



## Addressing Childhood and Adolescent Obesity in Jordan and Arab Nations of the Eastern Mediterranean Region: Urgent Action Needed

Ala'a B. Al-Tammemi\*, Dalia Zayed

Research, Policy, and Training Directorate, Jordan Center for Disease Control (JCDC), Amman, Jordan.

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**\*Corresponding author:** Ala'a B. Al-Tammemi, MD, MPH, Director of Research, Policy, and Training Directorate Jordan Center for Disease Control (JCDC). Amman 11180, Jordan.

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### Abstract:

The alarming rise in obesity among children and adolescents constitutes a threat to global public health and imposes significant challenges in terms of the associated health and economic burden worldwide

**Keywords:** obesity; children; adolescents; Jordan; EMR

### Dear Editor

The alarming rise in obesity among children and adolescents constitutes a threat to global public health and imposes significant challenges in terms of the associated health and economic burden worldwide. Based on recent data released by the WHO, the prevalence of obesity among children and adolescents aged 5 to 19 years has increased by 6.3% from 1.94% in 1990 to 8.24% in 2022 globally [1]. It is important to stress the point that obesity acts as a major risk factor for many chronic diseases including cardiometabolic diseases, respiratory disorders, musculoskeletal disorders, and many cancers such as gastrointestinal, renal and endometrial cancers [2]. As the prevalence of obesity among children and adolescents is alarmingly increasing in low- and middle-income countries as well, this public health menace could add to the health and economic burden especially in limited resources settings, in terms of short and long term physical and psychological complications, including its progression into adult obesity [3].

The WHO Eastern Mediterranean Region (EMR) comprises 22 countries with a population count of approximately 725 million in 2020 [4]. Like other regions, the EMR has undergone an epidemiological transition from primarily communicable diseases to non-communicable diseases over the past few decades. This can be attributed to many factors such as demographic changes, urbanization and globalization, lifestyle changes, and challenges in the health systems. The EMR is considered a challenging region due to various political, economic, and demographic factors. Addressing the growing burden of obesity among children and adolescents in the EMR requires extensive and comprehensive multifaceted efforts. Eating habits and the overall lifestyle of people living in many countries in the EMR are influenced by cultural, socioeconomic, and environmental factors, which add to the challenges in confronting obesity among young age groups [4].

Jordan is a middle-income country located in the EMR with a population count of approximately 11.5 million [5]. Approximately, 40% of the population in Jordan is under 18 years of age. In 2022, 3.71 million were estimated to be in the age group of 5-19 years in Jordan [6]. Among children and adolescents aged 5 to 19 years in Jordan, the prevalence of obesity has been a growing concern, and has increased by 12.6% from 5.18% in 1990 to 17.8% in 2022 [1]. On the other hand, among children under 5 years in Jordan, the prevalence of obesity is also alarming and was estimated to be approximately 2.2% in 2019, affecting boys more than girls, children living in urban areas, and those living in wealthier households [7].

Additionally, and as per data from the WHO, other countries in the EMR have also witnessed a dramatic increase in the prevalence of obesity among children and adolescents aged 5-19 years during the period 1990-2022. In 2022, the prevalence of obesity among children and adolescents aged 5-19 years was estimated to be 20.4% in Egypt, 18.6% in Iraq, 21.2% in Kuwait, 18.6% in Lebanon, 18.8% in Oman, 13.5% in the occupied Palestinian territory - including east Jerusalem, 23.9% in Qatar, 18.1% in Saudi Arabia, and 21.4% in the United Arab Emirates. In reference to 1990, the prevalence of obesity among this age group has worsen by 10.6% in Egypt, 13.2% in Iraq, 10.2% in Kuwait, 14.1% in Lebanon, 14.3% in Oman, 10.3% in the occupied Palestinian territory - including east Jerusalem, 16.4% in Qatar, 13.8% in Saudi Arabia, 13.4% in the United Arab Emirates [1].

Looking at this this issue from a public health lens, tackling and combatting obesity among children and adolescents in Jordan and other countries in the EMR where the burden of obesity is increasing need to be through a comprehensive multi-sectoral approach that addresses the driving factors of this public health threat and promotes healthy behaviors and lifestyles. The nutrition transition which affected the EMR region with an increase in the availability of affordable unhealthy drinks and fast-food products warrants additional efforts to prevent obesity. Targeting children and adolescents in the age group of 5 to 19 years through multifaceted efforts and awareness campaigns has a paramount importance in combatting obesity. Therefore, targeted large-scale awareness campaigns that are based on the constructs of the Health Belief Model (perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy) are expected to facilitate the adoption of health lifestyles among people.

Confronting obesity should be systematically strengthened through utilizing all the available resources such as media (digital, printed, and broadcasted), primacy health care centers, schools, community, and non-state actors in enforcing national nutrition strategies and regulations, raising public awareness about the dangers of obesity, promoting healthy eating habits, encouraging regular physical activity, discouraging sedentary lifestyles, establishing a supportive and healthy school environment, fostering active living environment, and enhancing the family roles in obesity prevention and early intervention. Although tackling and confronting obesity is challenging especially in settings with limited resources and where sociocultural factors are considered a strong influence (like in Jordan and many countries in the EMR), a

solidarity in the national and regional efforts is considered the cornerstone in preventing obesity among young generations.

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## References

1. WHO. Prevalence of obesity among children and adolescents aged 5 to 19 years.
2. Pati S, Irfan W, Jameel A, Ahmed S, Shahid RK. Obesity and Cancer: A Current Overview of Epidemiology, Pathogenesis, Outcomes, and Management. *Cancers (Basel)* 2023;15.
3. Fraiwan M, Almomani F, Hammouri H. Body mass index and potential correlates among elementary school children in Jordan. *Eat Weight Disord - Stud Anorexia, Bulim Obes* 2021;26:629–38.
4. Al-Jawaldeh A, Abbass MMS. Unhealthy Dietary Habits and Obesity: The Major Risk Factors Beyond Non-Communicable Diseases in the Eastern Mediterranean Region. *Front Nutr* 2022;9.
5. Department of Statistics. Population Count Jordan. 2024.
6. Department of Statistics. Estimated Population by Age Groups in Jordan. [Online] 2022. (accessed April 29, 2024).
7. Ministry of Health. Jordan’s National Nutrition Strategy 2023-2030. [Online] 2023. (accessed April 29, 2024).