

## ASSESSMENT OF MUSCULO-SKELETAL DISORDER IN FLOWER PLUCKING WOMEN IN FAIZABAD DISTRICT OF UTTAR PRADESH

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### **ABSTRACT**

Women play a significant and crucial role in Agriculture development, livestock production and Floriculture as a manager decision maker and skilled farm worker. In this study attempt has been made to study the role performed by farm women engaged in floriculture and to find out the MSD (Musculoskeletal disorder) and OH (Occupational Hazard) among women. The study was conducted in Faizabad District in U.P. 100 samples were taken of women involved in flower management. It was found from the study that majority of respondents (40%) suffered from the Back pain while (20%) women suffered Knee pain. The analysis of the study shows that Poor postures and finger nodes. Stress full work, unawareness of new techniques in the use of equipment and unwariness for safety measures were the reason for musculoskeletal discomforts. 70% women used foot wears due to the awareness of the advantages of it. The preferred activities by women were grading of flower (42%) as first followed by Deeping of flowers (34%), plucking of flower (12%) and storage flower (11%) respectively. The study will be use full in policy making designing women friendly implements for flower plucking and right posture training.

**Key word:** MSD (Musculo-Skeletal Disorder), Occupational Hazard, Knee pain, Back pain, Musculoskeletal Disorder.

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## INTRODUCTION

The women are the backbone of agricultural workforce. They play a significant and crucial role in agricultural development, livestock production, horticulture, and floriculture post harvest operation, agro-social forestry and fisheries, as a manager, decision maker and skilled farm worker. Women have very hectic life. The daily routine work begins cleaning, fetching drinking water, dish washing, laundry, preparing food for family, care of children, tailoring and sewing clothes. She manages these activities very smartly. Women in agricultural families perform many farm related activities both within and outside the household in most parts of the country. So far, as floriculture is concerned, woman participates in almost all activities right from preparatory tillage to harvesting, storage and marketing of the flowers. “Women are responsible for the more time-consuming and labor-intensive tasks of crop and livestock production: a rural woman performs numerous labor intensive jobs such as weeding, hoeing, grass cutting, plucking flower, cotton collection, sowing, application of fertilizer, weeding, transporting, threshing, winnowing, cleaning, sorting grading harvesting and bagging. These tasks are carried out manually or with simple tools. These simple tools include knife, secateurs, scissors, special long knife, cutting knife.” Indian women in urban areas in India suffer due to unemployment. Income is vital for all women and they make up a significant part of the farming workforce. Even in societies where women don't work in the fields, they are active in post-harvest activities.

The plucking and harvesting of the Marigold flower is considered as the severe most drudgery prone activity (Ergonomic practices, 2003) where women have to keep their posture in bending position from the back facing the ground for the plucking of flowers. It leads them to severe pain in their backbone, leg, and thigh and feet etc. To reduce such problems, the ‘hybrid variety of tall plant’ of Marigold as well as rose can help reduce or completely abandon the bending position of women while the harvesting process goes on (Ergonomic practices, 2003).

**NIOSH (2001)** studied that Harvesting of flowers often requires farm workers to bend over into a stooped trunk posture, often many times for significant periods of time. **Ergonomics Practices (2003)** reported that the harvesting of the Marigold flower is considered where as the severe most drudgery prone activity, where women have to keep their posture in bending position from the back facing the ground for the harvesting of flower. **Jyotsna et al. (2005)** stated that during flower harvesting activity from morning till evening women usually adapts squatting posture and

they continue to work in this posture for long duration without adapting any other posture due to which they reported severe pain in lower back and knees. **Osborne *et al.* (2012)** studied on women farmers and reported that lower back pain was the most common MSD among the farmers, followed by upper and then lower extremity MSDs. They also suggest that the prevalence of MSDs in women farmers was greater than in non-farmers population.

### **Objective-**

To study problems faced by women in post harvest management of flowers.

### **MATERIAL AND METHODS:**

The research procedure and technique used in arriving at:

#### **Location of the study:**

- **District** -Faizabad,
- **Block**- Purabazar and Milkipur block,

**Sample procedure:** Select a Faizabad District of Eastern U.P. Two block selected Purabazar and Milkipur block. The sample size taken for study was 100. Samples were randomly selected in stratified manner among women involved in flower business.

