

# The Impact of Socio-Economic and The Health Conditions of Tribal Women. A Study of Paderu Tribal Mandal of Visakhapatnam District In Andhra Pradesh

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## Abstract

India is a rapidly developing nation, but patriarchal relationships and traditional values remain pervasive. Women in urban areas are becoming educated and urbanised, but tribal women remain steeped in tradition and have lower socioeconomic achievements than men. Gender-based violence and discrimination are major issues faced by women in India, with cases of rape, domestic violence, and female infanticide still prevalent. The position of women in a society was frequently determined by their income, employment, education, health, and fertility, in addition to their roles within the family, community, and society. Nonetheless, the study of tribal women is crucial due to the fact that their problems vary by region due to their geographical location, historical context, and social change processes. The present paper focuses on socio-economic and the health status of tribal women in paderu mandal of Vishakhapatnam district in Andhra Pradesh. It is found that there is a need for targeted interventions to improve the health outcomes of vulnerable populations, particularly those with lower incomes and who rely on traditional cooking fuels. These interventions could include access to clean energy sources and targeted health education campaigns, which can reduce exposure to indoor air pollution.

**Keywords:** Social, Economic, Health, women, Standing of Living.<sup>1</sup>

## Introduction: -

Women are universally more susceptible to social, economic, and health disadvantages than men, according to prevalent discourse. This claim is supported by numerous studies showing that women are more likely to experience hunger, discrimination, and violence. Nevertheless, it is essential to recognise that women's experiences vary according to their race, ethnicity, class, and other intersecting identities. Women report higher rates of morbidity, disability, and healthcare utilisation than men despite living longer than men (Nathanson, 1977; Vergrubbe, 1985; Wingard et al., 1989). This phenomenon may be caused by a combination of biological, social, and environmental factors that affect the health of women

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differently than that of men. It emphasises the need for targeted healthcare interventions that address the unique health issues encountered by women.

India is a rapidly developing nation, but amidst modernization, patriarchal relationships and traditional values remain pervasive in many spheres of life. Despite the fact that women in urban areas are becoming educated and urbanised and ascending the occupational ladder, the majority of tribal women living in tribal areas remain steeped in tradition and have substantially lower socioeconomic achievements than men, according to numerous studies. Furthermore, gender-based violence and discrimination continue to be major issues faced by women in India, with cases of rape, domestic violence, and female infanticide still prevalent in some parts of the country. Efforts to address these issues through education and policy changes are ongoing, but progress is slow. The women's lower socioeconomic status was one of the primary reasons for poorer health outcomes in the developed world in earlier decades, it may be worthwhile to investigate whether gender differences in morbidity among tribal women in India can be explained by any lingering socioeconomic differences. The latter effect is significant from a policy standpoint because it may be susceptible to targeted interventions in part. Additionally, examining the impact of cultural beliefs and practises on women's health in tribal communities could also provide valuable insights for developing effective interventions to improve health outcomes among these populations. Such interventions could include culturally sensitive healthcare services and education programmes.

Women in the tribal regions of India have been excluded from a preview of modern facilities. They preferred to adhere to their own customs, superstitions, and methods of childrearing. Women do not pay sufficient attention to their health, sanitation, environment, nutrition, or social behaviour to enhance their bio-psycho-social standing in society. They established their own norms and standards for health, sanitation, socialisation, childbearing, and childrearing. They were oblivious to the disadvantages and repercussions of their traditional habitat-dwelling practises. Pregnant and lactating mothers did not receive adequate nutrition, undergo routine health examinations, or take precautions. Regarding the precautions to be taken during pregnancy and postnatal care for children, they each had their own opinions. Their beliefs regarding the amount of food that should be given to young children and mothers have resulted in anaemia, malnutrition and associated problems, disease, and social and economic backwardness. Issues include malnutrition, communicable diseases, health risks, and a dearth of resources. In addition to expectant women, nursing mothers, and children, the entire tribal community was informed.

