

Research Paper

## Postural analysis of the entrepreneurs while conducting tailoring activity drafting and cutting

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- ABSTRACT: The gender participation in running the enterprise was studied and it revealed that about 80 per cent of women entrepreneurs were involved in the tailoring enterprise. The main objective of this study was to assess the postural analysis of women entrepreneurs while performing drafting and cutting activity in existing method as well as improved methods. The use of multipurpose tailoring stand developed by AICRP College of Home Science, M.A.U., Parbhani was considered as an improved method. This investigation consisted survey and experiment which was conducted in the respective locations of tailoring enterprises of thirty selected women entrepreneurs between the age range of 25-35 yrs. Women entrepreneurs responses regarding perceived postures and localized postural discomfort were recorded by using 7 and 5 point scale, respectively. Ergonomic evaluation was worked out to find out the effect of multipurpose tailoring stand. Postural analysis of tailoring and related activities showed that angle of deviation at cervical and lumbar region of women was reduced when work was performed with the help of tailoring stand while performing tailoring activity-drafting and cutting in improved method. Criticality index was reduced for the entire discomfort regions of the body. It has been concluded that there was highly significant reduction in postural problems when tailoring activity drafting and cutting was performed by improved method.
- KEY WORDS: Postural analysis, Angle of deviation, Tailoring activity, Ergonomics
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Indian woman plays an important role in the unorganized sector. Her work often demands more time and energy resources. She performs the activities in her usual way adopting casual postures without realizing the cost of energy and other muscular efforts which ultimately result in muscular skeletal problems leading to drudgery. According to Saha (1999), the major health problems related to abnormal working posture are the 'problems of aches' of the muscular skeletal system. Researchers have proved that any work design or work environment that helps to perform the work with minimum energy and put minimum stress on cardio vascular system and muscular system is the best design of work (Varghese et al., 1994). So working posture becomes an important factor while designing ergonomically sound tools and equipment. Similarly, Corlett et al. (1983) showed how the need to adopt poor working posture in order to perform task could lead to postural stress, fatigue and pain which may in turn force the

operator to stop work until the muscle recovers. Kroemer (1994) described the relationship between health complaints and musculo-skeletal injury as a mountain with a wide base of common occurrences of tiredness, fatigue and discomfort.

## **■ RESEARCH METHODS**

The present study was carried out in Parbhani town of Marathwada region in Maharashtra state in the year 2011. Purposive random sampling was followed to select thirty subjects between age range 25-35 years who were involved in tailoring enterprise and performing drafting and cutting of the sari blouse. Questionnaire schedule was developed to note down the responses of the entrepreneurs. M.A.U. multipurpose tailoring stand developed by AICRP, Family Resource Management, College of Home Science was used as new technology. The activity of drafting and cutting of the