**Tools for the data collection:** The following tools will be selected for the data collection:

Interview Schedule and Observation Techniques: Interview schedule will be prepared used as a tool for collection of information through interview from respondents. Observation was made personally to confirm some of the information obtained from the respondent, regarding flower plucking.

#### **Analysis and Interpretation of data:**

Frequencies and percentages were obtained for each variable of the study to draw inferences as per the objectives.

$$\text{Percentage} = \frac{\text{Score obtained}}{\text{Total Score}} \times 100$$

**RESULT AND DISCUSSION:****Distribution of respondents according to the musculoskeletal disorder in Hand and Finger.**

S.No	Finger Problem	Frequency	Percentage
1	Yes	59	59%
2	No	41	41%
	<b>Total</b>	<b>100</b>	<b>100</b>

indicates that majority of respondents, 59 per cent women have accepted facing problem in hand and finger during flower plucking time while 41 per cent of women had no problem during plucking time of flowers.

**Distribution of respondents suffering related to plucking of flowers.**

S.No.	Problems	Frequency	Percentage
1	Back pain	39	39%
2	Breathing problem	2	2%
3	Swelling in leg	23	23%
4	Rashes	5	5%
5	Sneezing	5	5%
6	Any other problem	20	20%
	<b>Total</b>	<b>100</b>	<b>100</b>

shows that majority of respondents 39 per cent were suffering from back pain, followed by 23 per cent of them suffering from swelling in leg, 20 per cent women were suffering from problems like finger pain, hand pain, shoulder pain and eyes pain problem while plucking flower, 5 per cent suffered rashes and sneezing problem where as only 2 per cent were suffering from breathing problem. It may be for this reason educated people are not accepting it as a business. It is concluded from the table that most of the respondent's suffer back pain during plucking of flower in the field.

**Distribution of respondents according to the changes of posture while plucking flowers.**

S.No.	Change posture	Frequency	Percentage
1	Yes	10	10%
2	No	90	90%
	<b>Total</b>	<b>100</b>	<b>100</b>

Indicates that majority of respondents 90 per cent women do not change posture while plucking flower and only 10 per cent of women change posture while plucking flower.

The reason they gave was that plucking flower needed bending posture and grading flower needed only one posture to work efficiently.

**Distribution of respondents according to the problem faced while sitting on the ground for grading of flowers.**

S. No.	Problems	Frequency	Percentage
1	Knee pain	22	22%
2	Leg pain	38	38%
3	Swelling	37	37%
4	Any other	3	3%
5	Rashes	-	-
	<b>Total</b>	<b>100</b>	<b>100</b>

Indicates that majority of respondent 38% are suffering from leg pain, 37% are suffering from swelling, followed by 22% women suffering from knee pain and a very small percentage of them 3% suffering from other problem like finger pain, thigh pain while grading the flowers. None of them suffered from rashes while grading flower.

**CONCLUSION**

The study shows women who are illiterate also have avenues for income generation through flower management. The skill in making garland bouquets fetches profit. Even the weathered flowers are consumed properly. They are kept separately. Women are involved in plucking of flower, grading of flowers, dipping of flowers and sale in the flower. In playing their role in flower management they face many types of musculoskeletal discomfort due to poor posture long hours of grading schedules.

**RECOMMENDATION:**

- Awareness program through mass media to help in adoption of proper posture and new technologies.
- Use if right posture in working, plucking, dipping and grading of flowers.

## REFERENCES

- Jyotsna *et al.* (2005). Ergonomic Intervention for Preventing Musculoskeletal Disorder among Farm Women. *J.Agric.Sci.* **1** (2): 61-67.
- Ergonomics Practices (2003). Production of Rose and Marigold Flower in Allahabad City pp.1-2, Research Journal of Agriculture Forestry Science. ISSN 2320-6063 Vol-2(9)1-3 September 2014. [www.isca.in](http://www.isca.in), [www.isca.me](http://www.isca.me).
- Niosh (2001). Ergonomic, Intervention, Preventing, Musculoskeletal Disorder Among Farm Women. *J. Agri. Sci.* **1**(2): 61-71(2010).
- Osborne *et al.* (2012). Evolution of Work Related and Musculoskeletal Disordered and Posture Stress Among Female Cultivators Egged in Post Harvesting Task West Bengal pp.22-23. *Indian Journal of Biological Science*, **18**:16-25