

Work Related Musculoskeletal Disorders in Informal Sectors at Jabalpur India

Prabir Mukhopadhyay*

Associate Professor and Head, Design Discipline, PDPM-Indian Institute of Information Technology Design and Manufacturing Jabalpur, Jabalpur, India

***Corresponding Author:** Prabir Mukhopadhyay, Associate Professor and Head, Design Discipline, PDPM-Indian Institute of Information Technology Design and Manufacturing Jabalpur, Jabalpur, India.

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Introduction

Work related musculoskeletal disorders (WMSDs) which manifests itself in the form of pain and numbness in different parts of the body and later develops as a debilitating disorder is a matter of concern amongst the Indian workforce today. The country has a large portion of the working population employed in different informal sectors like agriculture, hand crafts, vehicle servicing, laundry etc. where the problems of WMSDs are gradually on the mount leading to a decline in productivity and quality of work. This in turn is affecting the business which in turn is affecting the economic status of the people involved in this profession.

Jabalpur is a city in Madhya Pradesh State in India, where a large number of informal sectors exist providing employment to the local youth. Some of these informal sectors are marble sculpture, papadam (a snack made out of gram-flour) manufacturing, bicycle repairing, incense sticks manufacturing, hand weaving, hand-made garment manufacturing etc. In all these sectors the problems of WMSDs are on the mount leading to a reduced productivity and specially quality of the job which in turn is affecting the business of these sectors.

For controlling WMSDs there has to be a multipronged approach which is missing till date in these sectors. The most important stage is the diagnosis of the problems, through direct and indirect methods. The second stage is the prognosis of deciding the course of intervention and the last stage is the stage of intervention. Till date for handling these problems emphasis has been only on the diagnosis and there has been very little focus on the intervention and hence controlling these disorders. WMSDs in general have some common risk factors like, force, posture, repetition and along with this environment and psychological factors also contribute to a large extent.

In this part of the country the majority of the initiatives have been taken by the experts in the field of Occupational Health but very little contribution has come from the Designers. For controlling WMSDs there has to be a very holistic view. One approach could be to design/-re-design hand tools and work stations keeping an eye to maintain neutral posture of different parts of the body. The second approach could be re-design the way the task is being performed as to ensure that neutral body posture is maintained and the body's natural movement can follow.

The problem with WMSDs is that there are various "invisible" factors which can also trigger WMSD. The world's literature is quite rich suggesting a strong correlation between psychological factors and low back pain. In such cases if the root cause is not identified and treated, then any design intervention in terms of tools, workstation or process would fail to control it.

Lastly practising yoga can help in toning the muscle of the body and in many cases, help the body fight against WMSDs in reducing pain and numbness in different parts of the body. It is to be remembered that the human body essentially was "designed" for hunting and gathering food. Confining it to a place for a long period, at awkward postures and making it do repetitive work, only goes against its properties for which it was not designed for. This is leading to the rising incidences of WMSDs.

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