

Role of Ergonomics in Kitchen Related Back Problems

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Description

The kitchen is an important area in the home serving many purposes, both functional and social. The kitchen environment needs to be both usable as well as comfortable [1]. The favorite place of all women in their house is kitchen. Kitchens are the highest function room. Indian women spend about 5-6 hours a day in kitchen which may amount to approximately one fourth of her life span and this also is a reason for (causes) various health problems. One of the most important health problem women working in kitchen is pain observed maximally at upper and lower back region. Posture and mode of work had a great effect on the development of musculoskeletal disorders among women engaged in different kitchen activities [2].

In the kitchen the need to have everything on hand and to move freely and tirelessly is often the goal which is not achieved satisfactorily by women. Repetitive movements like chopping and dicing vegetables, awkward positions like holding the head downward to cook food or bending while arranging utensils, overreaching like reaching for supplies on platform or reaching for higher cabinet's, lifting like moving pots and pans are the most commonly done while working in kitchen. Postures and its maintenance play a major role in reducing muscles stress.

Ergonomics takes into account the user's capabilities and finds methods that make tasks easier utilizing equipment and the surrounding environment. Ergonomics principles are not frequently considered in preparation kitchens especially in developing countries like India. Study conducted by Spinalogy Clinic in Kitchen Ergonomics and Back pain and found that simple changes in kitchen ergonomics have far lasting and very good effects on spine and joint pain of women. Total 104 patients participated in the study. The

Oswestry Disability Index (ODI) was taken before the treatment and then , after 1 week, after 1 month, 6 months and 1 yr of the session. The questioner has been designed to give information as to how the low back pain and the upper back pain have affected the ability to manage the daily routine activities. Changes like taking foot stool while standing, arranging cabinets and postural modifications were done. A common goal of these changes was to reduce the unnecessary loading of muscles, improve the posture, and reduce the fatigue level. Excessive stress on the body can lead to disability resulting in pain in daily routine activities. The decrease in the disability index of 104 patients over a period of 1 year is from an average of 35% (before session) to 2% (after 1 year). The study concluded that, these changes reduce the low back pain, upper back pain, discomfort and even they increase the functional abilities.(did not understand this sentence) Ergonomic solutions can help in reducing some of the fatigue level of women while optimizing their sense of overall well-being. Maximum work in the kitchen is done in standing; due to this women always feel fatigue after kitchen work especially in the morning time [3].

To conclude with use of certain ergonomics principles as well as proper interior of the kitchen plays an important role in reducing back related problems.

References

1. Maguire M, Peace S, Nicolle C, Marshall R, Sims R, et al. (2014) Kitchen living in later life: Exploring ergonomic problems, coping strategies and design solutions. *International Journal of Design* 8:73-91.
2. Gangopadhyay S, Bandyopadhyay T (1999) Ergonomics study on analysis of normal activities of Indian women in kitchen. *Biomedicine* 19: 123-128.
3. Suffering from low back pain? Check your kitchen ergonomics.