

## ***Short Communication***

# **Effects of Pesticide Application on the Health of Rural Women Involved in Cotton Picking**

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## **ABSTRACT**

This study investigates the effects of pesticides application to cotton on the health of rural women involved in cotton picking. The data were collected from a sample of 150 female cotton pickers by using a well-prepared interviewing schedule. Majority of the purposively selected respondents were always facing the problems of stomach disease, breathing problem, diarrhea and feel swelling/inflammation on the hands/other parts of body during or after picking cotton. It is suggested that cotton pickers and farmers should be educated about the negative effects of pesticides on the human health and environment and the precautionary measures to avoid these hazards.

**Key Words:** Pesticides; Health; Cotton; Women

## **INTRODUCTION**

In agriculture, pesticides are the chemicals used for plant protection from insects and pests. Farmers are using pesticides in large quantity to save their crops and to get higher yield. These chemicals when mixed with crops, soil and water, play havoc with human life. These chemicals are quite injurious to human life (Rafiq, 1993). In Pakistan, about 76% of the pesticides are consumed in cotton crop (Government of Pakistan, 1996). The excessive use of pesticides on cotton increases the percentage of health hazards to those who are closely related with cotton crop. Cotton picking is one of major agri-activity which is related with women. In Pakistan, the contribution of rural women in the households as well as in the national economy is self-evidenced. When cotton is picked, some pesticide dust inevitably dislodges from the fluffy boll, stem and leaves settles on their bare hands and arms; some of it may even be inhaled. Women are engaged in cotton picking for a period of 2-3 months. This constant and prolonged exposure to toxic chemicals in many ways potentially poses greater health problems. While picking, they are vulnerable to acquiring cuts or skin rashes. Some women pick cotton during pregnancy which is very dangerous both for mother and the baby. This study endeavours to acknowledge females contribution in agriculture and the dangerous they face in their work with a focus on women exposure to chemical pesticides. This is also important in the context that females are major part of a family and when a woman gets sick or dies due to sickness, the family left behind in crisis and chances of social disintegration are increased. The findings of the study may guide the producers, distributors, spraymen, farmers as well as cotton pickers to adopt better

safety measures. Present study was aimed at the following objectives:

1. To examine the socio-economic characteristics of rural women involved in cotton picking activity.
2. To get consciousness on the role of women in agriculture.
3. To gather information on the impact of pesticides on the health of female involved in cotton picking.
4. To make recommendations for safety measures from pesticides during cotton picking.

## **METHODOLOGY**

The universe for this study consisted of 150 female cotton pickers of three villages of Tehsil Tandliawala, Punjab–Pakistan. The data on various aspects given in the following section were collected by using a well prepared questionnaire.

## **RESULTS AND DISCUSSION**

Majority of the cotton pickers (88.0%) agreed that income from picking cotton affected their quality of food, while to 52.7% of cotton pickers, this income improved their clothing standard. About 45% the cotton pickers agreed that income affected their health standard and to 20% of them, this income affected their social relationing (Table I). It was found that 39.3% of affected cotton pickers always observed skin disease like irritation or skin burning; whereas, 33% of the respondents often felt such skin problems. According to 27.3% of cotton pickers, they had no such problem (Table II).

**Table I. Distribution of respondents as to their views about effect of income from cotton picking on quality of food, health and social relationing**

Income effects	No		Yes		Total
	F	%	F	%	
Food quality	18	12.0	132	88.0	150
Clothing standard	71	47.3	79	52.7	150
Health standard	83	55.3	67	44.7	150
Social relationing	120	80.0	30	20.0	150

**Table II. Distribution of respondents with regard to the extent of feeling skin diseases**

Skin diseases	Frequency	Percentage
No	41	27.3
Sometimes	59	39.3
Always	50	33.4
Total	150	100.0

**Table III. Distribution of respondents with regard to the extent of feeling stomach problem**

Stomach problems	Frequency	Percentage
No	43	28.7
Sometimes	89	59.3
Always	18	12.0
Total	150	100.0

**Table IV. Distribution of respondents with regard to the extent of feeling weakness/tiredness**

Weakness/tiredness	Frequency	Percentage
No	59	39.3
Sometimes	40	26.7
Always	51	34.0
Total	150	100.0

Table III indicates that 59.3% felt stomach problems sometimes during or after picking cotton; while 12% of the pickers always felt it, and 28.7% of the pickers had never such problem during cotton picking. It was found that

30.3% of the pickers had never felt weakness or tiredness during or after cotton picking; while 34% of them felt such problems some times. According to 26.7% of the respondents, they sometimes felt tiredness and weakness during cotton picking (Table IV).

## CONCLUSION

The results revealed that most of the cotton pickers agreed that income from picking improved their quality of food. The commonly observed problems related with pesticide treated cotton picking are skin diseases, stomach problems, weakness and tiredness.

## SUGGESTIONS

1. Female cotton pickers and other farmers should be educated about the negative effects of the pesticides application to the crops and the precautions necessary to be taken during cotton picking.
2. Cotton pickers should use gloves and masks during cotton picking in order to avoid the hazards of chemicals on their hands and other parts of body.
3. It must be made sure that picking should not start before the completion of specific period after spray i.e. at least 15 days after spray.
4. Pesticides producing companies should introduce environment friendly chemicals.

## REFERENCES

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