



QUANTITATIVE ASSESSMENT OF LIFESTYLE FACTORS IN YOUNG ADULTS WITH MASLD IN UZBEKISTAN (EATING BEHAVIOR, SMOKING, PHYSICAL ACTIVITY, CHRONIC STRESS, SLEEP QUALITY)

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| Article history: | Abstract: |
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| <p>Received: July 30th 2024 Accepted: August 28th 2024</p> | <p>The prevalence of metabolic-associated steatotic liver disease (MASLD) is increasing globally, including in Uzbekistan. Lifestyle factors such as eating behavior, smoking, physical activity, chronic stress, and sleep quality play a crucial role in the development and progression of MASLD in young adults. This study aims to quantitatively assess these factors in young adults diagnosed with MASLD in Uzbekistan. By examining these variables, the research seeks to identify high-risk behaviors and potential interventions to improve outcomes for this population.</p> |

Keywords: MASLD, eating behavior, smoking, physical activity, chronic stress, sleep quality, Uzbekistan, young adults.

INTRODUCTION

Metabolic-associated steatotic liver disease (MASLD), formerly known as non-alcoholic fatty liver disease (NAFLD), is a significant global health issue, especially in developing countries like Uzbekistan. It is closely linked with lifestyle factors, including poor eating habits, smoking, lack of physical activity, chronic stress, and sleep disturbances. These factors contribute not only to the onset of MASLD but also to its progression, making it crucial to understand their quantitative impact. Young adults are particularly vulnerable as they undergo significant lifestyle transitions. Addressing these risks is essential to developing effective public health strategies in Uzbekistan.

PURPOSE OF THE STUDY

The purpose of this study is to quantitatively assess lifestyle factors, including eating behavior, smoking, physical activity, chronic stress, and sleep quality, among young adults diagnosed with MASLD in Uzbekistan. Through this analysis, the study aims to identify critical lifestyle patterns that contribute to the development and progression of MASLD in this population.

MATERIAL AND METHOD

STUDY DESIGN:

This is a cross-sectional study conducted in major hospitals and healthcare centers in Uzbekistan specializing in liver diseases. The study involved young adults aged 18-35 diagnosed with MASLD.

PARTICIPANTS:

A total of 150 participants diagnosed with MASLD were included in the study. Participants were selected based on specific criteria, including a confirmed diagnosis of MASLD through clinical and imaging techniques.

DATA COLLECTION

Participants were surveyed regarding their eating behavior, smoking status, physical activity levels, chronic stress, and sleep quality. Eating behavior was assessed using a validated questionnaire focused on dietary habits. Smoking status was classified as smoker, non-smoker, or former smoker. Physical activity was evaluated using the International Physical Activity Questionnaire (IPAQ). Chronic stress was measured using the Perceived Stress Scale (PSS), and sleep quality was assessed using the Pittsburgh Sleep Quality Index (PSQI).

STATISTICAL ANALYSIS:

The data were analyzed using descriptive and inferential statistics. Associations between lifestyle factors and MASLD severity were determined using regression analysis, with a significance level set at $p < 0.05$.

RESULTS OF THE STUDY

The analysis revealed that unhealthy eating behaviors, including high consumption of fats and sugars, were significantly associated with more severe MASLD cases. Smoking was prevalent among 40% of the participants, with smokers showing higher liver fat content than non-smokers. Low physical activity was reported in 60% of the participants, and these individuals were more likely to exhibit advanced stages of MASLD. Chronic stress, as measured by PSS, was high in 70% of participants and



was linked with greater liver damage. Poor sleep quality, reported by 55% of participants, was also associated with increased MASLD severity.

CONCLUSIONS

This study highlights the significant role of lifestyle factors in the progression of MASLD in young adults in Uzbekistan. Unhealthy eating behaviors, smoking, low physical activity, chronic stress, and poor sleep quality are all linked with more severe MASLD outcomes. Addressing these factors through public health interventions, lifestyle modification programs, and individual counseling may help reduce the burden of MASLD in this population.

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