



THE SURVEY OF THE MUSCULOSKELETAL DISORDERS RELATIONSHIP WITH THE LIFE QUALITY OF THE SURGERY ROOM NURSES

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ABSTRACT

Introduction: Musculoskeletal pains are among the substantial problems in work environments and they are considered among the ordinary reasons behind absenteeism. Musculoskeletal disorders influence the quality of life and cause the quality of life to lower. Therefore, the present study was conducted with the objective of surveying the relationship between the quality of life in surgery room nurses with the musculoskeletal disorders. **Material and methods:** The present study is a descriptive-analytical research which has been conducted on 112 individuals. To collect the information required for the study we made use of a questionnaire which included three parts, the first part of which pertained to the demographic characteristics and the second part pertained to the revised standard Nordic questionnaire and the third part was related to the quality of life standard questionnaire (SF-36). Finally, after the questionnaires were collected the data were analyzed by means of SPSS ver.19 software, descriptive statistics, Pierson correlation, Chi-square and independent t-test. **Findings:** The results of the current study indicated that the individuals' average age was 30.95 ± 7.76 and 41 individuals (36.6%) were single, 88 individuals (78.6%) were women. The results obtained by the present study indicated that the relationships between the quality of life and the musculoskeletal disorders in the neck ($p=0.02$), waist ($P<0.001$), shoulders ($p=0.002$) and wrist ($P<0.001$) were statistically significant. **Conclusion:** Generally speaking, the musculoskeletal disorders are effective on the quality of life especially in the aspects regarding physical performance, physical pain and general health status, in such a manner that the musculoskeletal disorders cause the quality of life to reduce in the staff.

KEYWORDS: Musculoskeletal disorders, quality of life.

INTRODUCTION

Nursing is among the occupations which requires considerable amount of physical and psychological activity. From the perspective of the physical activities, nursing is ranked second next in rank to the industrial occupations which are on top^[1-3]. The studies have shown that the feeling of pain and discomfort in various parts of the musculoskeletal system are among the substantial problems at work environment, and it is in a way that it constitutes the main reasons for absenteeism from work environment and also such disorders result in temporal and perpetual inabilities in the individuals^[2-4]. Musculoskeletal disorders stemming from work conditions are circumstances in which the muscles, tendons and the nerves are damaged and the symptoms appear in the form of pain, discomfort and numbness in the organs^[5]. Various studies indicate that the musculoskeletal disorders impact the quality of life and cause a reduction in the quality of the life perceived^[6-8].

Functional quality of life has been recognized as the quality of in connection to the health conditions from the point of view of medicine which is intended to encompass the aspects of the individual's mental evaluation of the status quo of the health status, health care activities, health enhancing actions and activities and they enable the individual to be in pursue of valuable objectives^[9, 10].

According to the fact that the surgery room nurses are dealing with carrying out repetitive works and the tasks with improper posture and they are likely to come up with the prevalence of the musculoskeletal disorders these disorders and disturbances are more likely to affect their quality of life adversely, therefore the current study aims at the survey of the musculoskeletal disorders relationship with the quality of life among the nurses' quality of life in the surgery rooms.

Implementation method

The current study is an analytical-descriptive research in which it has been dealt with the survey of the musculoskeletal disorders in the surgery room nurses from the training hospitals associated with Zahedan medical sciences universities in 2016. The current study has been performed on 112 individuals who were selected based on a census sampling method. To collect the information required for the present study we made use of a three-part questionnaire the first part of which was related to the demographic characteristics (age, gender) and the second part was pertained to the revised standard questionnaire designed by Nordic. The questionnaire validity was confirmed by Sharifi et al and the questionnaire reliability was calculated through the use of Cronbach's alpha method (0.89) and the retest method (0.81)^[11].

The third part of the questionnaire was related to the quality of life standard questionnaire (SF-36) which evaluates 8 dimensions of the quality of life. By making use of the questionnaire the overall score of the questionnaire can be computed which will be indicative

of the individuals' quality of life scores. The entire dimensions and the scores mean were in a range from 0 to 100 and the higher the score it would be reflective of the higher qualities of life^[12, 13]. In the meantime, the aforementioned questionnaire's validity and reliability were calculated in Iran^[14]. After the questionnaires were collected, the data were analyzed by the use of SPSS ver.19 software and descriptive statistics and Pierson correlation, Chi-square and independent t-test.

