

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://ees.elsevier.com/hsag/default.asp>

The prevalence of osteoarthritic symptoms of the hands amongst female massage therapists



Heinmari Kruger ^a, Valencia Khumalo ^a, Nicolette Nadene Houreld ^{b,*}

^a Department of Somatology, Faculty of Health Sciences, University of Johannesburg, P.O. Box 17011, Doornfontein, 2028, South Africa

^b Laser Research Centre, Faculty of Health Sciences, University of Johannesburg, P.O. Box 17011, Doornfontein, 2028, South Africa

ARTICLE INFO

Article history:

Received 19 March 2015

Accepted 16 January 2017

Keywords:

Osteoarthritis

AUSCAN 3.1 Osteoarthritis Index

Questionnaire

Massage

Somatology

Therapist

Occupation

ABSTRACT

Background: Numerous occupations increase one's risk of developing osteoarthritis. Massage therapists rely heavily on their hands and cumulative hand strain injuries that occur whilst performing a massage may lead to the development of osteoarthritic symptoms. Females are at greater risk of developing osteoarthritis. Furthermore age weight, genetic predisposition; working years, working hours as well as body mass index all increase the risk of developing osteoarthritis.

Objective: This study sought to investigate the prevalence of osteoarthritic symptoms of the hands amongst female massage therapists, as well as to establish both an average age of symptomatic onset and whether their daily work productivity was influenced.

Materials and methods: Since the massage industry is predominantly practiced by females, female massage therapists, irrespective of age and registered with a South African Regulating Body were included. Participants were required to complete a self-administered questionnaire which evaluated age, self-reported symptomatic presence of and family history of osteoarthritis, and body mass index. Participants also completed the AUSCAN™ Hand Osteoarthritis Index LK3.1 (Australian/Canadian Hand Osteoarthritis Index) which assesses pain, disability and joint stiffness of the hands. The sample was divided into two groups based on the presence or absence of self-reported symptoms. All gathered data was analysed by the University of Johannesburg's statistics department (Statkon) by use of IBM SPSS Statistics software version 21.

Results: The mean age of symptomatic presentation was 43 years. The AUSCAN™ Index found that more than half of the total sample reported osteoarthritic symptoms in their hands. Participants in the non-symptomatic group also indicated a positive response to symptoms on the AUSCAN™ Index although they did not self-report a symptomatic onset age.

* Corresponding author. Fax: +27 11 559 6558.

E-mail addresses: heinmari@mweb.co.za (H. Kruger), vkhumalo@uj.ac.za (V. Khumalo), nhoureld@uj.ac.za (N.N. Houreld).

Peer review under responsibility of Johannesburg University.

<http://dx.doi.org/10.1016/j.hsag.2017.01.006>

1025-9848/© 2017 The Authors. Publishing services by Elsevier B.V. on behalf of Johannesburg University. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Conclusion: In this sample, massage therapists experienced osteoarthritic symptoms that cause pain and stiffness in their hands. It also seemed evident that the symptoms experienced were also responsible for placing strain on their ability to perform daily tasks. This study serves as a basis for further dialogue, research and professional awareness.

© 2017 The Authors. Publishing services by Elsevier B.V. on behalf of Johannesburg University. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

1. Introduction

Massage therapy is an age old practice that has evolved with time and with passing trends, and may be dated back to the ancient Roman, Greek and Egyptian dynasties (Braun & Simonson, 2008, pp. 2–3). A massage therapist is defined as one who treats clients by using touch to manipulate soft-tissue and muscles within the body. The touch relieves pain, helps to rehabilitate injuries, improves blood and lymph circulation, relieve stress and aids in general relaxation (Bureau of Labour Statistics 2014). Massage once formed a significant part of mainstream medical and nursing occupations, forming an important part of physiotherapy (Casanelia & Stelfox, 2010). To this day numerous occupations still incorporate various aspects of massage. Massage has a wide variety of applications and is a versatile therapy (Casanelia & Stelfox, 2010).

