Research Snapshots

COVID-19 pandemic impacts on adolescents' lives in sub-Saharan Africa

This is a summary of the following paper: Wang, D., Chukwu, A., Millogo, O., Assefa, N., James, C., Young, T., Lankoande, B., Workneh, F., Hemler, E. C., Korte, M. L., Mattei, J., Soura, A. B., Sie, A., Oduola, A., Berhane, Y., & Fawzi, W. W. (2021). The COVID-19 Pandemic and Adolescents' Experience in Sub-Saharan Africa: A Cross-Country Study Using a Telephone Survey, The American Journal of Tropical Medicine and Hygiene. Available at:

https://europepmc.org/article/med/34161298

espite low COVID-19 case fatality rates among adolescents, the public health measures put in place to combat the pandemic may negatively impact the development and health of adolescents. This study – conducted in rural and urban locations in Burkina Faso, Ethiopia and Nigeria using computer assisted telephone interviews – examines COVID-19 knowledge, perceptions and preventive strategies among 1,795 adolescents aged 10-19 years and the impacts of the pandemic and its mitigation strategies on various aspects of the lives of adolescents in sub-Saharan Africa.

The results show that adolescents' knowledge of COVID-19 symptoms, transmission and prevention was limited, especially in rural settings. One major impact of the pandemic on adolescents was the exacerbated inequities in education.

Among adolescents who were enrolled in school, most reported school closures in response to the pandemic (> 95% in urban Burkina Faso and both sites in Ethiopia and ${\sim}60\%$ in rural Burkina Faso and both sites in Nigeria). Many adolescents (ranging from 23-81% across the study sites) did not receive any education during the pandemic. Many adolescents (44-83%) selfassessed as having less ability to learn during the pandemic. In Burkina Faso and Ethiopia, around half of the adolescents (43-51%) perceived that it would be very difficult to catch up on their education after the pandemic. Even in countries where alternative education channels were available, these were not accessible or affordable to adolescents living in poverty or in remote areas. Another major impact of the pandemic on adolescents was evidence of reduced food intake. Decreases in the consumption of the major food groups were common across the sites including a reduction in the consumption of staples (ranging from 9-54%), pulses (29-49%), fruits (18-41%), vegetables (3-34%) and animal-source foods (11-29%). In terms of the impact on mental health, levels of depression, anxiety and psychological distress were generally reported as low across all the study sites.

Understanding the impacts of the COVID-19 pandemic on adolescents is important to the design and targeting of interventions during and after the pandemic especially in sub-Saharan Africa where adolescents are often overlooked in public programming. This study serves as an initial evidence base for policymakers to design and implement such interventions.



Dietary intake and practices of adolescent girls in low and middle-income countries: A systematic review

This is a summary of the following paper: Keats, E.C., Rappaport, A.I., Shah, S., Oh, C., Jain, R. & Bhutta, Z.A. (2018). The Dietary Intake and Practices of Adolescent Girls in Low- and Middle-Income Countries: A Systematic Review. Nutrients, 10(12), 1978. Available at: https://doi.org/10.3390/nu10121978

dolescents represent an important and often overlooked group in nutrition programming and, in many low- or middle-income countries (LMICs), they regularly face a double burden of malnutrition: undernutrition (stunting, wasting, micronutrient deficiencies) and overnutrition (overweight/obesity). Adolescent girls are disproportionately affected, with iron, vitamin A and iodine deficiency being particularly prevalent in this group. To summarise the dietary intakes, patterns and practices of adolescent girls, defined as those aged 10-19 years, in LMICs, a systematic review of both grey literature and academic databases was completed according to the PICO framework. This constitutes the first review to look principally at the dietary patterns of adolescent girls in a quantitative manner that

would allow for more informed policy and programming initiatives targeted towards this vulnerable population.

Of the 227 articles meeting the inclusion criteria, 59% were conducted in urban populations and 78% in school settings. Studies represented LMICs across six regions: Africa (n=36), East Asia and Pacific (n=47), Europe and Central Asia (n=9), Latin America and the Caribbean (n=35), Middle East and North Africa (n=46) and South Asia (n=54).

Heterogeneity was apparent between the study methodologies. Mean energy intake was lower in rural settings (1621 ± 312 kcal/day) compared to urban settings (1906 ± 507 kcal/day). Self-reported daily consumption of nutritious foods was low; on average, 16% of girls consumed

dairy, 46% consumed meat/fish, 44% consumed fruits and 37% consumed vegetables. By contrast, energy-dense and nutrient-poor foods were consumed four to six times per week by many, namely sweet snacks (63%), salty snacks (78%), fast foods (23%) and sugar-sweetened beverages (49%). Forty per cent of all adolescent girls reported skipping breakfast but 49% reported snacking during the day.

Despite the non-representative nature of the studies included in this review, it nevertheless highlights the dietary shift among adolescent girls residing in LMICs towards a more 'western' diet, filled with ultra-processed foods. It is evident that dietary habits are suboptimal within this group and that the already apparent double-burden of malnutrition is likely to become entrenched while remaining on this dietary trajectory, leading to major non-communicable disease implications in low- and middle-income settings.

Study heterogeneity within this review highlights the need for more consistent, representative nutrition data for adolescent girls to address both current data limitations and allow for comparison between studies. The authors highlight that this is especially pertinent considering the importance of good nutrition in adolescent girls, particularly those who are pregnant.