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Commentary

The Importance of Mental Health Measurement to Improve Global Adolescent Health

Regina Guthold, Ph.D.^{a,*}, Liliana Carvajal, M.Sc.^{b,c}, Emmanuel Adebayo, Ph.D.^d, Peter Azzopardi, Ph.D.^e, Valentina Baltag, Ph.D.^a, Saeed Dastgiri, Ph.D.^f, Tarun Dua, M.D.^g, Lucy Fagan, M.Sc.^h, B. Jane Ferguson, M.Sc.ⁱ, Joanna C. Inchley, Ph.D.^j, Million L. Mekuria, M.A., M.A.S.^k, Ann-Beth Moller, M.P.H.^l, Chiara Servili, Ph.D.^g, and Jennifer Requejo, Ph.D.^b

^aMaternal, Newborn, Child and Adolescent Health and Ageing Department, World Health Organization, Geneva, Switzerland

^bDivision of Data, Analytics, Planning and Monitoring, Data and Analytics Section, UNICEF, New York, New York

^cDepartment of Global Public Health, Karolinska Institutet, Stockholm, Sweden

^dAdolescent Health Unit, Institute of Child Health, College of Medicine, University of Ibadan, Ibadan, Nigeria

^eGlobal Adolescent Health Group, Burnet Institute, Melbourne, Victoria, Australia

^fTabriz Health Services Management Research Center, Tabriz University of Medical Sciences, Tabriz, Iran

^gDepartment of Mental Health and Substance Use, World Health Organization, Geneva, Switzerland

^hUN Major Group for Children and Youth, London, United Kingdom

ⁱIndependent Consultant, Tannay, Switzerland

^jMRC/CSO Social and Public Health Sciences Unit, University of Glasgow, Glasgow, United Kingdom

^kTechnical Division, Sexual and Reproductive Health Branch, UNFPA, Geneva, Switzerland

^lUNDP/UNFPA/UNICEF/WHO/World Bank Special Programme of Research, Development and Research Training in Human Reproduction (HRP), Department of Sexual and Reproductive Health and Research, World Health Organization, Geneva, Switzerland

Mental health has long been recognized as fundamental to well-being, reflected in the 1946 constitution of the World Health Organization (WHO) where health is defined as “a state of complete physical, mental and social well-being” [1]. As such, it is important to address mental health across the life course, but of particular importance during adolescence (10–19 years), a unique and formative period for social and emotional development which lays the foundation for long-term and intergenerational health and well-being [2].

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* Address correspondence to: Regina Guthold, Ph.D., Maternal, Newborn, Child and Adolescent Health and Ageing Department, World Health Organization, 20, Avenue Appia, Geneva 1211, Switzerland.

E-mail address: gutholdr@who.int (R. Guthold).

Strengthening adolescents’ internal and external resources and protecting them from risk factors and adverse experiences positively impact their potential to thrive and their mental health and well-being during adulthood. Previous studies have shown that timely interventions to strengthen adolescents’ family and social resources and to decrease risk factor levels could prevent much of the disease burden in adulthood [3,4], and that strengthening resilience among young people leads to positive health outcomes [5].

However, it is also during adolescence when mental health problems often manifest. Modeled estimates from WHO suggest that, each year, over 45,000 adolescents aged 10–19 years lose their life as a result of self-harm, including suicide [6]. Self-harm largely occurs among older adolescents, and globally it is the fourth- and third-most important cause of death among adolescent boys and girls aged 15–19 years, respectively (Figure 1). Mental health issues also play a crucial role in the nonfatal disease burden adolescents face. Collectively, childhood behavioral disorders, anxiety, and depressive disorders account for over 13 million years of life lost due to disability globally in this age group. Among adolescent boys, childhood behavioral disorders cause the greatest nonfatal disease burden, while among adolescent girls, anxiety and depressive disorders are among the top three causes (Figure 1). This burden of poor

mental health is only likely to increase in the context of the COVID-19 pandemic [7].

Despite the crucial importance of adolescent mental health, measurement at the population level remains fragmented and incomplete in many countries. For example, quality data on mental disorders are only available for less than 10% of the world’s adolescents [8]. This lack of data is an important barrier to action globally and nationally, hampering implementation of targeted interventions. It also hinders monitoring of exacerbating global mental health inequities and of progress of any investments made with respect to policies, programs, services, and ultimately mental health outcomes [9].

