Prevalence of Musculoskeletal Disorders in Hindu Priests: A Cross Sectional Study

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Abstract: <u>Background</u>: Generally Hindu priests are doing work like pooja, havan in sitting position for prolonged duration /time. They are constantly in forward leaning position without any back support. So there is high risk of musculoskeletal disorder. <u>Aim</u>: To assess prevalence of musculoskeletal disorders among Hindu Priests. <u>Method</u>: Nordic questionnaire was filled up by Hindu Priests. <u>Result</u>: study is going on Data of 35 subjects are analyzed prevalence of MSD is 62.8% in lower back 48.5% in shoulder 8.5% in wrist/hand 14.2% in upper back 14.2% knees 25.7% ankle/feet 5.7%. <u>Conclusion</u> From this study we concluded that there was medium prevalence of work relayed MSD (62.8%) as per Nordic musculoskeletal questionnaire.

Keywords Nordic questionnaire, musculoskeletal disorders, Hindu priests

1. Introduction

Musculoskeletal disorder are injuries or pain in the human musculoskeletal system, including joints, ligaments, muscles, nerves, tendons and structures that support limbs, nerves, tendons and structures that support limbs, neck and back. MSD caused when the physical capacity of the muscles, joints, ligaments etc is not in balanced with external forces that act upon the body.[1] Severe risk factors are associated with development or execration of MSDs in the work place, including physical, biomechanical, individual predisposition psychosocial condition.[2]

The term MSD may also include term such as RSI (repetitive strain injury), which are descriptive of the nature of the injury or risk factor and MSD that refer to specific body location or body system. MSD can be occupational or non occupational [3].

Musculoskeletal disorder is defined as condition where a part of musculoskeletal system is injured over time. Generally Hindu priests are doing work like pooja, yagna in sitting position for prolonged duration /time. They are constantly in forward leaning position without any back support. So there is high risk of musculoskeletal disorder. But very few studies have done on Hindu priests for MSDs. So this study is established to assess prevalence of musculoskeletal disorders among Hindu Priests.

There are many scales and questioners used to find out the prevalence of MSDs such as RULA, REBA, VAS, OWAS, NIOSH self administered questionnaire, Nordic musculoskeletal questionnaire etc. for epidemiological point of view it is evident that Nordic musculoskeletal questionnaire is most applicable for cross sectional studies.

2. Methodology

Study design: A cross sectional study.

Inclusion criteria

- Male and female Hindu priests between age group = 30 to 45 years.
- Work should be done 6 hours a day

- Work experience should be more than >2 years.
- Over weight and obese.
- Subject willing to the participate

Exclusion criteria

- Congenital deformity
- History of recent surgeries
- History of recent trauma
- · Any spinal deformity
- Any arthritis changes or disorders

Data are collected from different ashrams and temples. Nature and purpose of the study is explained them and written consent form. Nordic questionnaire is taken.

The standardized Nordic musculoskeletal questionnaire was used in many earlier studies in different professionals. Before the questionnaire was given to them, the benefits, aims, objectives, and purpose of study was clearly explained and concerned was taken.

3. Result

Study is going on. Data of 35 subjects are analysed. Prevalence of MSD is 41% in lower back, 5% in shoulder, 12% in wrist/hand, 12% in upper back, 21% knees, 5% ankle/feet



Volume 9 Issue 11, November 2020

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4. Discussion

Sitting for prolong time 6 hours in a day and forward bending posture without any support may cause low back pain and knee pain.

These reasons lead to musculoskeletal disorders among Hindu pries

Clinical significance

If prevalence of musculoskeletal disorder is higher among Hindu priests then we can give ergonomic advice and physiotherapy treatment to them.

5. Conclusion

From this study we concluded that there was medium prevalence of work relayed MSD (62.8%) as per Nordic musculoskeletal questionnaire.

The highest musculoskeletal disorders are found in low back pain.

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