
A STUDY ON OCCUPATION RELATED HEALTH PROBLEMS AMONG AGRICULTURE WORKERS IN THENI DISTRICT

Dr.A.Sangamithra

Associate Professor,
Department of Economics,
Bharathiar University,
Coimbatore

P.Arun Kumar

Ph.D Research Scholar,
Department of Economics,
Bharathiar University,
Coimbatore

Abstract

Agriculture is considered to be one of the oldest occupations, perhaps as old as human civilization. Agriculture is the mainstay of Indian economy, has been and will continue to be the lifeline of the Indian economy at least in the foreseeable future. The health status of agricultural workers in rural is lower than in urban in Theni district. Agricultural work is subject to the health risks inherent to a rural environment and at the same time to those deriving from the specific work process involved. This sector of activity being most unorganized, very little attention has been given to the occupational health problems of these workers. Besides the normal health problems, agricultural workers, in general suffer from certain specific health hazards due to extensive use of fertilizers, insecticides and pesticides and mechanization. The increasing use of chemicals and biological agents with hazard potential unknown to people; the indiscriminate use of agro chemicals including pesticides, agricultural use of agro chemicals including pesticides, agricultural machineries and equipment, and their impact on health and safety of exposed population; pose serious safety and health risks for agricultural workers. The conditions of farmers in Tamil Nadu seem to be very unpleasant and therefore farmers do not want their children to continue farming and as farmer of Tamilnadu also face health hazards due to pesticide and insecticides used by farmer for the good yield. Government has to take step in educating farmers regarding the risk of pesticides and other problems involved in agriculture and create awareness program in order to avoid a major occupational hazards related to agriculture.

Keywords: *Agriculture, pesticides, farmers, occupational hazards, biological agents*

Introduction

Agriculture is the mainstay of Indian economy, has been and will continue to be the lifeline of the Indian economy at least in the foreseeable future. It is a matter of concern therefore that the share of agriculture in the country's economy has been decreasing over the years. Agriculture is considered to be one of the oldest occupations, perhaps as old as human civilization. Approximately 2 billion people are engaged in agriculture and related work in the developing countries of Asia, whereas the developed countries contribution is merely 100 millions. In a country like India, large workforce is employed in diverse settings. There are 360 million workforces in India, of which 225 million in agriculture and 120 million are in industrial sector. In the last 50 years, due to rapid industrialization, India has been considered as a newly industrialized country. In spite of this 50 percent of our Gross Domestic Product is still being contributed by agriculture sector. Thus, this sector is very vital and the most important sector of our economy but according to the International Labour Organisation (ILO), the agricultural sector is one of the most hazardous to health worldwide. Agricultural work possess several characteristics that are risky for health; exposure to the weather, close contact with animals and plants, extensive use of chemical and biological products, pesticides, difficult working postures and lengthy hours. The use of chemicals in modern agriculture has significantly increased productivity. Ill health arising from agricultural work has negative implications for

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agricultural productivity. The economic costs arising from the occupational health hazards of agricultural often arise because of the economic intensives of agricultural work (Manwani.V, 2012).

Agriculture Workers and the Problems Faced by them

Agriculture workers (AWs) are the main pillars for growth and development of this sector. In the fourth report of the joint ILO/WHO committee on occupational health, an agriculture worker means any person engaged either permanently or temporarily, in activities related to agriculture, irrespective of his/her legal status .In India Ministry of Labour includes ploughing, sowing, weeding, transplanting, harvesting, cultivation, forestry, plantation, fisheries, and others as principal agricultural operations . Agricultural work is subject to the health risks inherent to a rural environment and at the same time to those deriving from the specific work process involved. This sector of activity being most unorganized, very little attention has been given to the occupational health problems of these workers; though the need of investigation and intervention towards these problems. These health problems of workers in agriculture may be accidents (machine injuries, snake and insect bites), toxic hazards (chemical exposures and insecticide poisoning), physical hazards (extreme conditions, solar radiation), and respiratory problems (farmer's lung, occupational asthma). The lack of coordination of policy making between agriculture and health undermines efforts to overcome ill health among the agriculture workers and gives short shrift to agriculture's role in alleviating many of the world's most serious health problems. (Vijay Kumar Manwani, 2012).

Statement of the Problem

Besides the normal health problems, agricultural workers, in general suffer from certain specific health hazards due to extensive use of fertilizers, insecticides and pesticides and mechanization. The increasing use of chemicals and biological agents with hazard potential unknown to people; the indiscriminate use of agro chemicals including pesticides, agricultural use of agro chemicals including pesticides, agricultural machineries and equipment, and their impact on health and safety of exposed population; pose serious safety and health risks for agricultural workers. The conditions of farmers in Tamil Nadu seem to be very unpleasant and therefore farmers do not want their children to continue farming and as farmer of Tamilnadu also face health hazards due to pesticide and insecticides used by farmer for the good yield. Hence the study was conducted in Theni district of Tamil Nadu as Agriculture is the primary occupation of the district and 67 percent of its population lives in rural areas. Theni enjoys salubrious climate. Its maximum temperature is 38.50°C and the minimum is 26.30°C. The climate is conducive for Agricultural and Horticultural crops.

Where the health status of agricultural workers in rural is lower than in urban in Theni district. The drift of the population to cities has contributed to a concentration of health services in large urban areas, resulting in an imbalance in the distribution of health resources to the detriment of the rural sector. Limited funds are available, in particular in preventive and primary health care, those areas where a greater impact could be made among the rural populations. Small rural health centres often find it difficult to attract and retain the stand.

