Movement Behaviors and Quality of Life Among Adult Fitness Center Attendees in Saudi Arabia: A Cross-Sectional Study

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Introduction: Understanding how movement behaviors—physical activity, sedentary behavior, and sleep—relate to quality of life is essential for promoting healthier lifestyles. This study explored these relationships among adult fitness center attendees in Saudi Arabia, providing population-based evidence to inform public health strategies and interventions.

Methodology: A descriptive cross-sectional study was conducted among adult fitness center attendees across Saudi Arabia. Data were collected via an online Microsoft Forms survey using four validated Arabic instruments: the International Physical Activity Questionnaire–Short Form, Sedentary Behavior Questionnaire, Pittsburgh Sleep Quality Index, and WHOQOL-BREF. Ethical approval was granted by the Institutional Review Board at King Saud University (Approval No. KSU-HE-24-1077). Given the ordinal nature of questionnaire-derived variables and the non-normal distribution of data, non-parametric tests were applied: Kruskal-Wallis for comparing multiple groups, Mann-Whitney U for two independent groups, and Spearman's rank correlation to assess associations.

Results: Most participants were Saudi (98%), aged 32 years, with BMI in the overweight range (25.8±4.9). About 68% met physical activity recommendations, and 58% achieved recommended sleep duration. Higher physical activity correlated with better physical quality of life, while lower sedentary time and reduced screen time correlated with better social and psychological domains. Significant group differences emerged by sex, employment, chronic disease, smoking status, and BMI. Longer gym attendance correlated with higher physical activity and lower sedentary behavior.

Conclusion: Adult gym attendees in Saudi Arabia demonstrated generally favorable movement behaviors, yet excessive sedentary time and suboptimal sleep remain concerns. Meeting physical activity, screen time, and sleep guidelines was associated with better quality of life. Tailored interventions addressing age, employment, health status, and regional differences may further enhance lifestyle behaviors and overall well-being.