

# A Study on Health Status of Scheduled Caste Women Workers of Tea Plantation at Valparai Taluk, Coimbatore District

C. Umamaheswari<sup>1</sup> and Dr. K. K. Saradha<sup>2\*</sup>

<sup>1</sup>Department of Economics, Government Arts College, Udumalpet – 642126, Tamil Nadu, India

<sup>2</sup>Department of Economics, Vellalar College for Women, Erode – 638012, Tamil Nadu, India; economicsvellalar@gmail.com

## Abstract

Health plays a vital role in the well-being of human life and country's economic growth. The health of women, in particular can be analyzed in terms of various indicators that vary geographically, socio-economically and culturally. At present, Indian women are facing many health problems, which lead to disturbance in the output level of the company. The tea industry has been playing a very important role in the development of the Indian economy. Women make an immense contribution in the productivity of tea plantation. Most of the labor force in tea plantation includes migrants from various districts of Tamil Nadu. The study adopted simple random sampling technique in selecting the sample and primary data were collected from 100 respondents. The study has been undertaken to analyze the health status of scheduled caste women working in tea plantation at Valparai Taluk, Coimbatore District. The study indicated that the health awareness among the scheduled caste women workers was very poor. The findings showed that variables such as age of the worker, level of formal education of the worker, length of service and annual medical expenditure had significantly influenced the health status of the women workers. It was suggested that the Government, NGOs as well as the management of the tea plantations should take immediate measures to improve the health of the workers to have drastic change in economic and social aspects.

**Keywords:** Health, Plantation, Production and Women Workers

## 1. Introduction

India, being a predominantly agriculture oriented, has more population engaged in primary sector. This sector not only satisfies the basic need of the people but also offers sustenance to the masses. Most of the population, directly or indirectly involve in agriculture and its allied services for their livelihood. Among various crops, the tea plantation engages more women workers. The condition of women workers on plantation everywhere is universal and similar. Women workers are assigned the lower status in the functional and social hierarchy on tea plantations. These women have very little exposure to the outside world. In the tea estates located in hilly area, estate

laborer faces many troubles like, rain, winter and threats from animals. The health aspect of tea plantation laborers influences their level of productivity. In this regard, the present study focuses on the health status of women workers in tea plantation.

## 2. Review of Literature

Dukhabandhu Sahoo *et al.*<sup>1</sup> in their study indicated that maximum percentage (23%) of laborers suffer from health issues, particularly calorie deficiency and disorders like fever, cough, anemia, hypertension, gastric problems, skin problems, etc. Further, it was found that significant percentage of people working in tea plantation died during

\*Author for correspondence

the last five years due to tuberculosis, high blood pressure, lack of proper treatment and other diseases. Nibedita Chowdhury *et al.*<sup>2</sup> revealed that various disorders had affected the female laborers. The maximum percentage (76%) of respondents does not eat food at proper time. Majority of 86% of the female laborers lack adequate nutrition and the health services provided to female laborers were not satisfactory. Musharraf Hossain *et al.*<sup>3</sup> revealed that the high rate of illiteracy, low wage, early marriage, poor dietary intake, high rate of communicable diseases and poor nutritional status were directly related and affected each other. Barani and Barani and Rajarajan<sup>4</sup> indicated that gender sensitization played a key role in human progress. The female laborers became tired and got ill. The study suggested that Government and other stakeholders should work together and provide proper information to protect the lives.

### 3. Objectives of the Study

The major objectives of the present study are:

- To study the health status of women workers working at tea plantations.
- To find out the reasons for unhealthiness of women workers.

### 4. Research Design

The primary data required for the study are collected from scheduled caste women workers working in the tea plantation of Valparai Taluk. The major tea plantations in Valparai are Tata Tea Estate Ltd., Puthuthottam Tea Estate

Ltd., Chenniappa Estate, Manampolly Estate, Jayshree Tea Industries, Periya Karamalai Tea Estate, N.E.P.C Tea Ltd., Murugan Estate, Anali Estate, Sajitha Estate, Tamil Nadu Tea Plantation Corporation, Parry Agro Ltd., The Bombay Burma Trading Corporation and Sri Ram Estate. Of these, two tea plantations namely The Bombay Burmah Trading Corporation Limited and The Peria Karumalai Tea Estate are selected purposively. In each plantation, 50 scheduled caste women workers are selected on the basis of simple random sampling method. Thus, a total of 100 respondents are selected. Field work is undertaken during the month of August 2022 to collect the data.