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The deterioration of the health status in rural areas increases progressively the greater the distance from urban centres. The agricultural workers may live in extremely primitive conditions, in areas where roads are non-existence or inadequate and transportation is difficult. The majorities of the rural population in developing countries have an inadequate diet and are exposed to both general and occupational diseases.

Generally, the context in which an individual lives is of great importance on health status and quality of life. It is increasingly recognized that health is maintained and improved not only through the advancement and application of health science, but also through the efforts and intelligent lifestyle choices of the individual and society. According to the World Health Organization, the main determinants of health include the social and economic environment, the physical environment and the person's individual characteristics and behaviors.

Table 1 Overall Health Status of the Sample Respondents

Overall health status	Frequency	Percent
Good	4	08.0
Average	27	54.0
Bad(Sick)	19	38.0
Total	50	100.0

Source: Primary data

Among the 50 total sample agriculture workers, a majority of 27 workers (54 per cent) reported that they had an average health status, 4 workers (8 per cent) had a good health, and 19 workers (38 per cent) had bad or sick health condition. It is noted when respondents were asked to state their overall health status, a majority of them reported that their health status was average.

Objective of the Study

1. To Find out the occupation related health problems among agricultural workers

Data and Methods

An attempt has been made in this research to analyse the health seeking behaviour of agriculture workers in Theni district. The study was conducted in 5 taluks, namely Andipatti, Bodinayakanur, Periyakulam, Theni and Uthamaplayam coming under Theni district among 50 agriculture workers from different taluks.

Result and Discussions

Occupational Related Health Problems

The agricultural sector is one of the most hazardous to health worldwide. Agricultural work possesses several characteristics that are risky for health: exposure to the weather, close contact with animals and plants, extensive use of chemical and biological products, difficult working postures and lengthy hours, and use of hazardous agricultural tools and machinery. This brief outlines the occupational health hazards of agriculture, presents a case study on the

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trade-offs between their health and economic impacts, and proposes responses (International Labour Organization (ILO)).

Farm work is subject to the health risks inherent to a rural environment and at the same time to those deriving from the specific work process involved. This sector of activity being most unorganized, very little attention has been given to the occupational health problems of these workers; though the need of investigation and intervention towards these problems. These health problems of workers in agriculture may be accidents (machine injuries, snake and insect bites), toxic hazards (chemical exposures and insecticide poisoning), physical hazards (extreme conditions, solar radiation), and respiratory problems (farmer's lung, occupational asthma). The lack of coordination of policy making between agriculture and health undermines efforts to overcome ill health among the agriculture workers and gives short shrift to agriculture's role in alleviating many of the world's most serious health problems.

Table 2 Occupational Related Health Problems

Health Problems	Frequency (50)	Percent (%)
Musculoskeletal problems	46	92.0
Skin diseases/problems	36	72.0
Ulcerative colitis	30	60.0
Allergy/Immune System	24	48.0
Diabetes	18	36.0
Eyes diseases/problems	12	24.0
Thyroid	8	16.0
Gastrointestinal	6	12.0
Eczema	6	12.0
Endocrinologic	6	12.0
Haematological	4	8.0
Ear, Nose and Throat problems	4	8.0
Neurologic problems	4	8.0

Source: Primary data

The Occupational related health problems is explained in the table 2, that among 50 respondents in total, a majority of 46 respondents were affected from musculoskeletal problems, next to 36 respondents (i.e, 72 percent) were affected by skin problems, ulcerative colitis affected 60 percent of a worker, allergy/immune systems was affected to 24 respondents due to their occupation, where 18 respondents were affected by diabetes, Eyes related problems affected 24 percent of the agriculture workers, 8 respondents were affected Thyroid problems, Gastrointestinal, Eczema and Endocrinologic problems affected 12 percent of agriculture workers, Haematological, Ear, Nose and Throat and Neurologic problems affected 8 percent of agriculture workers.

Conclusion

Agriculture workers are subject to the same range of illnesses and chronic diseases as is the general population, however, there is evidence that they are at increased risk for occupational acute injury, certain chronic diseases, and pesticide illness. Farm workers are at increased risk

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for a number of important non-occupational conditions. The major underlying factor affecting chronic disease risk is low socio-economic status. This may be further influenced by low educational levels, poor housing conditions, and reduced public health services. For example, obesity rates and associated health problems have been shown in several studies of farm workers to be increased, reflecting in part the general rise in these conditions among low-income immigrant Theni district populations.

Besides the normal health problems, agricultural workers, in general suffer from certain specific health hazards due to extensive use of fertilizers, insecticides and pesticides and mechanization. The increasing use of chemicals and biological agents with hazard potential unknown to people; the indiscriminate use of agro chemicals including pesticides, agricultural use of agro chemicals including pesticides, agricultural machineries and equipment, and their impact on health and safety of exposed population; pose serious safety and health risks for agricultural workers. Since the occupational safety and health service are out of the reach of this group their vulnerability is further accentuated. Pesticides are usually spread and it has been observed that the sprayer operators experience fatigue mainly due to carrying the sprayer load. The vibration arising out of powered sprayers also causes discomfort to the operator. The pesticide applicators, mixers and loaders are at the risk of exposure to toxic chemicals. It is not uncommon that the farmers broadcast pesticides or prepare pesticide solutions with bare hands improper handling of pesticides. Spraying without wearing personal protective devices, oral poisoning of pesticides, etc. led to many sprayer related accidents. Also due to low education and awareness levels among the group they are subject to greater health and occupational hazards. Hence government has to take step in educating farmers regarding the risk of pesticides and other problems involved in agriculture and create awareness program in order to avoid a major occupational hazards related to agriculture.

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