



THE PREVALENCE OF MUSCULOSKELETAL DISORDERS AMONG LATEX HARVESTERS IN THE SMALLHOLDER RUBBER SECTOR: A CASE STUDY IN MONERAGALA DISTRICT IN SRI LANKA

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Abstract

The study was aimed to investigate the prevalence of the Musculoskeletal Disorders (MSDs) among the Latex Harvesters (LHs) of rubber (*Hevea brasiliensis*) farming and to identify the factors affect MSDs. The data was collected employing a questionnaire survey, from 297 LHs in Moneragala in 2020, where the sample was selected using stratified random sampling technique. The pain of the nine anatomical body regions of the LHs was measured as in the dichotomous responses as yes or no, during the last 12 months. Results indicated that, 78% of the LHs experienced an MSD. Female LHs (69%) were dominated in the sample and 91% of them were married. The age of LHs varied from 22 to 79 years. The majority of LHs (45%) were included in the age category of 46-55 years. About nine percent of the respondents were above the age of 65 years, while only 30% were found below the age of 35 years. The average harvesting extent was 0.7 ha/day (approx. 350 trees). The most (43%) of the LHs had work experience in rubber tapping from 7.5 – 9.5 years. The mean working hours/day was 6. The most commonly affected body region among the respondents was Neck Pain (NP) (76%), followed by low back pain (67%), shoulder pain (54%), knee pain (55%), ankle/foot pain (56%), elbow pain (31%), upper back pain (36%), wrist pain (53%) and hip/thigh pain (21%). So that, the LHs were in potential risk of NP among the other MSDs. Forty-seven percent of the LHs with neck pain were directed to medical advice. The NP had significant association with the age ($r=0.7776$), working hours per day ($r=0.5821$), number of trees tapped per day ($r=0.3776$) and work experience in rubber tapping ($r=0.8021$). Marital status, education level, gender have not shown a significant association with the NP. It is important for the LHs to be aware and to be trained on occupational health and safety by professionals in regular manner. These results suggest an urgent necessity for work process modifications, as in harvesting methodology and harvesting tools to prevent MSDs of LHs in smallholder rubber sector.

Keywords: *Latex Harvesters, Musculoskeletal Disorders, Rubber Smallholders*