### **Need for the study:-**

The position of women in a society was frequently determined by their income, employment, education, health, and fertility, in addition to their roles within the family, community, and society. Nonetheless, the study of tribal women is crucial due to the fact that their problems vary by region due to their geographical location, historical context, and social change processes. According to the 2011 census, India's total population of Scheduled Tribes is 104,281,034, or 8.6% of the total population. In spite of the Government of India's concerted efforts, tribal population groups lag behind the Indian National population in the majority of demographic, social, and economic indicators, and a significant proportion of tribal groups suffer from deplorable health conditions. There is a greater need for a region-specific study of the health status of tribal women, which can provide data for more meaningful and effective planning for their welfare. The purpose of the present study was to examine the situation of tribal women in Andhra Pradesh, with a particular focus on health.

**Objectives:-**

The study's primary objective is to examine the socioeconomic conditions and their influence on the health conditions of tribal women; however, specific objectives have been formulated for this study.

- To find out the socio-economic conditions of the respondents in the study area
- To assess the health conditions of the women respondents in the study area.
- To examine the determinants of women's health in the study area
- To suggest appropriate policy interventions to improve the health and welfare of the tribal women in the study area.

**Methodology: -**

The study used a random sampling technique to select sample respondents from the Paderu ITDA division in the Visakhapatnam district of Andhra Pradesh. The data was collected from 193 women whose ages ranged from 19 to 49 and who had given birth to at least one child. The structured interviews were conducted for the purpose of data collection. The study area was chosen due to the tribal population being primarily inhabited by 13 tribes. Secondary data was obtained from multiple sources, including academic journals, research projects, websites, and national and international surveys. The study used a structured and pre-tested schedule to collect primary data from the sample respondents in the study area. The study aimed to analyse the economic status, living conditions, and health status of respondents from the selected villages, which will be used to develop policies and programmes for the improvement of rural areas.

**Population Demographics of Paderu I.T.D.A. Division.**

In the table 1, the population details of the mandals in Paderu I.T.D.A division has been shown. The Chinthapalli has highest population among all other mandals but the proportion of the ST population to the total population is highest in the Pedabayalu mandal. All the mandals in the ITDA division having more than 80 per cent of the ST population.

**Table 1 Population Details of the Paderu I.T.D.A. Division by the Mandal-Wise**

<b>Mandal</b>	<b>Total Population</b>	<b>ST Male</b>	<b>ST Female</b>	<b>ST Total</b>	<b>% of ST population to Total Population</b>
Koyyuru	50693	20406	20807	41213	81.29
Ananthagiri	49019	21928	22262	44190	90.14
Munchingput	47418	21470	23068	44538	93.93
Dumbriguda	49029	22558	23921	46479	94.80
Paderu	58983	23507	25187	48694	82.55
Hukumpeta	51697	24121	25473	49594	95.93
Pedabayalu	51890	24575	25362	49937	96.24
G. Madugula	53884	24765	25205	49970	92.74
Araku Valley	56674	25067	26809	51876	91.53
G.K. Veedhi	63174	27265	29492	56757	89.84
Chinthapalli	71640	31791	32912	64703	90.32

**Source: -**

**Data Analysis Tools**

Descriptive analysis, such as percentages, means, and standard deviations, are used to describe the study population in relation to demographic, socioeconomic, and non-economic variables. The multiple linear regression model is used to assess the influence of economic, social, and health factors on reproductive health status. The multidimensional health index for women was created to estimate the health status of tribal women in the study area.

