

Musculoskeletal complaints in nurses who provide home-based healthcare

Paula Carneiro, Ana Cristina Braga & Mónica Barroso
Department of Production Engineering, School of Engineering, University of Minho

ABSTRACT

Work related musculoskeletal disorders (WRMSDs) have been described as the major occupational health problem affecting nurses.

Main goals of this work are the characterization and evaluation of musculoskeletal complaints in nurses who work at Health Centres at the Northern Portugal and that provide home-based care.

This work demonstrates an analysis of the responses to a questionnaire based on one other developed by Kuorinka and colleagues.

The body areas with more complaints are the back and shoulders. There is statistically significant association only between “musculoskeletal complaints in the lumbar region” and “provide home care” (OR=4.21 ($p<0.05$), 95% Confidence Interval [1.4; 13.2]). Based on these results we can say that nurses who provide home-based care have a fourfold chance of having musculoskeletal complaints in the lumbar region than the others.

INTRODUCTION

Nurses are strongly affected by WRMSDs. For them, the values of prevalence of these disorders are high (Barroso et al. 2007).

Information regarding WRMSDs in providing home-based care is scarce. In Portugal, there isn't any study on this subject. Currently, the home-based care are very important as the population is rapidly aging, contributing to a greater demand for these services.

Based on the above arguments it was thought that the issue was of utmost importance.

METHODOLOGY

The methodology used in this work was a questionnaire developed in electronic format. The questionnaire was based on the “Standardized Nordic Questionnaire for the analysis of musculoskeletal symptoms” (Kuorinka et al. 1987). There have been adjustments in order to better adapt to this type of nursing activity.

RESULTS

We received 133 complete responses (response rate of circa 5%). The questionnaires have been treated statistically by SPSS (PAWS Statistics 18.0[®]).

About 87% of respondents are female. Circa 88.7% of respondents provide home-based health care.

The distribution of musculoskeletal complaints by the different body regions, referring to all the respondents, is as follows: the cervical region with about 74.4%, the lumbar region with 63.9%, the dorsal region with 50.4% and shoulders with 48.9% of complaints.

In the following chart the musculoskeletal complaints are divided into two groups: nurses who provide home-based care and nurses who don't. Based on this sample, with respect to complaints, only were found differences between the two groups for the lumbar region (Figure 1).

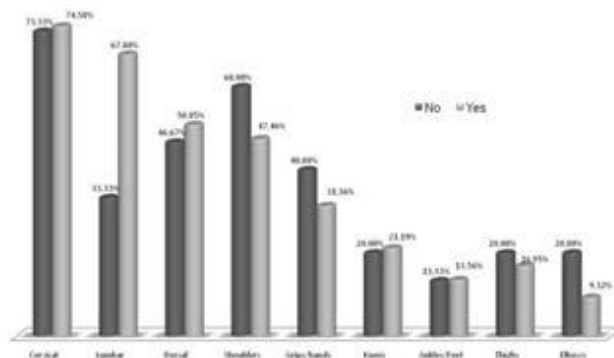


Figure 1: Distribution of complaints referring to two nurses' groups

All results presented below relate to the group of nurses who provide home-based care.

The activities more frequent are the treatment of pressure ulcers (44.9%) and the implementation of dressings (40.7%).

Circa 82.2% of home-based nurses consider that the height of the patient's bed is low, 16.9% consider it appropriate and 0.8% considers it high.

About 92.4% of nurses referred that usually they need to move the patient and 97.5% referred that in general there aren't lifting/transferring devices.

To measure the association between "provide home-based care" and "different referred complaints" (dependent variables) we carried out models of binary logistic regression to evaluate the odds ratio and respective confidence intervals. We detect statistically significant association only for the lumbar region (OR=4.21 ($p < 0.05$), 95% Confidence Interval [1.4; 13.2]).

The nurses who provide home care have circa fourfold chance of having musculoskeletal complaints in the lumbar region than their colleagues.

CONCLUSIONS

The sample size does not allow an inference about the population, however we can characterize it in several aspects.

About 88.7% of nurses who work at Health Centers from Northern Portugal provide home-based care.

The body regions with more complaints are the vertebral column and the shoulders. This is consistent with other studies carried out both at hospital context as in home care settings (Barroso et al. 2007; Cheung et al. 2006).

The activity performed most often is the treatment of pressure ulcers (44.9%).

Only 16.9% of home-based care nurses consider the height of the bed suitable. Studies revealed "the height of the bed" as a factor in the emergence of awkward postures and consequently of musculoskeletal complaints. Capiello confirmed that a physical space problem existed in home care nursing, which included the existence of inadequate beds (Cappiello et al. 2005).

Circa 92.4% of home care nurses referred that usually needs to move the patient and 97.5% of nurses reported that in general there aren't devices for lifting/transferring patients. In tasks involving manual handling of patients, devices for lifting/transferring should be used whenever possible (Botha et al. 1998).

There is statistically significant association only between "musculoskeletal complaints in the lumbar region" and "provide home care" (OR=4.21 ($p < 0.05$), 95% Confidence Interval [1.4; 13.2]). The nurses who provide home-based care have circa fourfold chance of having musculoskeletal complaints at lumbar region than the other nurses.

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