

## Occupational Health Hazards among Farm Women

Pooja Dwivedi<sup>1</sup>, U.V. Kiran.<sup>2</sup>

Student<sup>1</sup> & Assistant professor<sup>2</sup> Department of Human Development & Family Studies, School for Home Sciences Babasaheb Bhimrao Ambedkar University, Lucknow-226025

**ABSTRACT:** Occupational stress contributes not only to life stresses, but has an impact on health and, thus, on the quality of farm life experienced by farmers. The present study aimed to assess the occupational health hazards among farm women and analyse the areas of body discomfort among farm workers. The study sample comprised 120 farm women in Lucknow district. Occupational health hazards scale was used by Singh and Sinwal (1971) and Nordic musculoskeletal questionnaire by Kuorinka et.al (1987) assess of pain and discomfort of the body parts. The result shows that the farm women feel highly stressed working during the season. For postural discomfort, majority of the workers had pain in upper arms and lower arms pain as they were exposed to high level of repetitive task and threshing. It was concluded that majority of the farm women reported high incidence of hazards. Farm women lead a highly stressful life as they are involved in multiple roles. To make their life more comfortable and happier, health hazards faced by them may be reduced through proper training programmes, well designed hand tools and government intervention.

### I. INTRODUCTION

Health is the man's most precious possession. It influences all his activities and shapes the destiny of people. Without it there can be no solid foundation for man's happiness (Swamy,2000) Farming is a complex way of living that creates stressful life conditions among farmers in the primary sector. Occupational stress contributes not only to life stresses, but has an impact on health and, thus, on the quality of farm life experienced by farmers (Pollock 2002;Walker & Walker, 1987).

The occupational health problems may be mainly due to two reasons, i.e. the use of harmful chemicals in the occupation and the bio mechanical and posture demand of the workplace leading to musculoskeletal problems. The musculoskeletal disorder is of very high concern of the ergonomists. The risk of developing musculoskeletal problems is mainly due to the inconvenient work postures.

### II. METHODOLOGY

**Subjects:** - Lucknow district was purposively selected for the study. The sample was selected using multistage random sampling technique totaillie to 120 farm women from various areas of study.

**Evaluation of occupational health hazards assessed:** - The occupational health hazards status of farm women was assessed by using occupational health hazards scale developed by Singh S., and Sinwal S. (1971). The response of the Subjects were codedagainst score and finally summated score is compared with the graded chart of health hazards status.

**Evaluation of body discomfort (MSD):-** The body discomfort evaluated by NORDIC musculoskeletal questionnaire developed by Kuorinka (1987). Personal interview method was used to collect information from respondents.

### III. RESULTS AND DISCUSSION

Table-1.Assessment of occupational health hazards according to age.

Score Range	Age			Total
	18-34	35-54	55-70	
Low incidence of hazards(0-30)	----	----	----	----
Moderate incidence of hazards(31-60)	----	2(1.66)	----	2(1.66)
High incidence of hazards(61-90)	<b>57(47.5)</b>	47(39.16)	16(13.33)	118(98.33)
Severe incidence of hazards(91-120)	----	----	----	----

The occupational health hazards was assessed at four levels (Low, moderate, high & severe). Majority of the respondents reported high incidence of hazards. Minimum of hazards (47.5%) was reported by women in the age group of 18-34 years. Very few (1.66%) women in the age group of 35-54 years reported low incidence of hazards and majority (39.16) reported high incidence of hazards. It can be noted from the table that majority (98.33%) reported high incidence of hazards and none have reported severe incidence.

**Table No.2- Level of body discomfort in various body parts of the body due to farm work.**

Level of comfort					
	Body part	Mild	Moderate	Severe	No pain
1-	Neck	25(20.8)	30(25.0)	34(28.3)	31(25.8)
2-	Shoulders	30(25.0)	43(35.8)	23(19.2)	24(20.0)
3-	Upper back	17(14.2)	11(9.2)	10(8.3)	82(68.3)
4-	Upper arms	25(20.8)	19(15.8)	13(10.8)	63(52.5)
5-	Mid back	14(11.7)	23(19.2)	10(8.3)	73(60.8)
6-	Lower arms	11(9.2)	13(10.8)	6(5.0)	90(75.0)
7-	Lower back	7(5.8)	12(10.0)	14(11.7)	87(72.5)
8-	Buttocks	5(4.2)	3(2.5)	9(7.5)	103(85.8)
9-	Thighs	14(11.7)	32(26.7)	36(30.0)	38(31.7)
10-	Legs	13(10.8)	36(30.0)	63(52.5)	8(6.7)