**Index Development**

The Multidimensional Health Index (MPI) for women examines independent and outcome variables. In the 2015 Human Development Report, the UNDP produced the Multidimensional Poverty Index (MPI). The measure used 20 characteristics in three categories: personal health (during pregnancy), reproductive health awareness (education), and level of living. With each dimension weighted at 33.3%, the maximum score is 100%. Anaemia, high blood pressure, diabetes, excessive bleeding, and unexpected events comprise personal health. Induced abortion, higher birth order, age at first delivery, anti-natal care, post-natal care, supplemental food, immunisation of pregnant women and children, place of delivery, and reproductive health schemes are covered in reproductive health awareness (health education). Sanitation, drinking water, roads, transport, and power comprise the Standard of Living. The measure used 20 characteristics in three categories: personal health (during pregnancy), reproductive health awareness (education), and level of living. With each dimension weighted 33.3 per cent, the maximum score is 100 per cent. The categorizations 0 and 1 are the most frequently employed measures / weights for maternal women who are in deprivation (1) and non-deprivation (0), respectively. Therefore, as their percentage in the index increases, they become more impoverished.

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**Table 2 Health Status of the Respondents according to their Socio-Economic Conditions in the Paderu, I.T.D.A Division.**

Indicator			P.H Index	R.H Index	S.L Index	M.D.H Index
Education	No	%				
Illiterate	21	10.89	14.04	13.74	13.76	41.54
Literate	49	25.39	13.17	12.59	11.60	37.36
Primary	57	29.53	13.58	12.51	11.01	37.10
Secondary	47	24.35	13.17	11.83	10.82	35.82
Higher Education	19	9.84	13.15	11.21	10.12	34.48
<b>Age</b>						
19-25	44	22.79	11.75	12.59	12.64	36.98
26-33	59	30.56	12.69	12.51	12.38	37.58
34-41	56	29.09	12.51	12.28	11.59	36.38

42-49	34	17.61	14.60	12.17	10.22	36.99
<b>Occupation</b>						
Cultivation	47	24.35	15.50	13.80	12.95	42.25
Agri – Labour	55	28.5	14.97	12.97	13.15	41.09
Non- Agri Labour	42	21.76	13.20	12.28	12.12	37.60
Self – Employee	18	9.33	12.21	11.24	11.23	34.68
Employee	13	6.74	11.12	11.12	9.87	32.11
Non-worker	18	9.33	13.25	12.12	12.24	37.61
<b>Family Income (Annual)</b>						
below 30000	16	8.29	15.68	14.69	13.85	44.22
30001-50000	67	34.72	14.67	13.20	12.63	40.50
50001-80000	81	41.97	13.32	13.12	11.00	37.44
80001-100000	16	8.29	12.54	12.89	10.56	35.99
above 100001	13	6.74	11.23	11.55	9.20	31.98
<b>Type of Family</b>						
Nuclear	151	78.24	13.30	9.98	9.12	32.40
Joint	42	21.76	14.83	10.18	12.41	37.42
<b>House Type</b>						
kutcha	36	18.65	14.67	13.89	12.15	40.71
Semi-Pucca	68	35.23	14.24	12.59	11.00	37.83
Pucca	89	46.11	12.0	10.94	9.10	32.04
<b>Fuel</b>						
LPG	127	65.8	12.01	10.80	9.12	31.93
Kerosene	9	4.66	14.21	13.20	11.15	38.56
Firewood	57	29.53	15.12	14.65	13.12	42.89

Source: Field study

Note: P.H – Personal Health

R.H – Reproductive Health

S.L – Standard of Living

M.D.H – Multi Dimensional Health

The group of respondents who are using firewood (P.H.-15.12, R.H.-14.65, S.L.-13.12, and M.D.H.-42.89) and kerosene (P.H.-14.21, R.H.-13.20, S.L.-11.15, and M.D.H.-38.56) has higher deprivation index scores than LPG users (P.H.-12.01, R.H.-10.80, S.L.-9.12, and M.D.H.-31.93)

**Results: -**

The negative health index is shown in Table 2. If the multidimensional index value is close to zero, the respondent's health status is fine, and if it is close to one hundred, the respondent's health status is poor. In this section, the multidimensional health index, which includes the personal health index, reproductive health index, and standard of living index, presents the health status of women in relation to their socioeconomic circumstances.

