teens are less likely to be engaged in formal education, employment or training in their early twenties;[5] those who have self-harmed are at higher risk of later mental and substance abuse disorders;[6] and those who use cannabis and other illicit substances have generally poor life outcomes.[7]

There is, however, a need for a much better understanding of the health and social consequences of adolescent and young adult mental and substance use disorders. In this context, the prospective cohort study from Asselmann and her colleagues is a welcome addition to this literature.[4] They have examined a range of adverse social, clinical and functional outcomes in a community sample of adolescents and young adults with mental disorders from Munich. More than 2000 non-treatment-seeking 14- to 24-year-olds were followed for up to a decade and the findings provide invaluable data on the persistence of some of the major disorders that commonly arise during adolescence. As expected, those with baseline mental disorders fared less well than their peers in terms of later occurrence of mental disorders, and significant problems in socio-economic adjustment. Notably, there were differences in functional outcomes across different baseline disorders, with those who had substance use and somatoform disorders standing out for their poorer socio-economic outcomes.

Even so, the most striking findings are arguably the very high rates of remission at the final follow-up, with only a small minority of those with baseline eating and somatoform disorders continuing to experience similar problems into adulthood. More than 60% of those with baseline depressive and anxiety disorders had no similar recent disorder at follow-up. The exception was the group diagnosed with substance use

disorders at baseline, where a majority continued to have similar disorders 8 to 10 years later. Similarly, in terms of many life outcomes including education, employment, marital and financial status, the great majority of those with early mental disorders appeared to be doing well.

These findings are consistent with other recent reports. A multi-wave cohort study of Australian adolescents[8] demonstrated that, amongst those with only one episode of common mental disorder of less than six months' duration during adolescence, fewer than one in two went on to experience similar problems in young adulthood. In the same study, the proportion of participants reporting recent self-harm declined sharply from the ages of 15 to 19 years.[9] When participants were followed up again in their late twenties and mid-thirties on a range of psychosocial outcomes, few differences existed between participants with a history of self-harm and those without,[10] with substance misuse the notable exception.[11]

These high rates of apparent recovery perhaps reflect ongoing emotional and cognitive development during an active phase of neurodevelopment. However, the findings raise a central question about why some adolescents with mental disorders have better outcomes than others. Asselmann and colleagues provide some clues. A higher number of mental diagnoses at baseline, an earlier age of onset, and a greater persistence of baseline disorders all predicted persisting disorders at final follow-up. These same baseline factors also predicted poorer physical health, education, and other socio-economic outcomes, even after controlling for the effects of baseline mental disorders and sociodemographic factors.[4]

A greater understanding of the processes contributing to the resolution of mental disorders, as opposed to their persistence, is likely to be central in both treatment and prevention of mental disorders in young people. Despite their high rates of mental disorders, adolescents have been largely overlooked in programming and policy responses. This may be shifting, aided by major initiatives such as the World Health Organization's 'Global Accelerated Action for the Health of Adolescents' (AA-HA) and the World Bank's 'Out of the Shadows' strategy, as well as through multidisciplinary academic initiatives.[12]

High quality epidemiological research will be an essential element in developing more effective responses to adolescent mental disorders. The current evidence base provided by psychiatric epidemiology is grossly inadequate. A recent study from Erskine and colleagues[13] reported on minimally sufficient worldwide prevalence data for mental disorder in young people aged 5-17 years. The mean global coverage was 6.7%, with the figure considerably lower in low- and middle-income countries. Notably, of the 187 countries examined, two in three (124; 67%) had no prevalence data for *any* child or adolescent mental disorder. Data coverage for incidence, remission and risk factors is even weaker. As such, we currently lack a sound framework for designing either treatment or preventive interventions across this crucial life-phase. New research to identify the risk and prognostic factors at play during adolescence is urgently needed to address the question of why some young people manage to avoid emotional upheavals during adolescence and also why some continue to experience mental disorders into adulthood. Prospective

cohort studies of the kind undertaken by Asselmann and her colleagues will be a vital element in growing this essential knowledge base.

Mental and substance use disorders are becoming dominant health problems for adolescents worldwide.[12] Recent secular trends in self-harm, heavy substance use, and common mental disorders in adolescents suggest that they are not diminishing.[14] As Asselmann and colleagues appropriately recommend, identifying and accessing effective treatments will be important in addressing needs. Indeed, analyses of return on investment data regarding the scaling-up of treatments for depression and anxiety worldwide indicate that considerable economic benefits are likely to be gained from such investments.[15] However, given the high level of need, such responses will inevitably extend well beyond traditional child and adolescent mental health services. Even so, it is difficult to imagine that treatment services alone will be able to adequately respond to the great majority who manifest a disorder at some point during their adolescence.[3]

The transition to puberty and subsequent adolescent neurodevelopment propels an individual into a different engagement with her or his social world. It is therefore no surprise that adolescent risks for mental disorders are shaped by the social contexts in which young people are growing up. These disorders equally have the potential to disrupt the major social role transitions that lay the foundation of future social and economic adjustment. Adequate responses to adolescent mental disorders will therefore inevitably need to extend beyond the health service sector to address the social environments of schools, local communities, families and peers, including the increasingly pervasive influences of digital and social media. Innovative psychiatric epidemiology will be essential not only to understand these social determinants of adolescent mental disorders, but also to test the benefits of interventions that address them.

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