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Research Article

Health and Nutritional Status of Tribal Agricultural Labourers of Wayanad District: A Critical Gender Analysis

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ABSTRACT

The present investigation has been done on the basis of qualitative and quantitative data collected from primary sources and explored the health and nutritional status of tribal agricultural labourers. Majority of the respondents from Kattunaikan and Paniya communities washed their hands irregularly, while comparatively better habit of washing hands regularly was observed among the Kurichiya. Considerable number of respondents did not take timely vaccination, more than half of the male and female agricultural labourers did not consult physician on illness, irrespective of gender, majority of the respondents used tribal medicines over modern medicines, majority of the tribal people use water drinking without boiling and only a minor section had latrine facility in their houses. There was no significant difference between the three communities in the consumption of fruits and cereals, while, majority of the respondents of the three communities, consumed vegetables on regular basis. No regular intake of milk was among the three communities. Only a minor population among the respondents consumed pulses and fish/meat regularly. The ignorance about the severity of many medical conditions and problems of affordability to modern medical facilities expose the tribal communities to health risks and eventually leading them to high morbidity and mortality situations.

Keywords: *Health, Nutrition, Vaccination, Sanitation, Wayanad, Kattunaikan, Paniya, Kurichiya.*

INTRODUCTION

India is one of the single largest populations of indigenous people in the world (approximately 10.2 crores). There is 8.6 per cent of the tribal population in India according to Census 2011 which spread over a wide geographical terrain.

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Most of the tribal people live in a hilly or forested area where there is less illiteracy, malnutrition, inadequate access to safe drinking water, lack of personal hygiene and sanitation make them more vulnerable to diseases and as result of they have worse health indicators than the general population (Saha & Saha, 2018). Tribal health is one of the important and essential components of tribal lives and way of living. Tribal health is considered a very crucial way to understand the living pattern of the indigenous people. Tribal health is in bad shape and conditions in the present world. A host of infectious and communicable diseases are still widespread among the tribal population. Health condition is furthermore compounded by lack of awareness among the tribal population and inaccessibility to the health care services. Though tribal people represent the heterogeneous groups yet they have one commonality in terms of poor health indicators, a greater burden of morbidity and mortality and very limited or no access to health care services. The present paper is an attempt to highlight the various dimensions of the tribal health and nutritional status in the tribal areas of Mananthavady. It is need of the hour to have a holistic policy on tribal health to address the associated health care issues.

MATERIALS AND METHODS

The study was conducted in Mananthavady block of Wayanad district and from the block, three grama panchayats having highest population of *Kurichya, Paniya* and *Kattunaikan* communities respectively, was purposively selected. From each community, 60 agricultural labourers (30 women and 30 men) was selected randomly for the study, thus making a total of 180 as sample size.

Pretested interview schedule was used to collect primary data from the respondents. Focus group discussions, observation methods and other selected participatory tools was also used. Frequency, mean, percentage and correlation were used for the analysis. The scale developed by Sushama (1979) with slight modifications was used for the assessing the health and nutritional status of the tribal agricultural labourers. The frequency of washing hands before meals, vaccination, consulting physician, type of medicine used, type of drinking water used, latrine facility, consumption of fruits, vegetables, milk, cereals, pulses and fish/meat were assessed using the statements. A score of 2 was given for 'Yes' and 1 for 'No'.

RESULTS AND DISCUSSIONS

Habit of washing hands

In the case of *Kattunaikan* community, majority (90%) of both men and women agricultural labourers washed their hands irregularly, while only 10 per cent of men and women washed hands regularly. In the case of *Paniya* community, majority (80%) of the men and 86.67 per cent of the women washed their hands irregularly, while, 20 per cent of the men and 13.33 per cent of the women washed hands regularly. While considering the case of *Kurichiya* community, 53.33 per cent of the males and 46.67 per cent of the females washed their hands irregularly, while, 46.67 per cent of the males and 53.33 per cent of the females washed their hands regularly. The results are in line with that of Haddad et al. (2012).