There are considerable differences in Health status of the respondents based on their education levels, the illiterate respondents P.H index (14.04), R.H index (13.74), S.L index (13.76) and combined

index that is M.D.H index (41.54) is higher than that of any other respondents, which indicating illiterate respondents are more deprived of personal health, reproductive health and standard of living than the literates (P.H-13.17, R.H-12.59, S.L-11.60 and M.D.H-37.36) primary (P.H-13.58, R.H-12.51, S.L-11.01 and M.D.H-37.10), secondary (P.H-13.17, R.H-11.83, S.L-10.82 and M.D.H-35.82) and higher education (P.H-13.15, R.H-11.21, S.L-10.12 and M.D.H-34.48) respondents. There are no significant differences in the health status of the respondents based on their age category. Occupation plays an important role to determine the health status of the women respondents, the index scores of cultivators (P.H-15.50, R.H-13.80, S.L-12.95 and M.D.H-42.25) are higher among all other respondents which include agriculture labour (P.H-14.97, R.H-12.97, S.L-13.15 and M.D.H-41.09), non-agriculture labour (P.H-13.20, R.H-12.28, S.L-12.12 and M.D.H-37.60), non-worker (P.H-13.28, R.H-12.12, S.L-12.24 and M.D.H-37.61), self-employees (P.H-12.21, R.H-11.24, S.L-11.23 and M.D.H-34.68) and employees (P.H-11.12, R.H-11.12, S.L-9.87 and M.D.H-32.11) who are engaged in agriculture those index score are higher than the other occupations such as employees and self-employees, which indicating as they are engaged as a cultivator or agriculture labour their personal and reproductive health and standard of living more derived than the other occupations.

Income of the respondent is one of the important variables to determine health; the index scores are decreasing as the income of the respondents increases, which clearly shows that lower-income people are more deprived of health than higher-income people. The high index scores of respondents accounted high among the below Rs.30000 (P.H-15.68, R.H-14.69, S.L-13.85 and M.D.H-44.22) income group, followed by Rs.30001- 50000 (P.H-14.67, R.H-13.20, S.L-12.63 and M.D.H-40.50), Rs.50001-80000 (P.H-13.32, R.H-13.12, S.L-11.00 and M.D.H-37.44) and Rs.80001-100000 (P.H-12.54, R.H-12.89, S.L-10.56 and M.D.H-35.99) and Rs.100001 & above (P.H-11.23, R.H-11.55, S.L-9.20 and M.D.H-31.98). There are a few variations in the respondents' index scores based on their family type; respondents who are living in the joint family (P.H-14.83, R.H-10.18, S.L-12.41, and M.D.H-37.42) have higher scores than those in the nuclear family (P.H-13.30, R.H-9.98, S.L-9.12, and M.D.H-32.40). The type of house, where the respondents living that also plying a crucial role to determine the health status of the respondents, who are living in the kutcha housed (P.H-14.67, R.H-13.89, S.L-12.15 and M.D.H-40.71) and semi-pucca houses (P.H-14.24, R.H-12.59, S.L-11.00 and M.D.H-37.83) have high deprived health index than the respondents who are living in the pucca house (P.H-12.0, R.H-10.94, S.L-9.10 and M.D.H-32.04), it clearly indicating the living stand can determine the health of the individual.

### Results of Regression Analysis: -

In this multiple regression analysis, an attempt is made to measure the influence of specified socioeconomic and demographic variables on women's health, the dependent variable.

SPSS is the software used to estimate the regression model. It has been observed that the linear model has produced the most reliable and consistent results with the best feasible fit. Therefore, only linear regression results have been discussed here.

$$Y = a + x_1b_1 + x_2b_2 + x_3b_3 + \dots + x_nb_n$$

Where Y = Multi-Dimensional Health index of the sample respondents has taken as dependent variable.