Findings

The results of the studies indicated that the individuals 'average age was 30.95 ± 7.76 and 41 individuals (36.6%) were single and 88 individuals (78.6%) were women. The results of the study showed that the relationships between quality of life and the musculoskeletal disorders in the neck ($p=0.02$), waist ($P<0.001$), shoulder ($P=0.002$) and wrist ($P<0.001$) were statistically significant.

The relationship between the musculoskeletal disorders and the quality of life has been inserted in the following table.

Table 1: the relationship between the musculoskeletal disorders and the individuals' quality of life

		Quality of life mean score	Standard deviation
MSDs in the wrist	Positive	42.07	17.42
	Negative	30.47	15.06
MSDs in the neck	Positive	41.52	16.74
	Negative	33.73	17.05
MSDs in the waist	Positive	43.45	16.75
	Negative	29.96	15.18
MSDs in the shoulder	Positive	43.10	16.23
	Negative	32.82	16.84

The relationship between the quality of life fields and the musculoskeletal disorders in each of the body organ parts has been given in table (2).

DISCUSSIONS

The current study indicated that there is a statistically significant relationship between the musculoskeletal disorders in surgery room nurses and their qualities of life. That is to say that the high rate of the musculoskeletal disorders can cause the quality of life to be reduced which is corresponding with the results obtained by the other researches^[15]. In another study conducted in 2007 by Handen et al the negative effect of the chronic musculoskeletal pains stemming from work circumstances was evaluated on the quality of the physical, mental and psychological performance of the individuals and it became evident that the psychological and physical conditions of the employed individuals is effective on the chronic musculoskeletal pains and optimizing such conditions can considerable improve the quality of life^[16]. In the study conducted by Malekpoor it was shown that there existed a significant correlation between the dimensions of the quality of life and the musculoskeletal disorders and it was also reflected that the higher the rate of the musculoskeletal disorders the quality of life decreases more (the survey of the relationship between musculoskeletal disorders, physical

activity and quality of life in the workers from the automobile manufacturing industries). In a study carried out by Kavto et al on 29 workers who had to stay away from work for four weeks as a result of musculoskeletal reasons it was shown that both of the physical and psychological indices of the quality of life were in relationship with the musculoskeletal disorders and the results obtained therein showed consistency with the results obtained in the studies performed on the wrist and waist and they showed different results with the studies performed on the neck, in a way that in their study the physical and psychological indices showed a significant relationship with the musculoskeletal disorders but it has to be mentioned that such a significant relationship is lacking in the current study. Moreover, it was observed that there is a significant relationship between the musculoskeletal disorders in shoulder region with the psychological and physical problems which is consistent with the results obtained in the study conducted by Kavto et al, but since the musculoskeletal disorders of the shoulder region was shown to have no significant relationship with the psychological health in the current study it differs from what was found by Kavto et al^[17]. In

the Gorgich et al study the results showed that one of the factors that significantly improve public health is emotional intelligence. Emotional intelligence is teachable and teaching it to people can be somewhat reduced labor complications like as physical and social dysfunction^[18]. On the other hand reduce occupational hazards can be enhanced job satisfaction and Job motivation among employees created^[19].

Another difference which was found in the current study with the other studies cited here is in the determination of the musculoskeletal disorders in various regions of the body such as waist, neck, wrist and shoulder and their relationship with the quality of life. The reasons contributing to the musculoskeletal disorders can be improper conditions in the work environment, the inappropriateness of the hospital equipments in relation to the hospital staff body aspects (the desks inappropriate height, displays and beds), improper physical postures while working, long on-foot standings in the surgery room personnel and overtime shifts. Thus it is suggested here that it is possible to reduce the musculoskeletal disorders risks in the surgery room personnel through correcting the environmental conditions and avoiding the overtime shifts and the use of tools and instruments appropriate with the personnel physical sizes and aspects.

CONCLUSIONS

Generally the musculoskeletal disorders are effective on the quality of life especially in physical performance aspects, physical pains and general health status, in such a manner that musculoskeletal disorders cause a reduction in the quality of life in the staff members, so it is suggested that we can be of great help on the improvement of the quality of life in the surgery room personnel through optimization of the physical and psychological conditions in the work environment.

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