Table1. Distribution of respondents based on habit of washing hands

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	3	10	3	10	6	20	4	13.33	16	53.33	14	46.67	25	27.78	21	23.33
Irregularly	27	90	27	90	24	80	26	86.67	14	46.67	16	53.33	65	72.22	69	76.67

By examining the whole data, results show that majority of the respondents from *Kattunaikan* (90% each men and women) and *Paniya* (80% men and 86.67% women) communities washed their hands irregularly, while comparatively better habit of washing hands regularly was observed among the *Kurichiya*. Male respondents showed better results than their female counterparts.

Vaccination

In the case of *Kattunaikan*, majority (90%) of the males and 93.33 per cent of the females took vaccination ill-timely, while only 10 per cent of the males and 6.67 per cent of the females took vaccination timely. In the case of *Paniya* community, 80 per cent of the males and 90 per cent of the females took vaccination on time, whereas, vaccination was not taken on time by 20 per cent of the males and 10 per cent of the females. In the case of *Kurichiya*, half of the males and 40 per cent of the females took vaccination on time, whereas, 50 per cent of the males and 60 per cent of the females took ill-timely.

From the table it is clear that a considerable number of respondents (66% men and 73% women) did not take timely vaccination. The results are in line with that of Haddad et al. (2012). The lesser proportion of respondents taking vaccination on time might be due to their geographical isolation, less access to health centres and unavailability of health workers in the locality.

Table 2: Distribution of respondents based on vaccination

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Timely	3	10	2	6.67	6	20	3	10	15	50	12	40	24	26.67	17	18.89
Ill- timely	27	90	28	93.33	24	80	27	90	15	50	18	60	66	73.33	73	81.11

Table 3: Distribution of respondents based on consultation with physician

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Consult physician	6	20	4	13.33	9	30	7	23.33	19	63.33	14	46.67	34	37.78	25	27.78
Do not consult physician	24	80	26	86.67	21	70	23	76.67	11	36.67	16	53.33	56	62.22	65	72.22

Consulting physician

In the case of *Kattunaikan* community, only a few respondents consulted physician in case of illness, while, rest of the respondents did not do so. In the case of *Paniya* community, 30 per cent of the men and 76.67 per cent of the women consulted physician and in the case of *Kurichiya*, 63.33 per cent of the male and 46.67 per cent of the female respondents consulted physician.

By scrutinizing the overall scenario, it is unsatisfactory to note that more than half of the male and female agricultural labourers did not consult physician on illness, while only 37.78 per cent of the men and 27.78 per cent of the women consulted physician. The results are in line with that of Haddad et al. (2012). The possible reason for not consulting a physician might be due to their reluctance to undergo treatment and poor financial status.

Type of medicine used

From Table 4, we can see that the *Kattunaikan* people used tribal medicines for treatment and in the case of *Paniya* community, majority (83.33%) of the men and all women respondents also used tribal medicines. However, a considerable 60 per cent of the men and 25.56 per cent women of *Kurichiya* community preferred modern medicine over tribal medicines. This difference may be due to

the better financial position of the *Kurichiya* as compared to *Kattunaikan* and *Paniya*. The results are in line with that of Haddad et al. (2012).

The overall data shows that irrespective of gender, majority of the respondents used tribal medicines over modern medicines.

Table 4: Distribution of respondents based on type of medicine used

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Tribal medicine	30	100	30	100	25	83.33	30	100	12	40	11	36.67	67	74.44	71	78.89
Modern medicine	0	0	0	0	5	16.67	0	0	18	60	19	63.33	23	25.56	19	21.11

Type of drinking water

In the case of *Kattunaikan* community, irrespective of the gender, all the respondents used normal drinking water without boiling. In the case of *Paniya*, only 20 per cent of the men and 13.33 women used boiled water for drinking, while not so in the case of the rest of the respondents. While considering the *Kurichiya*, half of the male respondents and 56.67 per cent of the female respondents use boiled water for drinking.

Thus, from Table 5, we can conclude that, irrespective of the community, majority of the tribal people use normal water without boiling for drinking, but considerable number of *Kurichiya* respondents used boiled water. The results are in line with that of Haddad et al. (2012).

