Title: Factors associated with and socioeconomic inequalities in underweight, overweight and obesity among adults aged 18–49 years in Lesotho: Evidence from the 2023–2024 Demographic and Health Survey

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Abstract: The coexistence of underweight and overweight/obesity within populations presents a major public health concern for low- and middle-income countries undergoing rapid nutrition transition. In Lesotho, limited evidence exists on the prevalence, determinants, and socioeconomic inequalities of these conditions among adults. This study utilized data from the nationally representative 2023–2024 Lesotho Demographic and Health Survey (LDHS), comprising 5,457 adults aged 18–49 years. Body mass index (BMI) was categorized as underweight (<18.5 kg/m^2), normal weight (18.5–24.9 kg/m^2), and overweight/obese (≥25.0 kg/m^2). Weighted prevalence estimates, multinomial logistic regression, and concentration indices were used to examine associated factors and socioeconomic inequalities. Among adults aged 18–49 years in Lesotho, 15.2% were underweight, 48.2% had normal BMI, and 36.6% were overweight or obese. The prevalence of underweight was more common among men (22.6%), younger adults (18–29 years, 15.9%), and urban residents (17.2%). Conversely, overweight/obesity was more prevalent among women (54.8%), adults aged 40–49 years (47.9%), and individuals in the highest wealth quintile (51.0%). Multivariable analyses showed that older age, female sex, higher education, ever being married, and higher wealth index were significantly associated with overweight/obesity, while males and younger adults were more likely to be underweight. Concentration index analysis indicated no significant inequality in underweight [Concentration Index: 0.003, $p > 0.05$] but a significant pro-rich inequality for overweight/obesity (Concentration Index: 0.218, $p < 0.001$). Lesotho is undergoing a double burden of malnutrition, characterized by persistent underweight among men and younger adults, alongside an increasing prevalence of overweight and obesity among women and individuals in higher socioeconomic strata. Integrated, gender-sensitive, and equity-focused nutrition strategies are needed to address both forms of malnutrition. Strengthening the implementation of the national Food and Nutrition Policy and the Non-Communicable Disease Strategic Plan is essential to mitigate the rising burden of non-communicable diseases.

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