



EMPHNET's Research Digest

Nutrition Profile for Countries of the EMR with Different Income Levels: An Analytical Review

Introduction

As of 2016, over 1.9 billion adults were overweight globally, with more than 600 million of them having obesity. Children are not immune to this epidemic. By 2020, around 39 million children under five were overweight, marking a significant increase (5.6 Million) since the start of the millennium.

Meanwhile, malnutrition presents its own set of grim challenges. Globally, roughly one in three individuals suffer from some form of malnutrition. Symptoms range from stunting and wasting to micronutrient deficiencies. Such malnutrition patterns in childhood, whether it is undernutrition or excessive consumption, lay the foundations for adulthood obesity, overweight, and NCDs. Alarmingly, as of recent global estimates, approximately 149 million children under five are stunted, 45 million are wasted, and 39 million are overweight.

Malnutrition and micronutrient deficiencies health challenges in the Eastern Mediterranean Region (EMR). Anemia, often resulting from iron deficiency, is widespread, particularly among women and children. This deficiency manifests in fatigue, dizziness, diminished work capacity, and heightened vulnerability to infections.

Pregnant women with anemia face miscarriages, stillbirths, deliveries, and infant mortality. In 2019, the World Health Organization's Global Health Observatory (WHO-GHO) reported alarmingly high rates of anemia in the region, with nations like Yemen, Somalia, Pakistan, and Afghanistan leading the dire statistics. By endorsing the WHO Strategy on Nutrition for the EMR (2020–2030) in October 2019, the EMR countries committed to strengthened action on nutrition to achieve food security, end all forms of malnutrition, and improve nutrition throughout the life course by 2030.

This digest is based on a paper, titled “Nutrition Profile for Countries of the Eastern Mediterranean Region with Different Income Levels: An Analytical Review”, published in “Children”, that delves into the nutritional status of various income groups in the EMR, particularly focusing on metrics like child malnutrition rates for children under five, infant and young child feeding practices, and the prevalence of anemia in women of reproductive age.

Data related to overweight and obesity in children, adolescents, and adults were primarily derived using age-standardized estimates, while the Body Mass Index (BMI) was employed as a metric for defining overweight and obesity. The paper sourced demographic and economic indicators from the World Bank, and nutrition-specific data from the WHO-GHO and the Eastern Mediterranean Health Observatory. The study

also undertook a comprehensive review of existing nutrition policies and strategies within the EMR, tapping into databases like the WHO Global database and regional health observatories. Countries in the EMR were grouped into income categories based on the World Bank's criteria. To discern patterns, the study utilized a weighted average approach, focusing on key indicators like child malnutrition and anemia rates across various income groups.

Results

Demographics

An examination of the 0–14 aged population within EMR income groups shows notable disparities. The low-income group has the highest percentage within this age group in comparison to other income groups. Specifically, every low-income country in the EMR has more than 30% of its population in the 0–14 age range, with both Afghanistan and Somalia exceeding 40%. Conversely, high-income countries such as Qatar and the UAE reported percentages of 15% or lower for the same age group. As for the under-five mortality rate, Somalia leads with 117 deaths per 1000 live births, closely followed by Pakistan with 67 deaths per 1000 live births. High-income countries have rates below 10, with Oman being a slight exception at 11.

Child Malnutrition (Children under Five Years)

Over the past two decades, child malnutrition in the EMR demonstrated that under-five stunting was more common in low-income countries, with decreasing prevalence as income levels rise. Notably, Sudan in the low-income group had the highest prevalence of wasting in children under five at 14.1% in 2018. The most significant reduction in wasting during the last two decades was observed in high-income countries. In the high-income group, stunting prevalence decreased significantly from 12.6% to 5% over 20 years. However, the

prevalence of overweight in children below five almost doubled from 3.5% to 7.6% from 2000 to 2020. This trend of reducing stunting but increasing overweight prevalence was also observed in upper-middle and lower-middle-income groups. Interestingly, the low-income group experienced a decline in overweight prevalence from 6.7% to 4.9% during the same period.

Infant and Young Child Feeding

No clear correlation between income levels and breastfeeding practices in the EMR was found. Oman recorded the highest rate of early breastfeeding initiation at 82% in 2017, closely followed by Iran and Sudan. Sudan also led in exclusive breastfeeding rates at 61.5% in 2018. Conversely, Pakistan, Egypt, and Libya reported the lowest early breastfeeding initiation rates, with Kuwait, Yemen, and Djibouti having the lowest exclusive breastfeeding rates.

Anemia in Women of Reproductive Age

Anemia prevalence in reproductive-aged women over the last two decades was highest in the low-income group. This trend decreased in all income groups except for the lower-middle-income group until around 2013, after which it began to rise again. The anemia situation is particularly concerning in low-income countries, with a consistent prevalence of over 40% from 2000 to 2019.

Overweight in Children and Adolescents Aged 5–19 and in Adults

Over the 16-year period from 2000 to 2016, overweight prevalence among children and adolescents aged 5–19 was highest in high-income EMR countries, followed by upper-middle, lower-middle, and low-income groups. There was a significant rise in overweight prevalence across all income groups, both in children and adults. In 2016, every high-income EMR country exceeded the global

overweight prevalence for both children and adults.

Obesity in Children and Adolescents Aged 5–19 and in Adults

Similar to overweight trends, obesity rates among children and adolescents aged 5–19 from 2000 to 2016 were highest in the high-income EMR countries and increased with income levels. All high-income EMR countries had obesity rates in 2016 that were more than double the global average for both children and adults.

Conclusion

The nutrition profile of the EMR presents a unique and intricate set of health challenges. The double burden of malnutrition—encompassing both undernutrition and overnutrition—is evident across various income levels in the EMR, manifesting distinctly in each. Children, regardless of the economic group, face alarming rates of stunting, wasting, and overweight and obesity tendencies. Moreover, the pervasive issue of anemia among women of reproductive age, especially in low-income nations, warrants immediate attention.

Malnutrition Outcomes in Children Under Five Years of Age

Stunting:
Height-for-age less than two standard deviations



Wasting:
Weight-for-height less than two standard deviations



Overweight:
Weight-for-height greater than two standard deviations



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