

# Prevalence and determinants of the Double Burden of Malnutrition among Adolescents in Nepal: Results from an urban sample

## **Presenter Name**

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## Background

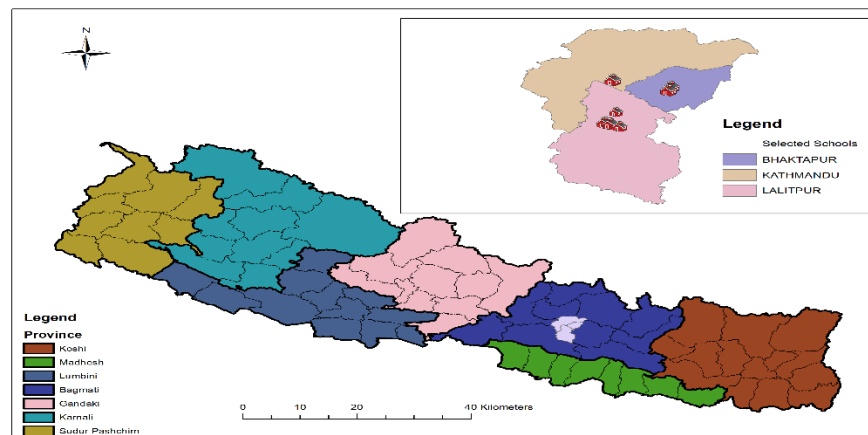
The effects of the double burden of malnutrition among adolescents has been largely overlooked, despite clear evidence of its serious long-term health impacts. In Nepal, undernutrition and overnutrition coexist within the same populations, households, and individual level.

## Aim

The main objectives of this study are to investigate the prevalence and associated factors of undernutrition, overnutrition, concurrent stunting, and overweight/obesity among adolescents in urban areas of Kathmandu Valley, Nepal.

## Methods

A school-based cross-sectional study was conducted to assess factors associated with the DBM among adolescents in Kathmandu Valley, Nepal. The study employed a multi-stage cluster random sampling technique, following the Probability Proportional to Size method, to ensure the selection of desired number of participants. Students from grades 8 to 10 were randomly selected for face-to-face interviews and anthropometric measurements, with tools adapted to the local context. Bivariate and multivariable models were applied to analyze the relationship between variables such as socio-demographic characteristics, behaviors, dietary habits, and nutritional knowledge.



### WHAT IS ALREADY KNOWN ON THIS TOPIC

- In Nepal, undernutrition remains a significant problem among adolescents, particularly affecting adolescent girls. To address this issue, the Government of Nepal has implemented the School Health and Nutrition Program and initiated the distribution of biweekly iron-folic acid supplements to combat micronutrient deficiencies. Currently, urban school adolescents are facing an emerging challenge of overweight and obesity.

### WHAT THIS STUDY ADDS

- The present study aimed to contribute empirical evidence on the existence of the double burden of malnutrition in Kathmandu Valley, the capital city of Nepal.
- The study highlights how social determinants of health and their impact on adolescent nutrition in Nepal
- This research is expected to provide valuable insights into the need for policy adjustment to address overnutrition while simultaneously scaling up current programs by integrating these emerging issues.

### HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

- This research will shed light on the nutritional challenges faced by adolescents in rapidly developing areas of Nepal.
- The findings are expected to inform future interventions and policy decisions, emphasizing the need for a more holistic approach to nutrition programs that address the complexities of the double burden of malnutrition

## Results

The results of the socio-demographic characteristics, behavioral factors, dietary habits, and level of nutritional knowledge are significantly associated with stunting, thinness, and overweight/obesity among students. The findings of this study revealed that 15.3% of the students were stunted, 5.5% were underweight, 16.9% were overweight/obese, and 3% of students with the coexistence of DBM.

The odds of stunting were significantly higher among older adolescents, those from extended families, and those with parents having lower levels of education. Conversely, physical activity, nutritional knowledge, and moderate diet quality reduced stunting risks. Gender and age influenced thinness, while parental education levels significantly impacted the risk of overweight/obesity.

## Conclusion

The findings underline the complexity of adolescent nutrition and the various socio-demographic and behavioral factors at play. The study concludes that DBM is prevalent among adolescents in Kathmandu Valley, highlighting the need for targeted interventions to address both undernutrition and overnutrition.

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