

Research

Is obesity a risk factor for low back pain? An example of using the evidence to answer a clinical question

Timothy A Mirtz* and Leon Greene

Address: University of Kansas, Department of Health, Sport, and Exercise Science. Lawrence, Kansas, USA

Email: Timothy A Mirtz* - numitor@ku.edu; Leon Greene - jlg@ku.edu

* Corresponding author

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Abstract

Background: Obesity as a causal factor for low back pain has been controversial with no definitive answer to this date. The objective of this study was to determine whether obesity is associated with low back pain. In addition this paper aims to provide a step-by-step guide for chiropractors and osteopaths on how to ask and answer a clinical question using the literature.

Methods: A literature review using the MEDLINE search engine using the keywords "obesity", "low back pain", "body mass index" "BMI" and "osteoarthritis" from years 1990 to 2004 was utilised. The method employed is similar to that utilised by evidence-based practice advocates.

Results: The available data at this time is controversial with no clear-cut evidence connecting low back pain with obesity.

Conclusion: There is a lack of a clear dose-response relationship between body mass index (BMI) and low back pain. Further, studies on the relationship between obesity and related lumbar osteoarthritis, knee pain, and disc herniation are also problematic. There is little doubt that future studies with controlled variables are needed to determine the existence of an unambiguous link, if any.

Introduction

Obesity is a problem of epidemic proportion [1,2]. Despite record rates of non-physician supervised dieting and the availability of numerous weight loss programs, the problem is not abating [3]. Complicating this, is that most primary care physicians do not treat obesity, citing a lack of time, resources, insurance reimbursement, and knowledge of effective interventions as significant barriers [4]. Musculoskeletal disorders including low back pain (LBP) represent a considerable public health problem and a common diagnosis creating absenteeism and the need

for disability pensions [5]. It is estimated that about 80% of the United States and Canadian population will experience LBP during adulthood [6]. Most low back pain is self-limiting and will ultimately resolve in two weeks (50% of those affected) to six weeks (90% of those affected), however it remains an intriguing clinical problem [6].

It is widely noted that the economic cost of obesity and its related disorders are staggering, with lifestyle related conditions such as diabetes mellitus and coronary heart disease placing a large economic burden on the health care