(Figures in parenthesis indicated percentage)

Mild pain was reported in neck (20.8%), shoulders (25%), upper arms (20.8%) and upper back (14.2%). Equal percent (11.7%) of respondents reported mild pain in buttocks was reported by (85.8%) of respondents followed by lower arms (75.0%), lower back (72.0%) and upper back (68.0%). From the data it is evident that almost equal percentage of respondents had all levels of pain from no pain to severe pain in neck. Severe pain in legs (52.5%) was reported by majority of farm women followed by thighs (30%), neck (28.3%) and shoulders (19.2%). Moderate pain was reported in shoulders (35.8%) followed by legs (30%), thighs (26.7%) and neck (25%).

**Table no. 3-Assessment of body discomfort among the farm women according to their age**

Age (in years)									
	Body part	18-34		35-54		55-70		F	'P' value
		Mean	SD	Mean	SD	Mean	SD		
1-	Neck	1.30	1.16	1.81	1.03	1.75	1.34	2.83	0.63
2-	Shoulders	1.26	0.95	1.81	1.01	1.75	1.06	4.29*	<b>0.01</b>
3-	Upper back	0.30	0.70	0.68	1.06	1.25	1.12	7.18**	<b>0.00</b>
4-	Upper arms	0.72	0.95	0.96	1.16	1.00	1.03	0.84	0.43
5-	Mid back	0.68	1.00	0.81	1.09	0.81	1.04	0.21	0.80
6-	Lower arms	0.44	0.88	0.38	0.79	0.75	1.06	1.07	0.34
7-	Lower back	.46	0.94	0.74	1.17	0.75	1.18	1.09	0.33
8-	Buttocks	0.23	0.68	0.38	0.96	0.44	1.03	0.61	0.54
9-	Thighs	1.94	1.21	1.47	1.24	2.00	1.15	1.26	0.28
10-	Legs	2.19	0.89	2.34	0.89	2.44	1.03	0.60	0.55

This table explains the body discomfort according to age in various body parts. High pain was reported in thighs ( $\mu=2.00$ ) and legs ( $\mu=2.44$ ) by the women in age group 55-70 years followed by other age groups. Highly significant differences was found in feeling of pain in upper back . Where high pain was reported by the women in the age group 55-70 years ( $\mu=1.25$ ) significant differences were also found in shoulders where high incidence of pain was reported by the women in the age group of 35-54 years ( $\mu=1.81$ ), 55-70 years ( $\mu=1.75$ ) and 18-34 ( $\mu=1.26$ ). In all the age groups high pain was reported in legs followed by thighs. This may be due to the reason that maximum of the farm activities performed by women in sitting posture for long hours.

The result of the present research is at par with the findings of many researches had concluded studies and reported that stress in general, but there is a limited body of occupational stress in farming. This study will be make major effort to present literature that is pertinent to model of occupational stress the reflect its relevance. The farmers actually demonstrate low strain from the impact of stressor s. These are partly the function of low government regulatory pressure and free outbreak of diseases or incidents of prolong bad weather. Moreover, the New Zealand farming organizations provide the social supportive structure for the farmers. The present study found initial support from the organization perceived organization support as a favorable work outcome. Finding suggest that farmers are capable of handling multi-tasks demands in the farm. **(Linn & Husaini 1987).**

#### **IV. CONCLUSION**

From the findings of the study it can be concluded that the farm women feel highly stressed during working season. Majority of the workers felt pain in upper arms and lower arms pain as they were exposed to high level of repetitive task and threshing. All these situation ultimately lead to musculoskeletal pain/discomfort in different body parts. It was concluded that majority of the farm women reported high incidence of hazards. Farm women lead a highly stressful life as they are involved in multiple roles- to make their life more comfortable and happier, health hazards by them may be reduced through proper training programmes, well designed hand tools and government intervention.

#### **REFERENCES**

- [1]. Occupational stress among the New Zealand Farmers Binhuat(2010)
- [2]. Singh and Sinwal, (2005) Scale for assessment of occupational.
- [3]. Kuorinka (1987) NORDIC musculoskeletal scale.