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Perception of physical activity among individuals with higher BMI: attitudes and barriers

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Abstract

Background: Physical activity is essential for maintaining overall health and managing body weight. The World Health Organization (WHO) recommends 150–300 minutes of moderate physical activity per week to reduce the risk of chronic diseases.

Objective: This study evaluates attitudes toward physical activity among overweight and individuals with obesity and identifies potential barriers to engagement.

Methods: Optional, anonymous and non-compensated participation in a cross-sectional online survey distributed via social media was offered to overweight and individuals with obesity. It comprised 10 questions - single or multiple choice, numeric response and ranking formats. Participants were categorized based on their age and BMI. Descriptive statistics and chi-square tests were used for data analysis.

Results: Participants (n=707) with a lower BMI had significantly more positive attitudes toward physical activity and exercised more frequently. Walking was the most commonly chosen activity. Individuals with higher BMI preferred lower-intensity activities. The main barriers to exercise were lack of time, financial constraints, and psychological concerns such as fear of judgment.

Conclusion: Higher BMI correlates with negative attitudes toward physical activity and lower participation rates in activity. Addressing these barriers and implementing structured support systems may improve physical activity levels among overweight and obese individuals.

Introduction

Physical inactivity is related to chronic diseases and higher mortality. The WHO identifies sedentary behavior as a leading risk factor for chronic diseases, such as cardiovascular disease, type 2 diabetes, and obesity (1). Individuals with a higher body mass index (BMI) experience challenge, including reduced mobility and psychological barriers regarding engagement in physical activity (2). Overweight individuals often report lower motivation due to stigma, low self-confidence, and previous unsuccessful weight loss attempts (3). Understanding these barriers is important for addressing promotion of physical activity. This study evaluates attitudes toward physical activity among overweight and individuals with obesity and identifies potential barriers to engagement.

Methods

We conducted a cross-sectional, non-interventional, quantitative study via an online survey system. A structured online questionnaire was used to collect demographic data and attitudes toward physical activity and perceived barriers. It was in Slovenian language and accessible online for one month. It comprised

10 questions - single or multiple choice, numeric response and ranking formats. Individuals aged ≥ 18 years with BMI > 25 kg/m² were included. Participants were grouped based on their BMI (25–30, 30–40, > 40 kg/m²) and age (< 30 , 30–50, > 50 years). Statistical analyses included mean values, standard deviations and chi-square tests ($p < 0.05$), using Microsoft Excel.

Results

We gathered 728 responses from mostly female (93%) participants, majority (67%) 30 to 50 years old. 707 questionnaires were analyzed (excluding participants who did not provide BMI data).

Attitudes towards physical activity: Most participants (79%) reported enjoying physical activity at some point in life. A significant difference in enjoyment was noted in relation to participants' BMI ($p = 0.00$): 84% (overweight, BMI 25–30 kg/m²), 76% (BMI 30–40 kg/m²) and 64% (BMI > 40 kg/m²).

Amount of physical activity: Most participants were active 1–3 days per week (58%), followed by 4 or more days (29%), while 13% reported being inactive. The 120-minute weekly activity threshold was met in 57% of overweight, 42% of obese with BMI 30–40 kg/m² and 30% with BMI > 40 kg/m² ($p = 0.00$). Also, 36% of overweight exercised 4 or more days per week, in comparison to 23% and 20% of obese with BMI 30–40 kg/m² and BMI > 40 kg/m², respectively ($p = 0.00$).

Type of physical activity: Walking was the most popular activity (79%), followed by guided exercise (36%), hiking (24%), and running/cycling (16%). Participants with a lower BMI (25–30 kg/m²) engaged more in guided exercise (37%) and hiking (25%), while those with BMI > 40 kg/m² predominantly chose walking (93%).

Barriers to physical activity: The most commonly reported barriers in all BMI groups were lack of time (58%), tiredness (17%), psychological concerns such as fear of judgment (14%), and financial constraints (11%).

Conclusion

Most participants enjoyed physical activity at some point in life. Individuals with higher BMI are less physically active, facing psychological and logistical barriers. They prefer low-intensity activities (walking), while more active individuals engage in a wider range of exercises. Individuals with lower BMI are more physically active and more likely to engage in frequent and vigorous activities. Lack of time, financial constraints, tiredness and psychological concerns (fear of judgment) are the most frequent barriers to exercise.

Accessible and targeted measures, such as financial incentives and community initiatives, could increase

participation. Future research should focus on sustainable strategies for long-term physical activity.

The study has some limitations. Self-reported data may introduce bias and the predominantly female respondents (93%) limits generalizability across genders. Objective activity measures and a more diverse participant pool could be an improvement to enhance validity.

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