



Editorial

Comprehensive Adolescent Health Screening in Africa



Africa is the land of the young. Across the 46 countries in sub-Saharan Africa, the average median age is 20, exemplified by Nigeria, Zimbabwe, and Ghana with median ages of 18.6, 20.5, and 21.4, respectively [1]. Such relative youth embodies the important potential of the ‘demographic transition’ to drive national wealth—but only if countries can educate and employ their large numbers of young people, protect them from war and civil unrest, promote gender equality, and maintain their health. The disproportionately high health burden experienced by adolescents in Africa reinforces the importance of their access to comprehensive, affordable health services [2,3].

In this issue of the *Journal of Adolescent Health*, Chingono et al. bring welcomed attention to health services for adolescents in Zimbabwe by exploring the opportunities of routine adolescent checkups, as an approach to clinical screening [4]. The authors explored the perspectives of young people, parents, and other stakeholders about the preferred timing, content, and site of health checkups. There was strong support for routine checkups, and two different approaches were recommended: one for 10- to 14-year-old adolescents, delivered in schools, and the other for 15- to 19-year-olds, delivered in the community. The recommended assessments were highly comprehensive and included assessment of growth and nutrition status, oral health, mental health, sexual health, immunization status, hearing and vision tests, and laboratory testing for anemia and HIV.

In the United States, recommendations for routine health screening in adolescents have largely focused on primary health care settings with screening oriented toward common mental health and behavioral concerns (e.g., substance use, unprotected sexual activity) as well as growth [5]. Routine laboratory screening is not universally recommended but is guided by clinical context (e.g., urine testing for chlamydia in sexually active young women or lipid profiles in obese adolescents). In other high-income countries with reasonable access to primary care such as Australia, more opportunistic approaches are currently recommended that encourage psychosocial and behavioral assessment whenever young people present for health care [6]. This is because notwithstanding robust research design and interventions that have included clinical training and support tools for health professionals, studies of screening for

mental health and behavioral concerns have thus far failed to show substantial or sustained health benefits [7,8]. There has been little research on the potential value of comprehensive adolescent health screening in countries with weak health systems and a high burden of disease in adolescents, including high physical health, nutrition, mental health, and behavioral needs. This underscores the importance of the next steps proposed by Chingono et al. to test the feasibility, effectiveness, and cost-effectiveness of their model in Zimbabwe.

Evaluation of this proposed routine school-based checkup could be seen as a step toward establishing school health services in Zimbabwe. The proposed clinical assessments are certainly consistent with the suite of actions described within the new World Health Organization guideline on school health services, a guideline that situates schools as an ideal setting to deliver equitable and affordable health care to students [9]. That guideline highlights the importance of tailoring recommendations based on the evidence of local health needs. In that context, the strong emphasis on laboratory testing for acute and subacute physical health needs (e.g., anemia, HIV) proposed by Chingono et al. appears appropriate, given clear definitions of normal and abnormal results. However, even assuming that positive findings emerge from future evaluations, it is important to acknowledge that the complexity of screening they propose could not be implemented in schools in the absence of coordination between Ministries of Health and Education, budget allocation, supportive school policies (including around confidentiality), a trained primary care workforce, referral pathways that provide access to higher-level services, and parent and community support. In other words, the scope and complexity of their proposal suggests that a school health service would be required to implement these clinical checkups.

There is a strong case for developing and testing innovative approaches to delivering health care to adolescents in schools, particularly when part of a wider commitment to health promotion in schools [10]. Indeed, the weaker the capacity of a health system to comprehensively address adolescent health, the stronger the theoretical case can be made. However, these are the same countries in which school health services (and indeed health-promoting schools more widely) will be the most

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challenging to implement unless efforts are concurrently made to strengthen the health and education systems in which professionals train and practice, as these are insufficiently oriented to adolescents. Without this, efforts to institute routine comprehensive adolescent health screening will fail to achieve their potential, wherever they are situated, because of the inability to sustainably take quality health services to scale. This includes the second routine checkup recommended by Chingono et al. in the community [4].

Among myriad challenges, the most notable is the lack of an adequately trained health workforce. Adolescent health and medicine is still vestigial within most undergraduate and postgraduate medical, nursing, community, and public health training in sub-Saharan Africa. However, systems are changing, at least in some countries. For example, the Ghana Health Service and the Ghana College of Physicians and Surgeons are supporting the development of new curricula in adolescent medicine for both undergraduates and postgraduates, with a new compulsory module on adolescent health for postgraduate training in family medicine. Access to a more specialized workforce will also be required, and there are concurrent plans in Ghana to make subspecialist fellowship training in adolescent medicine available to postgraduate trainees in family medicine and pediatric and internal medicine.

A more specific challenge is that the health system in which professionals operate is framed by laws and professional codes of conduct that reflect community values. Too many countries are yet to develop the necessary legal frameworks that support quality health care for adolescents, such as confidential health care for legal minors [11]. Although in Ghana, health professionals can legally provide contraception to unmarried sexually active adolescents, they are effectively stymied by lack of support from the community. Support from many different community stakeholders is required to enable the effective delivery of health care, including moving laws off statute books and into daily practice.

Given the significance of cost as a barrier to health care for adolescents, routine comprehensive health checkups and the requisite referral pathways will also only be effective (let alone equitable) when there is political will for adolescent health to be subsidized by national health insurance schemes. In too many countries, such schemes still only embrace maternal and child health as the main recipients.

Finally, leadership from associations for adolescent health can shape professional attitudes, support capacity building efforts, frame research priorities, and drive advocacy and engagement with governments, NGOs, schools, and communities. Despite Africa's large population of young people, there are remarkably few national associations for adolescent health. An important exception is Nigeria, where in August 2021, the Society for Adolescent

and Young People's Health in Nigeria hosted the first African Conference on Adolescent and Youth Health and Development.

This study represents an important early step toward strengthening health services for adolescents in Zimbabwe, especially when framed within the wider lens of school health services. The efforts of the research team to integrate findings across Zimbabwe, Tanzania, and Ghana suggest there could be wider applicability of the model if supported by future evaluations.

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