

# Musculoskeletal Disorders and its Associated Factors among Laundry Workers: A Comparative Cross-Sectional Study

Anshita Mishra<sup>1</sup>, Praveen Kumar<sup>1</sup>, Akash Deep Sharma<sup>1</sup>, Amod L. Borle<sup>1</sup>

<sup>1</sup>Junior Resident, Department of Community Medicine, Maulana Azad Medical College New Delhi.

Email Id: amishra371@gmail.com

## Abstract

*Introduction:* Musculoskeletal Disorder (MSD) is a health problem involving the joints, muscles, tendons, skeleton, cartilage, ligaments, and nerves which is caused by to intensity and severity of work. The upper cross syndrome is one such MSD caused by weakness in one group of muscles and tightness in other groups of muscles due to muscular imbalance between weak and tonic muscles. The prevalence of Upper Cross Syndrome has been found to be nearly 28% by researchers. A laundry business is an informal business with unbounded working hours, an inappropriate working environment, and tasks that are monotonous and repetitive. Laundry workers tend to develop this syndrome and other MSDs due to the nature of their work.

*Material and Methods:* A Comparative cross-sectional study was conducted in the field practice area of the Department of Community Medicine of Maulana Azad Medical College (an urban slum in the Mirdard Area where the Family adoption program of undergraduate students is being carried out) among Community laundry workers and the general population for a period of three months. All study population aged  $\geq 18$  years available at the study area during the visit were included, while people with any congenital/systemic musculoskeletal disorders e.g.: ankylosing spondylitis, rheumatoid arthritis, etc., or belonging to any profession involving heavy musculoskeletal work were excluded from the study. A total of 80 participants were selected using a random sampling technique. The analysis will be done using SPSS v.25 software.

*Results:* Mean age of the study participants was  $39.21 \pm 4.65$  years. Proportion of males was 95% in both the groups. Prevalence of upper cross syndrome among the two study groups was found to be 36% among the laundry workers while in the general community it was found to be 14% and was found statistically significant. Among the factors found statistically significant were lifting of hands above shoulders, doing work with single hand which contributed to Upper cross syndrome among the laundry workers.

*Conclusion:* Higher prevalence of Upper Cross Syndrome among the laundry workers signifies occupational hazards due to the significantly high involvement of shoulder. This further needs to be explored to devise preventive measures for the same.