Table 5: Distribution of respondents based on type of drinking water

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Boiled water	0	0	0	0	6	20	4	13.33	15	50	17	56.67	21	23.33	37	41.11
Normal water	30	100	30	100	24	80	26	86.67	15	50	13	43.33	69	76.67	53	58.89

Latrine facility

From Table 6, it is clear that none of the *Kattunaikan* respondents had latrine facility in their houses. They used open spaces and water bodies for meeting their primary requirements. In the case of *Paniya* community, majority of the respondents (86.67% men and 90% women) had no latrine facility in their houses. They took pits in their premises and used it. But in the case of *Kurichiya*, 73.33 per cent of the males and 60 per cent of the females had latrine facility in their houses. The presence of latrine facility can be a clear indication of better health and socio-economic status. The results are on par with Paul (2013).

From the overall data, only 26 per cent of the men and 21 per cent of the women had latrine facility in their houses. Even after continuous efforts by the Government bodies and social workers, basic facility of latrine was not common among the tribal people. The reluctance of the tribal communities to use latrines might be owed to their age-old tradition of using the open area for primary activities and unawareness about the ill-effects of open-defecation.

Table 6: Distribution of respondents based on latrine facility

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
With latrine facility	0	0	0	0	4	13.33	3	10	22	73.33	18	60	26	28.89	21	23.33
No latrine facility	30	100	30	100	26	86.67	27	90	8	26.67	12	40	64	71.11	69	76.67

Table 7: Distribution of respondents based on intake of fruits

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	17	56.67	13	43.33	20	66.67	19	63.33	21	70	16	53.33	58	64.44	48	53.33
Irregularly	13	43.33	17	56.67	10	33.33	11	36.67	9	30	14	46.67	32	35.56	42	46.67

Intake of fruits

In the case of *Kattunaikan* community, 56.67 per cent of the male and 43.33 per cent of the female agricultural labourers consumed fruits regularly. They consume fruits collected from the forest and their premises. In the case of *Paniya* tribes, 66.7 per cent of the men and 63.33 per cent of the women included fruits regularly in their diet. In the case of *Kurichiya*, 70 per cent of the men and 53.33 per cent of the women consumed fruits on regular basis. There was no significant difference between the three communities in the consumption of fruits. The results are in line with the observations of Messiana (2012).

Table 8: Distribution of respondents based on intake of vegetables.

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	26	86.67	25	83.33	26	86.67	25	83.33	28	93.33	25	83.33	80	88.89	75	83.33
Irregularly	4	13.33	5	16.67	4	13.33	5	16.67	2	6.67	5	16.67	20	22.22	15	16.67

Intake of vegetables

While considering the aspect of intake of vegetables, majority of the respondents of the three communities, consumed vegetables on regular basis, irrespective of gender. In the case of *Kattunaikan* and *Paniya* communities, 86.67 per cent of the men and 83.33 per cent of the women consumed vegetables regularly. In the case of *Kurichiya* community, 93.33 per cent of the men and 83.33 per cent of the women consumed vegetables regularly. They consumed locally available vegetables and greens. The results are in line with the observations of Messiana (2012).

Intake of milk

No regular intake of milk was observed in the case of *Kattunaikan* and *Paniya* community, they almost did not consume milk. But in the case of *Kurichiya* community, 16.67 per cent men and 10 per cent women consumed milk regularly. *Kurichiya* consumed milk regularly as compared to *Paniya* and *Kattunaikan*. The reason might be that *Kurichiya* owned cows and could afford milk. The other two communities did not have the habit of consuming milk regularly. Their consumption of milk was almost nil. The results are in line with the observations of Messiana (2012).

Table9. Distribution of respondents based on intake of milk.

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	0	0	0	0	0	0	0	0	5	16.67	3	10	5	5.56	3	3.33
Irregularly	30	100	30	100	30	100	30	100	25	83.33	27	9	85	94.44	87	96.67

Intake of cereals

In the case of intake of cereals, all the respondents from three communities consumed cereals regularly. They consumed rice along with culinary made of vegetables. They use rice and millets like *ragi*, *varagu* and so on. There was no significant difference between the consumption of cereals by male and female respondents. The eating habits of tribal people entirely changed as they started consuming processed and fast foods, away from their actual healthy habits. The results are in line with the observations of Messiana (2012).

