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Review Paper

Measurement and prevalence of adult physical activity levels in Arab countries

E. Murtagh [a, b, *], A. Shalash [c, d], R. Martin [e], N. Abu Rmeileh [c]

[a] Department of Physical Education and Sport Sciences, University of Limerick, Ireland
[b] Physical Activity for Health Research Cluster, Health Research Institute, University of Limerick, Ireland
[c] Institute of Community and Public Health, Birzeit University, Palestine
[d] School of Medicine, University of Limerick, Ireland
[e] Mary Immaculate College, Limerick, Ireland

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ABSTRACT

Objectives: This study aims to examine the reported prevalence of sufficient physical activity among adults in Arab countries and to determine the use of validated instruments for assessing physical activity.
Study design: This is a systematic literature review.
Methods: This review follows recommendations outlined in the Meta-Analysis of Observational Studies in Epidemiology guidelines. The protocol for this study was preregistered with PROSPERO. Cross-sectional, cohort and intervention studies with a minimum of 300 adults aged ≥18 years assessing physical activity using a questionnaire or other self-report measure in the Arabic language were identified from seven electronic databases (MEDLINE, Embase, Cochrane Database of Systematic Reviews, CINAHL, PsycINFO, SPORTDiscu and PubMed). Databases were searched from 1st January 2008 to 17th September 2018. Descriptive analysis was performed using frequency and percentages. The prevalence of physical activity was calculated as the average prevalence for the reported percentages from the studies with similar tools.
Results: Fifty studies involving 298,242 participants were included in this review. The mean (range) sample size was 5964.8.1 (323–197,681). Data were collected from participants in 16 of the 22 Arab countries. Great variation exists across the studies in determining whether adults were sufficiently active or not. Twenty studies reported usable data from the Global Physical Activity Questionnaire and the International Physical Activity Questionnaire (moderate & high categories). In these studies, prevalence of physical activity ranged from 34.2 to 96.9%. It was not possible to compare the other studies owing to variation in instruments used to assess physical activity and in the case definition used for 'physically active'.
Conclusions: This study highlights the need for wider reporting of physical activity and the adoption of valid and reliable instruments to support the development of evidence-informed policy and programmes at both country and regional level. International tools need to be correctly validated, or context-specific tools must be developed to accurately measure physical activity.

Introduction

Physical activity (PA) has a profound effect on health. The World Health Organization (WHO) has determined that physical inactivity is the fourth leading global risk for mortality, responsible for raising the risk of non-communicable diseases (NCDs) and affecting countries across all income groups.[1] It is estimated that worldwide physical inactivity causes 6% of the burden of disease from coronary heart disease, 7% of type 2 diabetes, 10% of breast cancer and 10% of colon cancer.[2]

While globally more than one-third of adults are estimated to not accumulate sufficient PA to meet public health guidelines,[3] there are large differences between regions. The highest prevalence of inactivity is seen in the Eastern Mediterranean Region (43.2%) and the Americas (43.3%).[3] The aforementioned burden of NCDs associated with physical inactivity in the Eastern Mediterranean Region is 8% of coronary heart diseases, 10% of type 2 diabetes, 14% of breast cancer and 14% of colon cancer.[2] However, life expectancy in the region has increased from 51 years of age in 1970 to

* Corresponding author. University of Limerick, Limerick, V94 T9PX, Ireland.
E-mail address: elaine.murtagh@ul.ie (E. Murtagh).

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