Commentary

Increasing Data and Understanding of Adolescent Mental Health Worldwide: UNICEF’s Measurement of Mental Health Among Adolescents at the Population Level Initiative

Liliana Carvajal-Velez, M.Sc. a,b,*, Jennifer Harris Requejo, Ph.D. a, Jill W. Ahs, M.Med.Sci. c,d, Priscilla Idele, Ph.D. e, Abiodun Adewuya, M.D. f, Claudia Cappa, Ph.D. a, Regina Guthold, Ph.D. g, Chisina Kapungu, Ph.D. h, Christian Kieling, M.D., Ph.D. i,j, Vikram Patel, Ph.D. k,l,m, George Patton, M.D. n, James G. Scott, M.B.B.S. o, Chiara Servili, Ph.D. p, Danuta Wasserman, M.D., Ph.D. q, and Brandon A. Kohrt, M.D., Ph.D. r

a Division of Data, Analytics, Planning and Monitoring, Data and Analytics Section, UNICEF, New York, New York
b Department of Global Public Health, Karolinska Institutet, Stockholm, Sweden
c Department of Neurobiology, Care Sciences and Society, Karolinska Institutet, Stockholm, Sweden
d The Swedish Red Cross University College, Huddinge, Sweden
e UNICEF Office of Research-Innocenti, Florence, Italy
f Lagos State University College of Medicine, Lagos, Nigeria
g Maternal, Newborn, Child and Adolescent Health and Ageing Department, World Health Organization, Geneva, Switzerland
h Department of Psychiatry, Universidade Federal do Rio Grande do Sul, Porto Alegre, Brazil
i Child & Adolescent Psychiatry Division, Hospital de Clinicas de Porto Alegre, Porto Alegre, Brazil
j Department of Global Health and Social Medicine, Harvard Medical School, Boston, Massachusetts
k Department of Global Health and Population, Harvard T.H. Chan School of Public Health, Boston, Massachusetts
l Sangath, Goa, India
m University of Melbourne and Murdoch Children’s Research Institute, Melbourne, Victoria, Australia
n Department of Mental Health and Substance Use, World Health Organization, Geneva, Switzerland
o National Centre for Suicide Research and Prevention of Mental Ill-Health (NASP), Karolinska Institutet, Stockholm, Sweden
p Department of Psychiatry and Behavioral Sciences, George Washington University, Washington, District of Columbia
q Department of Mental Health and Well-Being, World Health Organization, Geneva, Switzerland
r Division of Data, Analytics, Planning and Monitoring, Data and Analytics Section, UNICEF, New York, New York
s Department of Global Public Health, Karolinska Institutet, Stockholm, Sweden

The 2030 Sustainable Development agenda, officially adopted by 193 countries in 2015, is the first global monitoring framework that features mental health, an area critical to development that has previously been neglected and not attracted much-needed investment. Target 3.4 aims at reducing by 2030 premature mortality from noncommunicable diseases by one third, through prevention, treatment, and promotion of mental health and well-being. A specific related indicator is the suicide mortality rate.

Globally, mental health conditions are among the leading causes of disability and death for adolescents aged 10–19 [1]. The majority of mental disorders begin in adolescence [2]; therefore, addressing mental health problems during the adolescent period can have positive lifelong impacts.

Addressing adolescent mental health starts with good data on the prevalence of mental health conditions as well as risk and protective factors. These data are essential for informing the design and implementation of appropriate policies and programs and allocation of resources to support adolescents. Yet, data on adolescent mental health remain sparse, especially in low- and middle-income countries (LMICs) where available data coverage represents about 2% of the adolescents living in these settings [3]. This is especially striking because nearly 90% of the world’s 1.2 billion adolescents live in LMICs [4]. The challenges inherent to measuring mental health are exacerbated in LMICs, as lack of...
investment has led to lack of resources and standardized validated tools for measuring mental health in these settings.

Understanding the global burden of adolescent mental ill health is even more pressing as the world responds to the COVID-19 pandemic. Massive school closures have meant the loss of social support networks and peer contacts for millions of adolescents. Lockdown measures to reduce the spread of the virus are also associated with increased risk of exposure to domestic violence and online exploitation or bullying, which can exacerbate or trigger mental health conditions [5]. Adolescents who were already out of school before the onset of the pandemic have faced increased economic insecurity and fewer job opportunities [6]. At the same time, adolescents' access to mental health services and support have been disrupted in many countries [7].

To address the global lack of data on adolescent mental health, United Nations Children’s Fund (UNICEF), in collaboration with the World Health Organization and other key institutional and academic partners, is leading the development of a suite of tools for Measurement of Mental Health Among Adolescents at the Population Level (MMAP) [8]. The principal goal of the MMAP is to enable monitoring of adolescent mental health conditions across countries through a rigorous approach. The MMAP validation process has encompassed assessing scales such as the Revised Children’s Anxiety and Depression Scale [9] and tools from the Patient Health Questionnaire set [10]. Brief item sets on functioning, suicidality, mental health care, and connectedness have been developed and tested by UNICEF based on common approaches to population-level measurement in these domains. In addition, the MMAP toolkit will include a vignette-based tool for proactive case detection of mental health symptoms called the Community Case Detection Tool that enables community gatekeepers to promote in detection and help-seeking of adolescents who may benefit from care or support [11,12] (Of note, any copyrighted tools are subject to terms of usage as established by their developers or copyright holders. For RCADS: https://www.childfirst.ucla.edu/resources/, for PHQ: https://www.phqscreeners.com/, for CCDT https://www.warchildholland.org/intervention-ccdtt/).

The MMAP methodological approach to tool development involves a series of steps (Figure 1) and includes clinical validation of measures of depression, anxiety, functional limitations due to mental health problems, and suicidality. Cross-cultural applicability and adaptation to local realities, including integration of adolescents’ voices and diverse experiences, have been formative in the development of the MMAP toolkit and guidelines for its use. Another key step in the MMAP process has involved engagement of country partners, such as national and regional governments, local health authorities, and academic institutions, who are key to its adoption and sustained use across settings.

An initial MMAP clinical validation was concluded in Belize in 2020. Similar validation efforts are proceeding in settings in sub-Saharan Africa and Asia during 2021.

The MMAP initiative will result in a set of metrics and tools that will enable the following:

- Collection of comparable data on adolescent mental health through representative national surveys. These data can be used for global monitoring, prioritization of policies and programs, and allocation of resources for adolescent mental health.
- Collection of equity-sensitive data that can be stratified to ensure measurement of the most vulnerable populations.
- Monitoring and evaluation of adolescent mental health programs implemented at local and national levels, and among special population groups including adolescents on the move, pregnant or parenting adolescents.
- Assessment of risk and protective factors for adolescents’ mental health.

The MMAP toolkit will also be included as a monitoring resource for the UNICEF and WHO jointly developed Helping Adolescents Thrive program for promotion of mental health and prevention of mental health conditions [13].

The MMAP project brings the world one step closer to increased availability of valid and reliable data on adolescent mental health for LMICs where most of the world’s young people live.

References