Table 10: Distribution of respondents based on intake of cereals

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	30	100	30	100	30	100	30	100	30	100	30	100	30	100	30	100
Irregularly	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intake of pulses

In the case of *Kattunaikan*, only 16.67 per cent of the men and 13.33 per cent of the women consumed pulses regularly. In the case of *Paniya* community, 23.33per cent of the men and 30 per cent of the women consumed pulses regularly. In the case of *Kurichiya* community, 36.67 per cent men and 30 per cent men consumed pulses regularly. The overall results show that 25.56 per cent of the men and 24.44 per cent of the women consumed pulses regularly. The results are in line with the observations of Messiana (2012).

Table 11: Distribution of respondents based on intake of pulses

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	5	16.67	4	13.33	7	23.33	9	30	11	36.67	9	30	23	25.56	22	24.44
Irregularly	25	83.33	26	86.67	23	76.67	21	70	19	63.33	21	70	67	74.44	68	75.56

Table 12: Distribution of respondents based on intake of fish/ meat

Category	*Kattunaikan*				*Paniya*				*Kurichiya*				Overall (N= 180)			
	Male (n= 30)		Female (n= 30)		Male		Female		Male		Female		Male		Female	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Regularly	7	23.33	2	6.67	10	33.33	9	30	11	36.67	9	30	28	31.11	20	22.22
Irregularly	23	76.67	28	93.33	20	66.67	21	70	19	63.33	21	70	62	68.89	70	77.78

Intake of fish/ meat

In the case of intake of fish/ meat, 23.33 per cent of the *Kattunaikan* men and 6.67 per cent women consumed fish/ meat regularly and in the case of *Paniya* community, 33.33 per cent men and 30 per cent women consumed fish/ meat regularly. In the case of *Kurichiya* community, 36.67 per cent men and 30 per cent women consumed fish/ meat regularly. From Table 12, it is clear that many of the respondents consumed fish/ meat irregularly. The results are on par with Ranjini and Shareef (2016).

SOCIAL DISCRIMINATION AND HEALTH STATUS OF TRIBAL AGRICULTURAL LABOURERS

Health and nutritional status are an indicator of the socio-economic status and financial stability of the tribal people. In the study, health and nutrition was found to have a

negative influence on social discrimination. The tribal communities face numerous health issues like poverty, malnutrition, underweight, mental retardation, infertility, sickle cell anemia, hypertension and sexually transmitted diseases. The unhealthy and untidy living places, using drinking water without boiling, open defecation and polluted resources make the health status of tribal people even worse. In addition to this, the inaccessibility to health centres and negligence by the health workers result in infant and maternal mortality. The tribal people are denied or given poor health services which is also a type of discrimination.

In the case of correlation between social discrimination and health status of tribal agricultural labourers, a negative correlation was found to be involved, -0153* in the case of men and -0.269* in the case of women, both at 1 per cent significance. The above result clearly implies that a higher level of social discrimination results in low health and nutritional status. On comparison among men and women tribal population, the nutritional status of men was found to be better than that of women.

SUGGESTIONS

1. Creating awareness among the tribal people about the importance of education and health and also creating adequate infrastructural facilities for the same.
2. Timely issuing of ration cards to all the tribal communities.
3. Frequent visit of social and health workers to the tribal settlements.
4. Installation of water taps in remote interior tribal colonies.
5. Proper monitoring of tribal colonies for any case of drainage leakage, stagnant water etc.
6. Strict monitoring and ensuring the installation of latrines in tribal settlements.
7. Frequent arrangement of medical camps in the tribal settlements.
8. Setting up of tribal health centres for immediate and primary health care services of tribal colonies.
9. Provision of milk and nutritious food to expectants, lactating mothers, infants and adolescent children among the tribal people.

CONCLUSION

From the above study it is clear that the tribal population of Wayanad had poor health status. Substance abuse, unhygienic living environment and malnourishment are the major factors that contribute to poor health indicators for tribal communities. Many cases of sickle cell anemia, underweight, mental retardation, hypertension has been observed among the tribal women. The ignorance about the severity of many medical conditions and problems of affordability to modern medical facilities expose the tribal communities to health risks and eventually leading them to high morbidity and mortality situations. Even though treatment is free in government hospitals and cultural aspects are found to be not roadblocks in accessing health care, they cite financial incapability as a major hindrance to using health-care facilities. The problem is their inability to meet incidental expenses such as travel, bribes to doctors and boarding and lodging of bystanders associated with treatment. The situation takes a huge toll on the health status of the backward communities because of their lower creditworthiness and lack of assets to pledge.

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