

**Musculoskeletal symptoms and its associations with ergonomic physical risk factors of the women engaging in regular rural household activities:
A picture from a rural village in Bangladesh**

By

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Abstract

This study explores the association between housework related musculoskeletal symptoms and relevant risk factors among women within regular rural activities. A cross-sectional study was carried out on 46 women from the village named Chandishwar, a low-income rural village in Dhamrhi thana under the Dhaka region of Bangladesh. Neck, Upper back, Lower back, Wrist and Knee were the most common parts of women reported as having musculoskeletal symptoms in the previous 12 months and last 7 days. On the other hand, lower back, upper back; knee and neck was the most affected parts for disruption from different daily living activities in the at last 12 months among women in regular rural activities. Different physical risk factors are found which may lead to different type of musculoskeletal symptom. The physical risk factors associated with musculoskeletal symptoms were feeling fatigued at the end of a housework day, working long hours (12-14) and working in awkward postures or frequently engaging in repetitive hand movements. Descriptive statistics analysis process was used to find out the results. The total analysis process carried through SPSS 16.0 version. The result of this study was found that, the prevalence rate of MSS for 7 days was high than the last 12 months of the women engaging in regular rural activities. Ergonomic risk factors were associated with pain in the neck, back and upper and lower extremities. The association were tested through chi-square test where the p value were sat to <0.05 . Women from this rural community engaged in a large number of hours of housework, those alongside other factors were associated with high prevalence of musculoskeletal symptoms.

The role of women in homemaking activities is explored together with physical exposures leading to reported symptoms. Standardized Nordic and Ergonomic Risk Factor Assessment were used for collecting data. Self-administrated demographic questionnaire was also used for find out the demographic characteristics of the respondents. This study creates a hypothesis that may the ergonomic physical risk factors lead to the musculoskeletal symptoms among women with regular rural activities which might enlarge the further and widely conducted other research on this filed.