The lack of data may be explained by changes and transitions occurring during adolescence that present challenges to

measuring the health of 10–19 year olds generally as well as their mental health: First, measurement needs to consider the rapid physical, cognitive, social, and emotional development that leads to changing health needs between young (10–14 years) and older (15–19 years) adolescents, and between different genders. Second, adolescence is often the period of transition from education to work, to unemployment, or, in some settings, to marriage or childbearing [10], which requires a mix of measurement approaches—such as school and household surveys—to capture all adolescents. Third, the disease burden profile changes as young people grow up. Although the burden of mortality plays an important role throughout childhood and adolescence, the nonfatal disease burden and future burden caused by risk factors requires greater attention as adolescents develop [11]. Similarly,

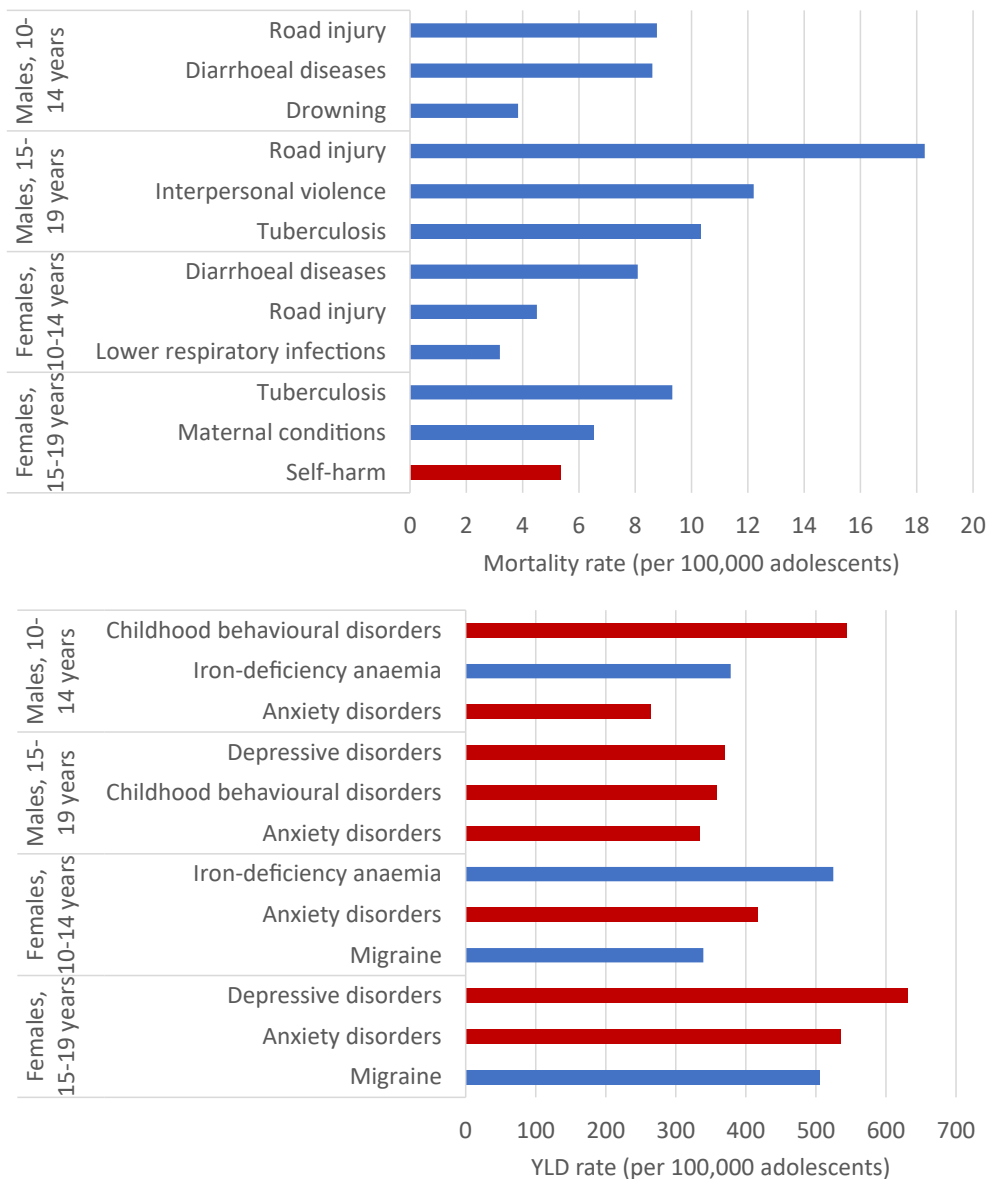


Figure 1. Global top three causes of mortality (above) and morbidity (as expressed in years lost due to disability [YLD]) (below), 2019, by adolescent sex and age group, Global Health Estimates. Mental disorders are colored in red.