Associated Bodywork & Massage Professionals (ABMP), an American body, commissions a nationwide survey of massage clients every two years. The most recent was conducted by Harstad Strategic Research in January 2013, and surveyed a representative sample of American adults on their use of massage during 2012. Sixteen percent of all American adults visited a massage therapist in 2012 and a further 37% have visited a massage therapist at some point in their lives. Twenty two percent of adult women and 10% of adult men visited a massage therapist in 2012. The majority (60%) of massage clients was female (Patrick, 2014). Seventy percent of clients visited a massage therapist to achieve relaxation and restoration while 66% visited a massage therapist to relieve pain or muscular soreness and 45% sought massage to relieve stress. Thirty percent of clients incorporate massage into their injury rehabilitation strategy (Patrick, 2014). As suggested by ABMP (2009), the average duration of a massage is 1 h. The majority (78.5%) however is between 50 and 75 min in length. However, 10.3% of massages last longer than 75 min (Patrick, 2014). Shorter sessions are often found in situations such as chair massage in airports and other public venues. Given the length and number of massage treatments performed by therapists, one could expect health realities for massage therapists, including the development of osteoarthritic symptoms.

Osteoarthritis (OA) is described as a degenerative form of arthritis that affects the smooth cartilage that covers the ends of bone, and is currently seen as the leading cause of musculoskeletal disability and pain amongst those 65 years and older (Flynn & Ohnson, 2007, pp. 7–9; McKay, Prapavessis, & NcNair, 2012; Sharma, 2006, p. 172; Vuolteenaho, Koskinen, & Moilanen, 2013). OA is a debilitating condition that affects young and old alike (Flynn & Ohnson, 2007, pp. 7–9). As OA progresses, the smooth cartilage at the ends of the bone are

worn away, causing painful bone on bone friction. The hip joints, spine, knees, small bones of the fingers and the base of the thumbs are most commonly affected (Flynn & Ohnson, 2007, pp. 7–9). Multiple risk factors in the development of OA have been established; these include age, sex, obesity, family history and occupation (Cimmino et al. 2013; Conaghan, Dickson, & Grant, 2008; Prieto-Alhambra et al. 2014; Pun et al. 1994; Vuolteenaho et al. 2013).

Females are also at higher risk for developing OA (Jones, Cooley, & Stankovich, 2002), and this risk further increases with age (Felson, 2004; McKay et al. 2012). Obesity was originally thought to contribute to OA by the load placed on weight-bearing joints; however obesity has also been linked to OA in the hands (Cimmino et al. 2013). Leptin, an adipose-derived hormone, has been found to be increased in synovial or joint fluid of obese patients and has been linked with OA (Vuolteenaho et al. 2013). Genetic risk factors or genetic predisposition has been found to account for up to 65% of cases (Pun et al. 1994). Biomechanical risk factors such as occupational usage of joints, joint laxity and joint mal-alignment have also been implicated in the development of OA (Conaghan et al. 2008). The agricultural, construction, and mining sectors (O'Reilly, Muir, & Doherty, 2000; Sandmark, Hogstedt, & Vingard, 2000; Thelin, Vingard, & Holmberg, 2004; Dillon, Petersen, & Tanaka, 2002), housekeeping (Rossignol et al. 2005), the operation of machinery (O'Reilly et al. 2000), the clothing industry (O'Reilly et al. 2000) and physiotherapy (Snodgrass & Rivett, 2002) have all been implicated in the contribution to the development of OA. The risk factors must not be mistaken for the cause of the condition. Two categories have been identified when evaluating the cause of OA. The primary group of causes are those that result in the breakdown of cartilage with movement or over time. The second category involves the initiation of OA due to joint injury or disease (Flynn & Ohnson, 2007, pp. 7–9). All these factors could cause significant symptoms.

Symptoms are also specific and can be identified by the audible 'creaking' sounds whilst the joint is in motion and is often associated with pain (Flynn & Ohnson, 2007, pp. 7–9). Joint swelling may be evident and may over time become permanent bony enlargements. The joint may also feel stiff when first waking in the morning (Flynn & Ohnson, 2007, pp. 7–9). Muscle weakness and a decrease in joint range of movement are also observed (Cibulka & Threlkeld, 2004). A recent study by Bernard and colleagues found that females experience painful jolting of the hands as a symptom of OA (Bernard, Wilder, Aluoch, & Leaverton, 2010). Bellamy et al. (2002) found that OA sufferers have a marked difficulty with daily tasks such as peeling vegetables. Pain, stiffness and moving difficulties were the primary focus when evaluating female massage therapists. Persistent pain, limited morning

Download English Version:

<https://daneshyari.com/en/article/5568033>

Download Persian Version:

<https://daneshyari.com/article/5568033>

[Daneshyari.com](https://daneshyari.com)