## 5. Results and Discussion

The demographic and health status of the respondents are analyzed by using Simple Percentage Analysis.

### 5.1 Demographic and Health Status of the Respondents

Age plays an important role in affecting health condition of people. The women have different role to play during their lifetime and work in different capacity. Table 1 gives the distribution of workers based on age.

From Table 1, it is observed that majority of 45% of the workers fall in the age group of 36–45 years, 30% of the workers fall in the age group of 46 years and above, 20% of the workers in the age group of 26–35 years and only 5% of the workers in the age group of 20–25 years.

Educational qualification raises the attention of people towards their health and fitness. It changes the attitude

**Table 1.** Distribution of respondents based on age

Age	No. of Workers	Percentage
20 - 25 years	5	5
26 - 35 years	20	20
36 - 45 years	45	45
46 years and above	30	30
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Computed

**Table 2.** Distribution of the respondents based on educational qualification

<b>Educational Qualification</b>	<b>No. of Workers</b>	<b>Percentage</b>
Illiterate	34	34
Can Sign Only	12	12
Primary level	41	41
Secondary level	9	9
Higher Secondary level	4	4
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Computed

of laborers and creates awareness. Table 2 depicts the classification of the respondents based on their education.

The Table 2 shows that 41% of the female workers are literate with primary education, 34% of the female workers are illiterate who cannot read and write. 12% of the female workers are with informal education (can sign only), 9% of the female workers are with secondary level of education and 4% are with educational qualification of higher secondary level.

Health and productivity are highly related. The low productivity in tea plantation is mainly due to poor health condition of workers. The Table 3 reveals the type of sickness suffered by the workers.

The Table 3 indicates that about 90% of the workers suffered with hand and leg pain. 71% of the workers are weak, 62% have the problem of asthma/breathing trouble due to the climatic conditions. They also suffer with fever, cough/cold (25%), diarrhoea/stomach pain (15%), skin diseases (23%), eye pain and head ache (24%). About 48% of the workers have the problem of sugar and blood pressure.

The mode of treatment taken by the workers is presented in Table 4.

The Table 4 depicts that about 85% of the sick workers undertook treatment from the garden's doctor/hospital or

**Table 3.** Distribution of respondents based on type of sickness

<b>Type of Sickness</b>	<b>No. of Workers</b>	<b>Percentage</b>
Fever/Cough/Cold	25	25
Diarrhoea/Dysentry/Stomach Pain	15	15
Weakness	71	71
Eye Pain/Headache	24	24
Skin Diseases	23	23
Asthma/Breathing Trouble/Chest Pain	62	62
Hand/Leg Pain	90	90
Sugar/BP	48	48

Source: Computed

**Table 4.** Distribution of the respondents based on mode of treatment taken

Mode of Treatment	No. of Workers	Percentage
Garden's Doctor/Hospital/Clinic	85	85
Government Hospital	5	5
Self Treatment	10	10
<b>Total</b>	<b>100</b>	<b>100</b>

Source: Computed

clinic. About 10% cured their illness with self treatment and 5% took treatment in government hospital.

## 5.2 Reasons for Various Sicknesses

The causes for sickness of plantation workers are multifarious. The nature and timing of work in the field affects the health condition of the workers. The life style and environmental factors also have its impact on the welfare of the workers. In this regard, the study considers the reasons namely work under rain/sun, hard work/walking and standing for a long time, bare feet, mosquito bite, spraying of insecticide with bare hand, lack of pure drinking water and others. Henry Garret Ranking Technique has been used to analyze the reasons

for various sicknesses and the results of the analysis are presented in Table 5.

The Table 5 reveals that the foremost reason for sickness is work under rain/sun with the mean score of 71.30. Hard work/walking and standing for a long time is the next reason for sickness with the mean score of 68.19. Third and fourth reasons for the sickness are bare feet in the working field and Mosquito bite with the mean scores of 58.28 and 56.05 respectively. The other reasons for sickness are lack of pure drinking water (49.21), spraying of insecticide with the bare hand (47.98) and the workers also reported other reasons like ignorance and lack of awareness about the diseases (34.06).

