



DOI: <https://doi.org/10.56936/18290825-2023.17.3-31>

STROKE RISK ASSESSMENT AND DIET-RELATED RISK FACTORS – COMPARISON OF TWO CITIES FROM BOSNIA AND HERZEGOVINA

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Received 11.02.2023; accepted for printing 5.06.2023

ABSTRACT

Stroke, as one of the cardiovascular diseases, is becoming more of a priority for health systems around the world, but especially in developing countries. Mortality rates had increased drastically in developing countries in comparison to developed countries. This shift is thought to be driven by multiple reasons; the ageing of population, difference in socioeconomic status, health care, just to name a few. Change in risk factors is driven by the economic development. The majority of stroke risk factors are lifestyle related which is strongly affected by the urbanization processes. For stroke, the most important risk factors are hypertension, high blood cholesterol, diabetes, obesity, lack of physical activity and poor diet.

Present study aimed to calculate the stroke risk in adults from two different urban settings in one developing country.

A cross-sectional observational study was conducted on 210 adults from two cities (Mostar and Sarajevo) in Bosnia and Herzegovina. Stroke risk was calculated with the “Stroke Risk Quiz” developed by the American Heart Association and the American Stroke Association. To assess the compliance of diet with the recommendations for stroke prevention we developed a short point-based questionnaire which focused on the consumption of 16 foods/food groups. Study participants from Sarajevo, capital of Bosnia and Herzegovina, have lower stroke risk compared to those from Mostar, a smaller city close to the Adriatic coast, where we expected to see the protective effect of the Mediterranean lifestyle which is traditional in the area. In Sarajevo, the dominant risk factors identified include increased body weight and blood pressure, and smoking. Only diet in Mostar reflects the Mediterranean, but family history of cardiovascular diseases, higher blood cholesterol levels and lower level of physical activity among study participants from Mostar surpass the benefit of a better diet and lower body mass.

Our findings support the idea that different (urban) settings require public health systems to adapt their educational and intervention activities to improve health indicators of populations and lead to reductions in health care expenses.

KEYWORDS: stroke, diet, lifestyle, developing countries, Bosnia and Herzegovina.

CITE THIS ARTICLE AS:

Banjari I., Han S., Al-Tawil N., Čorić N., Balkić Widmann J. (2023). Stroke Risk Assessment And Diet-Related Risk Factors – Comparison Of Two Cities From Bosnia And Herzegovina; The New Armenian Medical Journal, vol.17(3), p 31-39; <https://doi.org/10.56936/18290825-2023.17.3-31>

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