

Programme: MSc Public Health and Social Care in Practice

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Prevalence of physical activity among student in university of Birmingham



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Introduction

- ❖ Physical activity entails action that use muscles in the body and necessitate the use of energy. The World Health Organization recommends that every adults aged between 18-64 need at least 150 minutes of moderate exercise and muscle-strengthening activities for health benefits (WHO, 2021).
- ❖ Regular physical activity can promote better health, social skills, weight management, improved sleep (Warburton and Bredin, 2017). Also decrease in chance of getting various diseases such as heart disease, stroke, high blood pressure, obesity, and non-communicable diseases (Kilgore, 2023).
- ❖ Regular physical activity is necessary for maintaining good health and well-being. But prevalence of physical inactivity remains a significant concern, especially among young adults like university students. Where sedentary lifestyles, high-calorie diets, rapid socioeconomic development, and technological advancements have led to a high rate of physical inactivity, addressing this issue is vital for improving overall health outcomes (Alasqah et al., 2021).

Rationale

- Understanding the physical activity patterns of undergraduate students and interns in healthcare-related fields can provide insights into potential interventions to promote healthier lifestyles and reduce the burden of non-communicable diseases (NCDs) in this population (Alhammad et al., 2023).
- Promoting physical activity among undergraduate students is essential for their overall well-being and academic success. Engaging in regular exercise can improve mental health, physical fitness, and stress management, leading to better performance in academic and clinical settings (Alhammad et al., 2023).
- As future healthcare professionals, healthcare students have a professional responsibility to prioritize their health and serve as role models for their patients. By understanding their attitudes and behaviors towards physical activity, strategies can be developed to integrate physical activity promotion into their future practice (Alhammad et al., 2023).

Research question

- What factors influence physical activity behavior, motivations for engagement, and barriers hindering participation in regular exercise among healthcare students?
- How can insights into their physical activity patterns inform strategies to promote and encourage a more active lifestyle within the student population to contribute to improved health outcomes, academic performance, and the cultivation of a healthier and more active future healthcare workforce?

(Alhammad et al., 2023)



Research design

- **Methodology**

- Cross sectional quantitative approach
- Questionnaire based online survey
- Global Physical Activity Questionnaire [GPAQ] (Lee et al., 2003).
- Questionnaires divided into 4 sections as described: personal information, department of college, reasons for not practicing physical activities, and physical activity and sedentary behavior (Samarkandi, 2022).

- **Sampling, Participants, and Recruitment**

- stratified sampling method
- Inclusion- healthcare department, undergraduate students aged 18 years or above,
- Exclusion- who did not match the inclusion criteria mentioned above.
- Expected no of response: 400
- The students were provided with a link to the survey via Google Forms.
- Voluntary participation

(Alhammad et al., 2023)

Data analysis:

- Data analysis was performed using SPSS version 26 for Windows (SPSS Inc, Chicago, Illinois).
- Descriptive statistics are use in to sum up the demographic characteristics, presenting continuous data as mean and standard deviation (Alhammad et al., 2023).
- Inferential statistical analysis include comparisons of physical activity levels between different departments, determining factors influencing physical activity, analyzing sedentary lifestyle prevalence, and assessing relationships between variables (Hills et al., 2014).



Ethical considerations



- **Informed Consent:** All participants signed a consent form before starting the questionnaire, indicating that they were informed about the study, its purpose, and how the data would be used. This ensures that participants voluntarily agreed to take part in the study.
- **Confidentiality:** Participants were assured that their data would be used only for research purposes and would be maintained confidential throughout the study. Anonymizing the data further protects the participants' identities.
- **Exclusion Criteria:** The study excluded individuals who did not match the inclusion criteria, ensuring that participation was limited to those who met the predefined requirements.
- **Data Security:** Participants were instructed to complete the questionnaire only once to prevent response overlap. This helps in ensuring the integrity of the data collected.

(Alhammad et al., 2023)

Others ethical considerations

- Providing benefits to research subjects should prioritize maintaining the voluntary nature of participation, respecting the autonomy and well-being of individuals, and ensuring that any benefits offered do not compromise the integrity of the research process or the rights of the participants (Njue et al., 2015).
- Good research studies advance medical science, while poor studies waste time and resources, eroding trust in scientific inquiry (Mutch, 2011). The Guidelines for Good Clinical Practice (GCP) set international standards for ethical and quality clinical trial conduct (Singh, 2015).
- Fabricating data and falsifying results are considered significant forms of scientific misconduct (Scott-Lichter, 2012).
- Salami publication involves splitting data from a single research process into separate parts to create multiple manuscripts, thereby artificially boosting the number of publications (Abraham, 2000).

Implications and Contributions

- By understanding the physical activity patterns, motivations, and barriers among healthcare students, the study can contribute to promoting physical activity not only among the students themselves but also within the wider community (Alhammad, 2023).
- Engaging in regular physical activity has been linked to improved cognitive function, mood, and overall academic performance. By encouraging students to prioritize physical activity alongside their studies, the research can potentially contribute to better academic outcomes among healthcare students (AlTamimi et al., 2021).
- Following the WHO recommendations for physical activity are substantial, By incorporating regular physical activity into daily routines, individuals can reap the numerous benefits associated with an active and healthy lifestyle (Janampa-Apaza et al., 2021).

Gantt chart [Plan of work]

Task Name	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
Planning						
Introduction						
Rationale						
Research question						
Research design						
Data analysis						
Ethical consideration						
Implications						

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