

## GUEST EDITORIAL

## Colliding epidemics of communicable and non-communicable diseases during adolescence in South Africa

Over the past 50 years, the improvement of health outcomes in infants and young children has received more attention than that in adolescents, primarily because adolescence is not typically associated with ill health. However, this picture is rapidly changing, with the present generation of adolescents already encountering diverse challenges, with different biosocial and neurocognitive responses compared with their parents and grandparents. These transitions are influenced by geographical, cultural, economic and genetic contexts. This issue of CME includes the final two articles on the topic of adolescent health.

Coovadia *et al.*<sup>[1]</sup> highlight the epidemiological transitions taking place in South Africa (SA) during adolescence, from a predominance of infectious diseases and complications of malnutrition to a growth of and convergence with non-communicable disorders (NCDs). The health and economic implications of NCDs are increasing, and they are initiated by early-life malnutrition and later-life obesity. The most common NCDs are those related to obesity, diabetes, hypertension and mental disorders. The article underscores the importance of early events during adolescence that lay the foundations for and are predictive of chronic conditions during adulthood, and highlights the opportunity to prevent this by addressing issues during the early stage of susceptibility. Factors that contribute to adolescent NCDs include early sexual exposure, unprotected sex, multiple sex partners, indoor open stoves, allergies, substance abuse, violence, exposure to pollutants, lack of exercise and diet. The article alerts health practitioners to the importance of paying attention to a pattern of diseases that predict the development of NCDs later in life.

Peer and Ganie<sup>[2]</sup> highlight the fact that we are already facing an NCD crisis in SA. The severity of the obesity epidemic in this country can be illustrated by the fact that nearly one in every five SA boys and one in every four girls is obese. This has major consequences for cardiometabolic disease (type 2 diabetes mellitus, high blood pressure, dyslipidaemia), respiratory conditions

(obstructive sleep apnoea), gastrointestinal disease, musculoskeletal disease, psychological problems (depression) and social difficulties (stigmatisation), and has huge cost implications for healthcare delivery and the quality of life of the next generation of adults. A key contributor to overweight and obesity in adolescents is a more sedentary lifestyle, in parallel with the overconsumption of high-density refined foods. Early diagnosis and interventions to reduce obesity during adolescence can have a huge impact on improving adult health outcomes. Creating healthier environments, an increase in physical activity, and increasing awareness of healthy food choices during adolescence can make a big difference in containing the obesity epidemic, and minimise the need for weight loss medications or bariatric surgery and avert the serious long-term consequences.

The growing epidemic of NCDs in SA, together with the current high burden of communicable diseases, including HIV, and high teenage pregnancy rates, underscores the urgent need for innovative prevention interventions and access to treatment programmes to ensure that adolescents grow up to be healthy and productive adults.

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