

Analysis of musculoskeletal disorders of workers in grape cultivation

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■ **ABSTRACT** : Grape (*Vitis vinifera* L.) is an important fruit crop in India. Grapes are the third most widely cultivated fruit after citrus and banana. Major grape-growing states are Maharashtra, Karnataka, Andhra Pradesh, Tamil Nadu and the north-western region covering Punjab, Haryana, Delhi, and western Uttar Pradesh, Rajasthan and Madhya Pradesh. Agricultural workers involve several strenuous activities like ploughing, spading, carrying, uprooting, planting, weeding, cutting, shafting, threshing, sweeping, etc. Musculoskeletal disorders were common among farmers. Farmers handle heavy workloads often in awkward posture and experiencing some work related problems. That majority of the workers (59.3%) in pooled sample belonged to old age and similar trend was also observed in three districts *i.e.* majority 50 per cent, 75.0 per cent and 66.6 per cent, respectively from Hisar, Sirsa, Fatehabad were in old age. Cent per cent of the workers were male. Majority of the workers 44.4 per cent obtained education upto primary school 38.8 per cent upto senior secondary which was the good indication for grapes farming. The musculoskeletal problems and the pain perceived during MMH (Manual material handling) activity with different methods were determined by administering standardized Nordic Questionnaire. These discomforts may be due to prolonged standing work and also other agriculture operation which necessitated frequent bending. Use of improved agricultural tools for varied agricultural operations may mitigate this problem. Governmental efforts are also aimed to address these issues.

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