The independent variables like

Education ( $X_1$ ), occupation ( $X_2$ ), Income ( $X_3$ ), type of family ( $X_4$ ), type of Fuel ( $X_5$ ), age ( $X_6$ ) and type of house ( $X_7$ ) are used as independent variables.



**Multi-Dimensional Health index and Socio - Economic Variables: -**

This linear model employs multiple regression, and this model is the best fit due to its high F-value of 98.207, which is significant at the 1% level. The model also explains (R<sup>2</sup>) 77% of variations in the respondents' financial literacy (a dependent variable). In this model, four out of seven explanatory variables are found to be significant, with one variable significant at the 1% level, three variables significant at the 5% level, and one variable significant at the 10% level. Education has significance at the 1% level. At the 5% significance level, income, occupation, and residence type are significant, while fuel type is significant at the 10% significance level.

Education has a significant impact on health; it increases awareness and comprehension of the significance of sanitation, the timely use of medication, adherence to expert advice, etc., so as education increases, the health status of respondents will improve. Government employees and businesspeople have better health than farmers and agricultural labourers because they are more aware of the health situation and the resources available to maintain a standard of living. A rise in family income from the lowest to the middle and high levels has a positive effect on the health of respondents. There is a positive correlation between these two variables due to the fact that respondents residing in pucca houses had better socioeconomic conditions than the others.

**R= 0.931                      R<sup>2</sup>= 0.867                      Adjusted R<sup>2</sup>= 0.854**  
**F= 65.801                      P=0.000                      Std. error of estimate = 18567.55181**

**Table 3**  
**Regression Results**

Natural Farming – Garividi		B	Std. Error	Standardized Coefficients Beta	t-value	p-value
	(Constant)	17507.437	24854.374		.704	.482
X <sub>1</sub>	Education	-39748.898	9612.889	-.436	-4.135	.000*
X <sub>2</sub>	Occupation	-7776.006	3136.367	-.146	-2.479	.014**
X <sub>3</sub>	Income	11918.594	4594.806	.098	2.594	.010**
X <sub>4</sub>	Type of Family	-298.531	2051.719	-.006	-.146	.885
X <sub>5</sub>	Type of Fuel	7408.140	3059.452	.091	2.421	.017**
X <sub>7</sub>	Age	1972.390	11867.034	.014	.166	.868
X <sub>8</sub>	Type of House	675.881	371.011	.107	1.822	.071***
<b>a. Dependent Variable: Multi-Dimensional Health Index</b>						

**Conclusion:-**

The multidimensional health index, comprised of the personal health, reproductive health, and standard of living indices, depicts the health status of women in relation to their socioeconomic circumstances. In terms of personal health, reproductive health, and standard of living, illiterate respondents are worse off than literate respondents. There are no significant age-related distinctions in the health status of the respondents. A significant factor in determining the health status of the women respondents is their occupation, with cultivators having the highest index scores. There are variations in the index scores of respondents based on their family type, type of dwelling, and use of charcoal and

kerosene. People with lower incomes are more health-deprived than those with higher incomes. Education has a substantial effect on health, as it improves knowledge and comprehension of sanitation, medication, and expert advice. Due to their knowledge of the health situation and access to resources, government employees and businesspeople enjoy greater health than farmers and agricultural workers. A rise in family income has a positive impact on health, as respondents residing in pucca dwellings enjoy superior socioeconomic conditions. This suggests that improving access to resources and increasing income levels can have a significant impact on the health outcomes of individuals, particularly those in lower socioeconomic groups such as farmers and agricultural workers. Therefore, policies aimed at improving the economic conditions of these groups could have important implications for public health.

These findings suggest that there is a need for targeted interventions to improve the health outcomes of vulnerable populations, particularly those with lower incomes and who rely on traditional cooking fuels. Such interventions could include access to clean energy sources and targeted health education campaigns. Furthermore, access to clean energy sources can improve health outcomes by reducing exposure to indoor air pollution, which is a major contributor to respiratory illnesses. These interventions can have a significant impact on the overall health and well-being of individuals and communities.

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