

# Prevalence of Musculoskeletal Disorder among Housewives

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## Abstract –

*Background-* the concept of status of health has been considered more aggressively , and therefore, more attention has been paid to the integration of the different aspects of health quality in health assessment ,the study aims to assess prevalence of MSDs of housewives in Delhi and Noida *Method:* 100 Housewives of age 25-35, primi gravida and no pregnancy at time of survey were selected . Standard Nordic Questionnaire was employed to assess prevalence of MSDS. Descriptive statistics were used to analyse the data *Result:* 100 % housewives were affected by musculoskeletal disorders in one or more body region. The severity of MSDs last 12 months respondents indicated that they were prevented from carrying their normal activities with Lower back ( 60%), Shoulder (42 %), Upper back (38%), Neck (35%), Wrist/hand (29%), Ankle/Feet (26%), Knee & Thigh/Hips/Buttocks (20%) and Elbow (18 %). *Conclusion:* it can be concluded from the present study that selected housewives were having MSDS in one or more body region last 12 months and last seven days. Severity of MSDs is also high for last 12 months.

**Key Words:** Musculoskeletal disorder , House Wives , Standard Nordic Questionnaire, Survey

## 1.INTRODUCTION

In recent years the concept of status of health has been considered more aggressively , and therefore, more attention has been paid to the integration of the different aspects of health quality in health assessment. Currently, the assessment of health-related quality of life (QoL) is used widely as an outcome of health care system and health care interventions<sup>1</sup>. The World Health Organization Quality of Life Group defines quality of life as 'individuals' perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns'<sup>2</sup>. Therefore, quality of life might mean different things to different people and might also be influenced by many factors including age, culture, gender, education, social class, social environment, diseases, and disabilities

Musculoskeletal (MSK) pain is very common in both developed and developing countries with estimates of prevalence ranging from 11-60%<sup>6</sup>. Musculoskeletal conditions affect more than 1.7 billion people worldwide and have the 4<sup>th</sup> greatest impact on the overall health of the world population, considering both death and disability<sup>3</sup>

“Musculoskeletal disorders” include a wide range of inflammatory and degenerative conditions affecting the muscles, tendons, ligaments, joints, peripheral nerves, and supporting blood vessels. These include clinical syndromes such as tendon inflammations and related conditions (tenosynovitis, epicondylitis, bursitis), nerve compression disorders (carpal tunnel syndrome, sciatica), and osteoarthritis, as well as less well standardized conditions such as myalgia, low back pain and other regional pain syndromes not attributable to known pathology. Body regions most commonly involved are the low back, neck, shoulder, forearm, and hand, although recently the lower extremity has received more attention<sup>4</sup>

It is believed that job is one of the most effective factors on women's quality of life<sup>5</sup>, the matter of fact is that a woman's level of education and her employment status are expected to be positively related to women's empowerment and thus affecting her quality of life<sup>6</sup>

women are often responsible for tasks such as dusting, washing bathrooms and toilets, cleaning windows and mirrors and beds that can lead to contact with a variety of physical contact stress and consequently MSDs and but of course taking care of whole family needs

The previous studies suggest that the prevalence of musculoskeletal pain among women are more common than men and also the older women suffer from musculoskeletal pain more than the older men. The prevalence of injuries among women in the United States, Ontario and Quebec in Canada were reported as 79%, 65% and 50%, respectively.<sup>7</sup>

Musculoskeletal (MS) pain is responsible for poor quality of life and decreased productivity. Global Burden of Disease Study 2010 demonstrates the impact of musculoskeletal diseases as the second greatest cause of disability globally in all regions of the world. Quality of life (QoL) is an important indicator of the burden of musculoskeletal (MSK) diseases<sup>8</sup>

Considering the effect of women's health on the overall family health and with regard to lack of coordination in shared responsibility of men and women in family, and considering women's employment as a minor role alongside the major role of housekeeping, this study was designed to find the prevalence of musculoskeletal disorders of the housewives

