# To assess quality of life among health care professionals suffering from work related musculoskeletal problems in tertiary care center.

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## **Abstract**

Background: Work-related musculoskeletal disorders (WMSDs) are a group of painful disorders of muscles, tendons, and nerves of joint, back, neck, bone such as aches, pains, and stiffness. The work-related musculoskeletal disorders are common in health care professionals and because of workload they become negligent towards health issues. WMSDs interfere with productive work and quality of life of a doctor. Methods: An observational study was conducted. All the ethical aspects were respected by assuring the participants about the confidentiality of information obtained from them. Forty doctors including all specialties of age group 26-60 years participated in this study and data was collected using a structured MSK-HQ questionnaire which records the prevalence of MSK problems in terms of musculoskeletal symptoms (ache, pain, discomfort) in the preceding 2 weeks. Both males and females were included in the study. Results: Analysis was done using Microsoft Excel. In present study majorly 30% of subjects of age group 26-30 years, 27% of subject's age groups 31-35 years, 25% of subjects 36-40 years were affected. Conclusion: Thus, from the above conducted study it concludes that for all the activities in relation to questionnaire there are 50% of population who chose scores 3 that is slight problem in activities of daily living, 26-30 years, 31-35 years & 36-40 years of age (3&4rd decade of life) are the most affected & if musculoskeletal problems are ignored then in future it will interfere in their quality of life and their medical profession.

**Keywords**: Musculoskeletal problems, MSK-HQ questionnaire, Work-related musculoskeletal disorders (WMSDs), Health care professionals.

# Introduction

Musculoskeletal disorders are defined as musculoskeletal complaints, symptoms, or discomfort that can be caused by a variety of ailments, including neck pain, back pain, shoulder pain, limb pain, carpal tunnel syndrome, myofascial dysfunction syndrome, atypical facial discomfort, and so on. MSDs can be minor and rare on one end of the range, or severe, persistent, on the other [1].

Work-related MSDs (WMSDs) are MSDs that are made worse or endure longer as a result of work situations [2].

Workplace musculoskeletal disorders have a tremendous impact and are becoming an increasing problem in our modern cultures. After the common cold, they are the second leading cause of short-term or temporary work incapacity [3].

The global incidence of MSDs ranges from 14% to42%; however, epidemiological studies in India indicate a

community-based incidence of around 20%, with occupation-specific prevalence reaching up to 90% in some studies [4].

WMSDs are widespread among health-care professionals, with the nursing population, which makes up around 33% of the hospital workforce and accounts for 60% of all reported occupational injuries, being particularly vulnerable [5]. WMSDs are also more likely than any other group of disorders to induce missed work time or absenteeism, increased work limitation, job transfer, or disability [6].

Several investigations have discovered that the mechanisms causing work-related musculoskeletal pain are complex [7]. Long-term static postures, repetitive movements, bad lighting, poor placement, genetic predisposition, mental stress, physical conditioning, age, and obesity are all risk factors for back discomfort [8].

Even though various writers have indicated the frequency of WMSDs among health-care providers in developed nations,

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evidence on the prevalence of WMSDs in our nation is limited for reference [9].

As a result, a study was done among all specialties of doctors in ShaliniTai meghe hospital and research center wanadongari, Nagpur to determine the relevant MSDs in terms of perception of pain experienced as a result of the rigors of their respective professional activity and its impact on their employment.

# **Materials and Methods**

Ethical clearance is obtained from the institutional ethical committee DMCOP Nagpur. Observational study was done and 40 health care professionals of Shalini Tai Meghe hospital of age group 26-60 years were taken for the study including both males and females.

The participants who meet the inclusion and exclusion criteria and willing to participate in the study were included. The participants were explained about the study and the evaluation procedure. The informed consent was obtained from the individuals. Our study included doctors between the ages of 26 and 60, with at least 5 years of experience and at least 50 hours of clinical work per week. Specialists with any systemic disorders that may affect the musculoskeletal system, such as uncontrolled diabetes, were excluded from the research, as were doctors who did not meet the inclusion criteria. Those who had recent musculoskeletal injuries, a history of accidents, or who refused to participate in the study were eliminated.

Data was collected using a structured questionnaire consisting of 14 simple questions on activities of daily living. The MSK-HQ questionnaire records the prevalence of MSK problems in

terms of musculoskeletal symptoms (ache, pain, discomfort) in the preceding 2 weeks.

## Statistical analysis

Analysis was done using Microsoft Excel.

