# Obesity in South-East Asia: a Rising Concern

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## Introduction

The proportion of morbidity and mortality attributed to Non-communicable diseases (NCDs) is uniformly escalating around the world, including South East Asia. Obesity, a condition attributed to excess body fat, is one of the major risk factors for NCDs and is most commonly measured using the body mass index (BMI). Globally, BMI 25-29.9 and >30 kg/m$^2$ are defined as overweight and obesity, respectively, in adults. Among children under five, weight-for-height (WFH) >3 standard deviation (SD), and among children 5-19 years, WFH >2SD is defined as obesity[1].

Most recent estimates suggest that approximately 42% (2.2 billion) of adults are living with overweight or obesity. This prevalence is expected to escalate to 54% (3.3 billion) by 2035. The high BMI is responsible for over 120 million adult person-years lost to these four leading NCDs each year. For young people aged 5 to 19 years, the figure rises from 22% experiencing high BMI (430 million) to over 39% (770 million) by 2035. Three-quarters of these avoidable deaths and diseases in adults occur in low-middle-income countries, which have also shown the highest percentage changes in the prevalence of overweight and obesity in the last 3 decades (Fig. 1).

Countries in SEA are in a state of nutrition transition driven by flourishing economic development and urbanization, which have led to lifestyle changes. The prevalence of overweight and obesity among SEA adults was estimated to be around 26% in 2020, amounting to between 256 and 78 million. If the current trends continue, the prevalence is expected to escalate to 39% by 2035. Most of the World Health Organization's South East Asian (SEA) countries are included in the list of the top 20 countries with the most rapid increase in the proportion of adults living with high BMI from 2000 to 2016[2]. Within SEA countries, there are widespread disparities concerning the impact of obesity with respect to the number of healthy life years lost, being the highest in Thailand and Sri Lanka and lowest in Timor-Leste and Bangladesh (Fig. 2)[3].

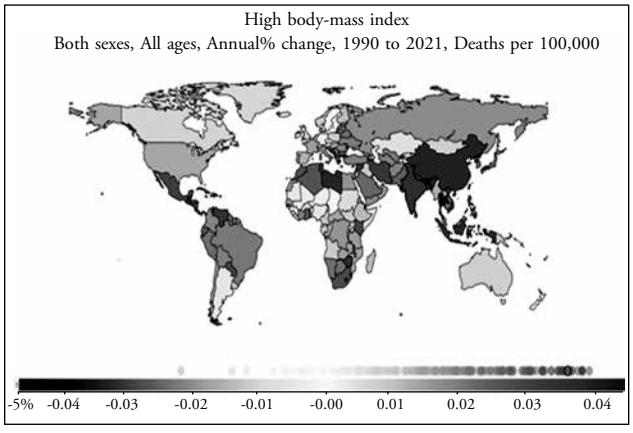



**Figure 1.** Worldwide annual percentage changes in the number of obesity-related deaths between 1990 and 2021.

The most common reasons for the increasing prevalence of overweight and obesity in SEA are behavioral risk factors like unhealthy diets and lack of physical activity. The growing paradox of undernutrition and obesity in the same population, commonly described as the double burden of malnutrition, impacts the population's health status and is straining national health capacities.

High BMI was among the top 10 causes of all-cause mortality across all age groups in 2021 and has shown the steepest increase since 1990 (Fig. 3). It has a major public health implication due to its impact on worsening other morbidities like diabetes, hypertension, stroke, cardiovascular disorders, and certain cancers. As a result, the obesity epidemic's direct and indirect financial effects on SEA countries are significant, valued at $7.5 billion (7.7% of total health care expenditure

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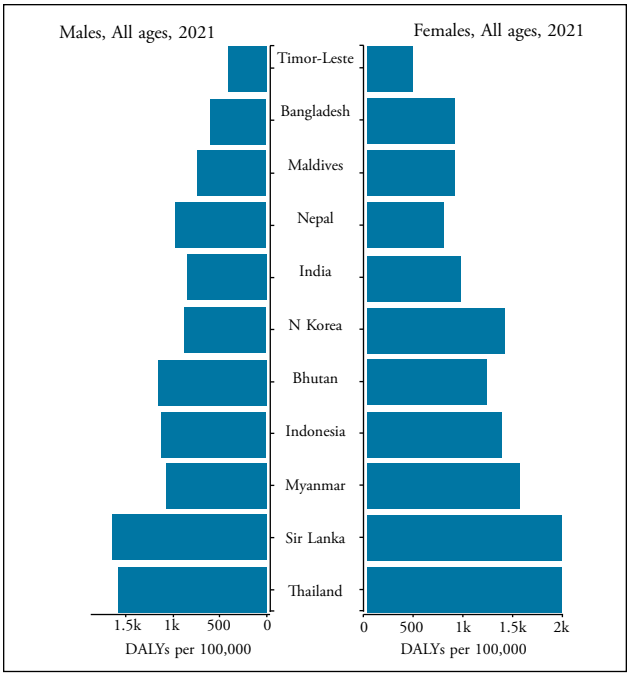



**Figure 2.** Disparities with South East Asian countries concerning the impact of obesity on loss of disability-adjusted life years.

and 0.3% of GDP) and $3.8 billion (5.1% of total health care expenditure and 0.2% of GDP), respectively.

In conclusion, the rising burden of obesity and its impact on overall health in SEA is worrisome. Systematic health education (primordial prevention) and health promotion (primary prevention) about the risk factors, healthy dietary habits, lifestyle, and regular exercise should be advocated with regular screening with early diagnosis and treatment of consequences (secondary prevention)[1]. There is an urgent need to look at the broader determinants of health before this problem overwhelms our health system and drains our budget, which could otherwise be used to realize our other priorities.




**Figure 3.** Trends depicting the position of major risk factors toward all-cause mortality between 1990 and 2021.

## References

1. World Health Organisation, Switzerland, Obesity and overweight. Available from: https://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight
2. World Obesity Atlas 2024, Obesity and its consequences. Available from: https://s3-eu-west-1.amazonaws.com/wof-files/WOF_Obesity_Atlas_2024.pdf
3. Institute for Health Metrics and Evaluation, Global Burden of Disease, 2021. Available from: http://vizhub.healthdata.org/gbd-compare

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