**Table 5.** Reasons for various sickness of the women workers

S.No.	Reasons for Various Sickness	Score	Mean Score	Rank
1	Work under Rain/Sun	6417	71.30	I
2	Hard work/Walking and standing for a long time	6137	68.19	II
3	Bare Feet	5245	58.28	III
4	Mosquito Bite	5075	56.05	IV
5	Spraying of insecticide with bare hand	4318	47.98	VI
6	Lack of pure drinking water	4429	49.21	V
7	Others	3065	34.06	VII

Source: Computed

### 5.3 Factors Affecting Health Status of the Respondents

Regression Analysis has been used to analyze the most important factor responsible for health status of the women workers. Before fitting the functions, zero-order correlation matrices are worked out to identify the multicollinearity problem. No multicollinearity problem is observed among the independent variables included in the function. The results of the regression analysis are presented in Table 6.

The results of the regression analysis showed that variables such as Age of the worker ( $X_1$ ), Level of formal education of the worker ( $X_3$ ) Length of service ( $X_7$ ) and Annual medical expenditure ( $X_9$ ) have significantly

influenced the health status of the workers. Among these, Age of the worker ( $X_1$ ), Length of service ( $X_7$ ) and Annual medical expenditure ( $X_9$ ) are highly significant at 1% probability level. The  $R^2$  value of the analysis is .944 which means that 94.4% of the selected variables have its impact on the health status of the workers. The F Value is 167.240 which is significant at 1% level.

## 6. Suggestions and Policy Implications

The following are the suggestions and policy implications recommended for the welfare of the women plantation workers.

**Table 6.** Results of regression analysis

Variables	B	t value	p-value
Constant	.099 (.192)	.516	.607
Age of the Worker ( $X_1$ )	.023** (.003)	6.914	.000
Age during Marriage of the worker ( $X_2$ )	-.012 (.007)	-1.619	.109
Level of Formal Education of the worker ( $X_3$ )	-.044* (.020)	-2.169	.033
Number of Children ( $X_4$ )	.003 (.027)	.108	.914
Gap between the Birth of Children ( $X_5$ )	-.002 (.018)	-.129	.898
Family Size ( $X_6$ )	.015 (.014)	1.068	.289
Length of service ( $X_7$ )	.035** (.004)	9.379	.000
Satisfaction with the present job ( $X_8$ )	-.038 (.027)	-1.435	.155
Annual Medical Expenditure ( $X_9$ )	.000** (.000)	3.768	.000
R = .971 $R^2 = .944$ F=167.240 Sig = .000      N = 100			

**Figures in Parentheses indicate Standard Error**

\*\* Significant at 1 % Probability level

\* Significant at 5 % Probability level

- Women workers are giving less importance for their health and nutritious value of the food. Therefore, NGOs and Government agencies should take steps to improve the consciousness of the workers in maintaining their health.
- To protect the health of the workers from environmental factors, certain measures like provision of rain coats, umbrella, rain shoes etc., should be given periodically.
- Health awareness campaign has to be conducted at least twice a year to create an understanding about the communicable and non-communicable diseases.
- Frequent medical checkup during the year is needed. Separate medical care council for women should be formed.
- Unsanitary latrine may be discontinued. Government and tea estate authority may establish 100% sanitary latrine in the houses of workers.

## 7. Conclusion

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Tea plantation offers more employment opportunities to many women folk. It raises the standard of living of people in estate regions. Even though it contributes for their livelihood, the women workers in the tea plantation are facing more problems than the women workers in other occupations. The health status of the workers also gets affected. The present study examined the health status of the women workers in tea plantation field. The results of the regression analysis showed that variables such as age of the worker, level of formal education of the

worker, length of service and annual medical expenditure have significantly influenced the health status of the worker. Further, work under rain/sun by the workers has led them to face the health issues. Hence, the suggestions mentioned in the study will help to overcome the health issues faced by the scheduled caste women workers in the tea plantation fields at Valparai Taluk of Coimbatore District.

## 8. References

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