

## Development and evaluation of scale for measurement of postural discomfort and satisfaction of agriculture workers after weeding operation

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### ABSTRACT

Agriculture production is the back bone of Indian economy and for enhancing agriculture production, weeding operation plays an important role. Most of the agriculture workers are doing weeding operation by traditional methods that's why they are suffered from postural discomfort. Postural discomfort at the time of weeding affects the productivity of work and efficiency of workers. Postural discomfort plays an important role in increasing the productivity and efficiency of agriculture workers. Hence, present study was undertaken with an objective to develop scale for measuring postural discomfort and satisfaction of agriculture workers regarding working performance and to evaluate the developed scale by agriculture workers. Present investigation was undertaken in Dept. of Home Science, RTMU, Nagpur during the year 2010-2011. As the scale was found to be reliable and valid, the developed scale will serve as a scientific tool for measurement of postural discomfort of agriculture workers after weeding operation. Most of the agriculture workers were having not tolerable postural discomfort after existing method of weeding. Most of the agriculture workers were having postural discomfort at neck, wrist, shoulder and knee than the other part of the body.

**KEY WORDS :** Agriculture workers, Postural discomfort, Weeding operation and Self rating scale

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### INTRODUCTION

Women in rural India play a major role in shaping the country's economy through their active participation in agriculture. At present, women work force in agriculture and allied sector is estimated at about 61 million which amounts to about 30% of the total rural workers in the country. In India, particularly in Maharashtra, women are primarily associated with weeding operation in rural areas. They are doing weeding operation manually that's why they suffer from postural discomfort at the time of weeding. Owing to poor socio-economic conditions, they are compelled to carry out a considerable number of manual, rigorous tasks in agricultural fields.

Gangopadhyay *et al.* (2005) shows that those workers worked continuously in awkward postures during certain agricultural activities. Consequently they suffered from discomfort in different parts of their body. Even though they were very young, they were likely to suffer from serious musculoskeletal disorders in the future.

Chung *et al.* (2005) Shows that many Korean workers are exposed to repetitive manual tasks or prolonged poor working postures that are closely related to back pain or symptoms of musculoskeletal disorders. Workers engage in tasks that require not only handling of heavy materials, but also assuming prolonged or repetitive non-neutral work postures. Poor work postures that have been frequently observed in the workplaces of shipbuilding shops, manufacturing plants, automobile assembly lines and farms often require prolonged squatting, repetitive arm raising and wrist flexion and simultaneous trunk flexion and lateral bending. In most manufacturing industries, workers have to assume improper work postures repetitively, several hundreds of times per day depending on daily production rate. A series of psychophysical laboratory experiments were conducted to evaluate the postural load at various joints. A postural load assessment system was then developed based on a macro-postural classification scheme. The classification scheme was constructed based on perceived discomfort for various

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