the main causes of mental health disorders vary between young and older male and female adolescents (Figure 1), and measurement approaches need to be adapted accordingly. Fourth, rapid epidemiological and technological shifts and changing population profiles affect adolescent health over time and have impact on measurement. This includes increased online presence and related risks, and the shift of many countries from mainly infectious disease profiles to an increasing burden of injury, violence, and noncommunicable diseases, including mental health [12]. Fifth, adolescence can be a time characterized by multiple identities and co-occurrence of several risk behaviors, requiring special attention in measurement.

In response to several global initiatives calling for greater investment in the health of 10–19 year olds [13,14], there has been an increase in adolescent health measurement efforts. However, these efforts occurred mostly independently, with little coordination, leading to duplication in some areas, gaps in others, and inconsistencies in indicator definitions and use [15], including in adolescent mental health [16]. This limits the comparability, sharing, and use of the data for action to improve adolescent health [15].

To address these issues, two initiatives have been established in recent years. As described elsewhere in this supplement, United Nations Children's Fund and partners are leading The Measurement of Mental Health among Adolescents at the population level (MMAP) initiative. MMAP focuses on developing and validating a suite of tools to collect data on priority indicators for adolescent mental health across different settings [17].

The other initiative is the Global Action for Measurement of Adolescent Health (GAMA) Advisory Group [18,19], led by WHO and supported by Joint United Nations Programme on HIV/AIDS, United Nations Educational, Scientific and Cultural Organization, United Nations Population Fund, United Nations Children's Fund, UN Women, the World Bank Group, and the World Food Programme. GAMA's overarching goal is to improve adolescent health measurement globally. This will be achieved through identifying a core set of priority adolescent health indicators, and subsequently promoting harmonized guidance for their measurement to converge and support data collection efforts at national and global levels.

GAMA's activities to date include (1) a systematic selection of priority areas for adolescent health measurement, to focus resources on the most important health issues for adolescents, as described elsewhere [20]; (2) a mapping of over 400 indicators used for measurement of these priority areas; and (3) an on-going systematic selection of core indicators from all those mapped.

GAMA's first activity, the systematic selection of priority areas for adolescent health measurement, considered four inputs. Each of these inputs independently highlighted the critical importance of measuring mental health as part of monitoring adolescent health: First, in an online survey, nearly 1,000 youth group representatives from 62 countries considered mental health conditions the most important health issue for 10–19 year olds. Second, 70 adolescent health professionals working in 21 countries consistently identified mental health as one of the most critical adolescent health issues needing enhanced measurement. Third, GAMA's disease burden analysis highlighted that mental health conditions were among the most important causes of mortality and morbidity across regions, adolescent sex- and age groups. Fourth, GAMA's review of 15 systematically identified global and regional measurement initiatives including adolescent health indicators revealed that only three contained any mental health

indicator, including mental disorders broadly in one initiative [21], and depression in two [22,23], calling for more comprehensive and consistent adolescent mental health measurement.

Together, GAMA and MMAP are addressing the need to prioritize, improve, and better align adolescent mental health measurement. The initiatives complement each other in that GAMA's selection of core indicators within the identified priority measurement areas builds on MMAP's proposed indicators for adolescent mental health measurement for which MMAP ensures rigorous measurement through validated tools that are applicable across cultures. A subset of them is being adopted by GAMA and promoted for global use in adolescent health measurement broadly. GAMA also expands into broader areas relevant to adolescent mental health, including objective and subjective measures of well-being [24], policy, service coverage and quality, and health behaviors, thereby providing important context for adolescent mental health measurement. Collectively, these coordinated efforts can ensure consistent data collection and monitoring to ultimately deliver the most useful data for action to improve adolescent mental health globally.

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