### 1.1 Methods

Cross Sectional Survey design

#### Inclusion Criteria

1. Age 25-35 years
2. Married women with prim gravida
3. No pregnancy at the time of survey

#### Exclusion Criteria

Any diagnosed case of musculoskeletal/ neurological/ psychological/ psychiatric / dermatological/ deficit or disorders that can affect the study

### 1.2 Procedure

100 housewives were selected as per inclusion criteria to participate in the study from Delhi and Noida for the study. After proper explanation of the purpose and procedure of the study, written consent for the participation in the study had been taken. Verbal description of the whole procedure explained to the participants. In the study data were collected by closed ended structured questionnaire. Age, Height, Weight was documented

The Nordic Musculoskeletal Questionnaire (NMQ) was employed to record the analysis of musculoskeletal disorders. The questionnaire included neck, shoulder, lower back, elbow, hands, upper back, hips, knees and feet over the past week and over the past year. Response was recorded in dichotomized alternatives yes- no

## 2. RESULT

Table -1: result of Nordic questionnaire

Body Region	Last 12 months				Last 7 days				Functional Impairment			
	Yes		No		Yes		No		Yes		No	
	N	%	N	%	N	%	N	%	N	%	N	%
Neck	48	48	52	52	44	44	56	56	35	35	65	65
Shoulder	55	55	45	45	47	47	53	53	42	42	58	58
Elbow	28	28	72	72	25	25	75	75	18	18	82	82
Wrist/Hand	36	36	64	64	34	34	66	66	29	29	71	71
Upper Back	49	49	51	51	45	45	55	55	38	38	62	62
Lower Back	70	70	30	30	64	64	36	36	60	60	40	40
Hips/Thigh / Buttocks	29	29	71	71	28	28	72	72	19	19	81	81
Knees	37	37	63	63	33	33	67	67	20	20	80	80
Ankle/feets	36	36	64	64	36	36	64	64	26	26	74	74

### DISCUSSION

From the descriptive analysis it indicated that 100 % respondents are affected by MSDs in one or more body region. The severity of MSDs last 12 months respondents indicated that they were prevented from carrying their normal activities with Lower back (60%), Shoulder (42 %), Upper back (38%), Neck (35%), Wrist/hand (29%), Ankle/Feet (26%), Knee & Thigh/Hips/Buttocks (20%) and Elbow (18 %).

The high prevalence of MSDs among housewives suggests that housework could be an independent risk factor contributing to the development of musculoskeletal disorders among women. Another reason for this result could be due to some essential biomechanical parameter and features of housework such as child care, care-giving, food preparation and cleaning that paid for doing them at home, the results are in accordance with study done by Babak Fazli et al on Iranians' Housewives(2015) which also suggests that the prevalence of MSDs in Iranian housewives is very high & ergonomic training and informing the housewives about the risk factors of MSDs could prevent and postponed the occurrence of these disorders

Several relevant findings emerged from reviewing the MSD literature., increased hours of unpaid work at home and performing certain daily activities, such as frequent lifting of objects or children over 10 kg, can be correlated with low back disorders, sociopsychological stress at home can be suggested to be associated with LBDs as well as psychosomatic strain(R.R. HABIB,2010)

Furthermore, the division of domestic labor among household members, which has been shown to be associated with psychosocial health [10.11,12], has received little attention in MSD research.

It is clear from the literature review and the preliminary findings presented in this article that physically demanding housework activities expose female homemakers to several known risk factors for MSDs of the lower back, neck/shoulder, and upper and lower limbs. This line of work should, therefore, be studied from an ergonomic point of view, so as to indicate opportunities for prevention.

### 3. CONCLUSIONS

It can be concluded from the present study that selected housewives were having MSDS in one or more body region last 12 months and last seven days. Severity of MSDs is also high for last 12 months

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