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Debate: Giving prevention a chance to prove its worth in lowering common mental disorder prevalence: how long will it take?

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The global burden of Common Mental Disorders (CMDs), including major depressive and anxiety disorders, is substantial. CMDs contribute to lowered work productivity, family dysfunction, substance abuse, suicide, and reduced life expectancy. Although expenditures on mental health care and drug therapy have increased dramatically in recent decades, expanding treatment rates for CMDs, the point-prevalence of CMDs has not decreased (Jorm, Patten, Brugha, & Mojtabai, 2017; Ormel, Cuijpers, Jorm, & Schoevers, 2020). It has been rather stable since the 1980s (Baxter et al., 2014) and even on the rise in youth since roughly 2010 (Jacka et al., 2013; Sadler et al., 2018). Chronic-recurrent disorders in adulthood typically have precursors in childhood. These findings raise the question: What is needed to reduce the CMD burden? Some reduction might be achieved with more effective treatments and smaller treatment (quality) gaps (Chisholm et al., 2016), but even with optimal treatment delivery of currently available treatments, other approaches are necessary to reduce CMD burdens.

Prevention is a logical approach to reduce CMD burden, but prevention has its own complexities (Jacka et al., 2013; Ormel et al., 2020). Universal, selective, and indicated prevention trials report small to occasionally moderate benefits. They often involve psychological therapies administered to motivated people with sub-threshold symptoms, rarely target the strongest determinants of risk upfront and structurally, are typically limited to assessing short-term outcomes (rarely exceeding 1–2 years), and benefits tend to decrease over time. In addition, evidence-based prevention has not been widely implemented and implementation fidelity has been far from optimal.

We recently suggested that giving prevention a chance to prove its promise will require: (a) full embedment in social institutions; (b) long-term structural funding; (c) targeting major CMD determinants early in life combining population-level and individual-level strategies; and, (d) integrated evaluation of short-term and long-term effects to guide implementation (Ormel et al., 2020; Ormel & VonKorff, 2020). Two forms of embedment are important. The first is political embedment, whereby local and national governments implement prevention programs, activities, and strategies in existing institutions such as schools, healthcare facilities, and workplaces. The second form is social-psychological embedment, which involves normalizing prevention activities at a societal and cultural level and integrating them into the social norms of day-to-day life (as has been done for smoking prevention). Without embedment in social institutions and targeting major determinants early in life, and sustaining key changes for a generation, we believe population prevalence will not drop significantly (Ormel et al., 2020). Individuals and families at highest risk are often the least motivated to participate in prevention programs. By making basic programs, in particular parenting courses and life skills training, universal and linking participation to family benefits, participation may be sustained long-term at higher levels. Participation should be routine, expected and rewarded, even for persons with limited resources.

In general, better results are likely to be obtained with long-term, structurally integrated, multi-component preventive strategies that target emotions, behavioral health, social, educational and economic outcomes at multiple levels (individual, class, school, curriculum, community, state) (Jacka et al., 2013). Benefits may be enhanced through combining individual strategies (e.g., Parenting training, Life skills training, Resilience training) with population strategies (e.g., raising minimum wage, improving school quality, reducing access to alcohol, apprenticeship programs).

Incorporating rigorous evaluation as an essential component of preventive intervention is critically important. Assessment of behavioral changes and health outcomes is needed to guide effective implementation, and to ensure that societal investments yield commensurate benefits over time. For example, resilience training has been integrated into comprehensive fitness programs provided to hundreds of thousands of soldiers in basic training in the United States and the United Kingdom (Cornum, Matthews, & Seligman, 2011). Despite compelling theoretical bases and observational data, rigorous evaluation of benefits has been lacking (Meredith et al., 2011). A recent randomized controlled trial assessing psychological outcomes yielded negative results (Jones et al., 2019). Without surveillance of implementation and behavioral outcomes, it is difficult to know whether lack of hoped for benefits reflected implementation deficiencies, problems with timing, targeting or intervention intensity, or an inherent lack of efficacy.

An advantage of targeting life skills and resilience of children and their parents is the potential for long-term benefits for multiple outcomes including psychological well-being, social, economic, and financial domains as

well as mental health outcomes (Black et al., 2017; Moffitt et al., 2011). Since benefits are potentially broad and sustained over the life span, evaluation of downstream effects should draw on school performance, health, juvenile justice, social welfare and employment records, as well as performance measures monitoring uptake of life skills and effective parenting during program implementation. Since the fruits of enhanced child development may take decades to be fully harvested, population-based life span evaluation strategies may be needed that monitor success using electronic databases maintained by educational, health care, juvenile justice, employment and social welfare agencies. Such broad-based, longitudinal evaluation will require innovations in the legal, ethical, technical and organizational bases of collecting life span data for large, population-based cohorts.

Implementing broad-based CMD prevention will require long-term investments in educational settings, family support systems, and community services. It may take 5–10 years before benefits of structural changes for adolescent development are clarified and several decades to establish whether initial developmental benefits lead to reductions in CMD prevalence. While there is suggestive evidence that such investments may prove to be cost-effective (McDaid, Park, & Wahlbeck, 2019), initial uncertainties regarding long-term benefits creates an impasse. Large investments may not occur without compelling proof of effectiveness, but evaluation of effectiveness cannot occur without long-term, structural investments.

Overcoming this impasse requires a paradigm shift. Given that CMD prevention initiatives need to be fully embedded in societal institutions over long periods of time, randomized controlled trials are not sufficient for evaluating effectiveness. They need to be supplemented by evaluation designs appropriate for long-term assessment of community-based programs which monitor implementation as well as near-term and long-term effectiveness. Innovative pragmatic research designs are needed that draw on population databases including electronic healthcare data, educational data, and governmental data on dependency, income and criminal justice status. This is analogous to use of population-based health care data to monitor vaccinations and their safety and effectiveness (Baggs et al., 2011), while drawing on more diverse sources of data. Economists and sociologists have used social experimentation methods to evaluate effects of tax policies, health insurance benefits, housing benefits and other large-scale social programs (Hausman & Wise, 2007). A key assumption that needs to be tested by rigorous evaluative studies is whether implementation of multiple program components in different sectors (schools, families, social welfare organizations) yields more robust benefits than stand-alone programs.

There is growing societal consensus that increased investments in child development are needed to ensure success of future generations in adolescence and adulthood, and to reduce the growing burden of common mental disorders over the life span. But the costs of such investments and the uncertainties of where and how to make these investments in children, families, schools and communities holds back concerted action. While promising, the challenge to achieve institutional change is formidable. To use a Dutch analogy: Windmills work. But If you want to drain the sea, you need many windmills, along with dikes and canals. You then need to operate the windmills, dikes and canals for a long time, while monitoring progress to ensure that your systems are operating as planned to reclaim and protect land from the sea. Can we afford this? We currently invest 10%–18% of gross domestic product in health care services that are not achieving hoped for benefits in improving social well-being and quality of life outcomes. We cannot hope to reduce the prevalence of CMDs and improve quality of life over the life span without increasing investments in child development, guided by the best scientific evidence we can develop.

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No ethical approval was required for this article.

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