## DETERMINANTS OF NUTRITIONAL PROBLEMS AMONG ADOLESCENT GIRLS IN MYANMAR

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## ABSTRACT

Adolescents are nutritionally vulnerable for certain reasons, such as their increased nutritional requirements for growth, eating patterns, and lifestyles. Earlier maturation of females and variations in physiological needs and other factors like low social status, poverty, and lack of education make adolescent girls more likely to suffer from nutritional deficiencies, mainly anaemia, undernutrition, and obesity. The study aims to assess the determinants of nutritional problems among adolescent girls in Myanmar 2015-16. The study is a secondary data analysis of the Myanmar Demographic and Health Survey 2015-2016, which was conducted as a nationwide cross-sectional study in 2015-2016. A total of 1,810 adolescent girls (15-19 years) were included in this analysis. The prevalence of anaemia among adolescent girls was 47.5% (95%CI:44.4,50.7), and determinants of anaemia were region, wealth index and marital status. Binary logistic regression showed the odds of getting anaemia among adolescent girls in coastal region was 2.02 times (95%CI:1.41,2.88), delta region 2.15 times (95%CI:1.53,3.02), central plain 2.06 times (95%CI:1.49,2.86) higher than those in the hilly region and 31% less in married adolescent girls compared to never-married girls (aOR=0.69; 95%CI:0.49,0.97). The prevalence of short stature among adolescent girls was 7.3% (95%CI:5.9,8.9), and determinant of short stature was wealth index. The odds of getting short stature among adolescent girls was 2.68 times higher in the middle wealth quintile (95%CI:1.27,5.66) and 3.21 times higher in the lowest wealth quintile (95%CI:1.59,6.47) compared to those in the highest wealth quintile. The prevalence of underweight among adolescent girls was 27% (95%CI:24.4,29.7) while overweight and obesity was 4.5% (95%CI:3.3,6.0), and determinants of underweight and overweight/ obesity were region, wealth index and child bearing. Multivariable multinomial logistic regression analysis showed that the relative risk of getting underweight among adolescent girls in coastal region was 2.39 times (95%CI:1.54,3.72), delta region 2.16 times (95%CI:1.43,3.25), central plain 1.92 times (95%CI:1.26,2.93) higher than those in the hilly region and 68% less in those who had child bearing history compared to those who had not (RRR=0.32; 95%CI:0.14,0.76). The relative risk of getting overweight and obesity was 1.9 times higher in adolescent girls who had child bearing history compared to those who had not (95%CI:0.67,5.44). Regional variation and socioeconomic status difference

greatly affect the prevalence of anaemia, underweight, overweight/ obesity, and adolescent girls from coastal and delta regions were the most vulnerable. Health education on awareness of nutritional problems and preventive measures targeted to adolescent girls should be strengthened to reduce nutritional problems among adolescent girls in these regions and community participation should be empowered. Integrated nutrition intervention programs, including iron and folic acid tablets supplementations, treatment of hookworm, and sanitation programs for adolescent girls, should be strengthened under joint workforce of MCH, School Health and Nutrition Unit. More studies should be carried out regarding regional disparities in dietary patterns and lifestyle modification of adolescent girls in Myanmar.