#### **Results**

Age of the participants in this study was between 26-60 years. There was no statistically significant difference between mean ages. There were a total 15 females and 25 males included in this study (**Table 1**).

The pie chart states the age wise distribution of participants where 26 to 30 years are 30%, 31 to 35 years are 27%, 36 to 40 years are 25%, 41 to 45 years are 5%, 46 to 50 years are 7%, 51 to 55 years are 3% and 56 to 60 years are 3% (**Figure 1**).

Participant's physical activity levels in a week are, out of 100%, 22% participants have 0 physical activity levels in a week, 18% participants have 4 days of physical activity levels in a week, 13% participants have 6 days of physical activity levels in a week, also 13% participants have 3 days of physical activity levels in a week, 12% participants have 2 days of physical activity levels in a week, only 10% participants have all days of physical activity levels in a week and 2% participants have 1 day of physical activity levels in a week (**Figure 2**).

In present study majorly 30% of subjects of age group 26-30 years, 27% of subjects age groups 31-35 years, 25% of subjects 36-40 years were affected (**Table 2**).

 Gender
 Mean Age

 F=15
 F=34.733 years

 M=25
 M=37.36 years

Table 1: Age wise distribution of participants.

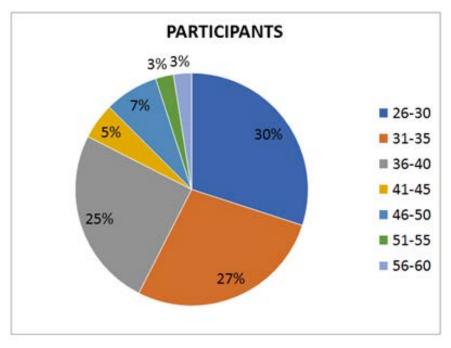


Figure 1: Age wise distribution of participants.

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AGE (IN YRS)	SCORING					Tatal Cubicata
	0	1	2	3	4	Total Subjects
26-30	0	0	2	5	5	12
	0%	0%	16.70%	41.70%	41.70%	100.00%
31-35	2	1	1	5	4	11
	18.18%	9.10%	9.10%	45.50%	36.40%	100.00%
36-40	1	0	2	8	0	10
	10%	0%	20.00%	80.00%	0%	100.00%
41-45	0	0	0	1	1	2
	0%	0%	0%	50.00%	50.00%	100.00%
46-50	0	0	0	0	3	3
	0%	0%	0%	0%	100.00%	100.00%
51-55	0	0	0	1	0	1
	0%	0%	0%	100.00%	0%	100.00%
56-60	1	0	0	1	0	1
	10%	0%	0%	100.00%	0%	100.00%
	1	1	5	21	13	40
	10%	2.50%	12.50%	52.50%	32.50%	100.00%

Table 2: Age wise distribution against total scoring OF MSD scale.

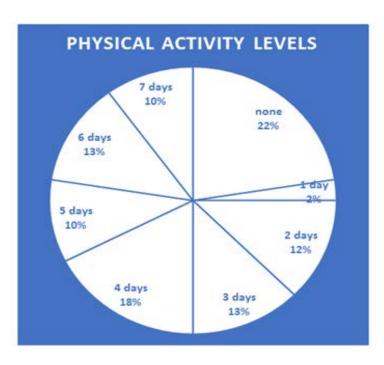


Figure 2: Physical activities of participants.

# **Discussion**

In present study 30% of subjects of age group 26-30 years, 27% of subject's age groups 31-35 years, 25% of subjects 36-40 years were affected. A study done by Mokhlesur Rahman et al, they stated that there are a high proportion of health care professionals who had WMSDs, and the affected site reported more than one body region, followed by neck, shoulder, lower back and other sites among them. They also state that working in awkward or cramped positions were found to be the commonly reported risk factors for the development of WMSDs [5]. 21(52.5%) people out of 40 selected slight pain symptoms i.e. score 3 from the questionnaire [10].

# **Conclusion**

In this study we concluded that the quality of life is hampered for the persons who suffer from musculoskeletal problems. For all the activities in relation to questionnaire there are 50% of population who chose score 3 that is slight problem in activities of daily living. 26-30 years, 31-35 years & 36-40 years of age (3&4rd decade of life) are the most affected. So present study concludes that if musculoskeletal problems are ignored then in future it will interfere in their quality of life and their medical profession.

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The source of funding for the study is self.

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# **Conflict of Interest**

There is no conflict of interest.

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