http://www.jhpr.ir
Hosp Pract Res. 2026 November;11(Special Issue 1):8-9
doi 10.30491/hpr.2026.256774
HPR
Hospital Practices and Research
Policy Brief

Metabolic Syndrome Burden in a Military Town: Evidence for Targeted Health Interventions

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Received October 2, 2026; **Accepted** November 4, 2026; **Online Published** November 10, 2026

Abstract
Metabolic syndrome is a major public health concern that increases the risk of chronic diseases such as cardiovascular diseases and diabetes. The aim of this study was to determine the prevalence of metabolic syndrome in a military town in Tehran. The findings revealed a notably high prevalence of metabolic syndrome within the study population. According to the results of the study, urgent interventions in health policies focusing on a healthy diet, physical activity, and systematic screening are recommended to reduce the long-term burden of chronic diseases.
Keywords: Metabolic Syndrome, Military Health, Lifestyle Policy

1. Background

Metabolic syndrome is a group of abnormalities, including abdominal obesity, insulin resistance, dyslipidemia, and hypertension. Metabolic syndrome is associated with type 2 diabetes, cardiovascular disease, and nonalcoholic fatty liver disease. To our knowledge, no study has been conducted on the prevalence of metabolic syndrome in military families. This study aimed to determine the prevalence of metabolic syndrome in a military town in Tehran.[1-3]

2. Methods

This was a cross-sectional study conducted on participants referred to a health center within a military town in Tehran. Metabolic syndrome components, including triglycerides, high-density lipoprotein cholesterol (HDL-C), waist circumference, fasting blood sugar, and blood pressure, were measured. Metabolic syndrome was diagnosed according to the Iranian National Committee of Obesity criteria.

3. Results

The results of the present study showed that metabolic syndrome is highly prevalent in the studied population. The most common components of metabolic syndrome were low HDL-C and abdominal obesity.

4. Discussion and Conclusion

Considering the notably high prevalence of metabolic syndrome among families of military personnel, regular screening is necessary to identify those at higher risk. Moreover, implementing metabolic syndrome prevention strategies, such as lifestyle modification, following a balanced diet, and increasing physical activity, is recommended for this population group.

5. Policy Recommendations

1. Lifestyle Intervention Programs: Provide mandatory and low-cost programs that include physical activity sessions and nutrition counseling for people living in military towns.
2. Standardized Systematic Screening: Develop an annual screening program for all components of metabolic syndrome in military families (for example, adults aged 30 and older) to early detection and prevention.
3. Environmental and Nutritional Policy Modifications: Implement policies to improve the nutritional environment within military towns, including commissaries, restaurants, and schools.

Acknowledgments

Researchers thank to guidance and advice from the "Clinical Research Development Unit of Baqiyatallah Hospital".

Author Contributions

Authors contributed equally to this work.

Conflict of Interest Disclosures

All authors declared that they have no conflict of interest.

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