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Research Article



A Study of Nutritional status in two hilltop PVTG villages of ITDA Rampachodavaram

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ABSTRACT

Malnutrition still defines the tribals health even after 70 years of independence. A lot of maternal and infant deaths occur due to this. This is more pronounced in interior and hilltop villages where reaching the habitations would be a gigantic task. Hence, PMRDF was engaged to conduct situational study of two different hilltop villages which are least connected but inhabited by PVTG populations. This study was conducted by staying in the villages for a couple of days, understanding the tribal lifestyles, food habits and sanitary conditions. Correctional action was taken by ITDA based on the recommendations of this study.

Key words: Malnutrition, ITDA, Rampachodavaram, PVTG, hilltop villages.

Introduction

India's concern for Nutrition is as old as her civilisation. Its holy books and other ancient scriptures contain guiding principles for nutrition and health. In the post independent India there has been an unequivocal commitment to the cause of nutrition through Constitutional provisions. The Constitution of India states explicitly in Article 47 that the "State shall regard the raising of the level of the nutrition and the standard of living of its people and the improvement of public health among its primary duties....." The adoption of the National Nutrition Policy (NNP) by the Government in 1993 and the International Conference on Nutrition (I.C.N.) held in December, 1992 at Rome are the important landmarks in the field of Nutrition at the national and international level respectively.

The concept of health, as defined by the World Health organisation is the "state of complete physical, social and mental well-being and not merely absence of disease or infirmity". Nutrition and health are not synonymous, but without good nutrition, health cannot be at its best. Food has always played an extraordinarily vital role in the rise and growth or the fall and decline of a nation because of its effect on the health efficiency of its populace. Despite spectacular increase in the food grain production in recent years the problem of chronic malnutrition continues to exist extensively; especially among children and women, because they are caught in the relentless sequence of ignorance, poverty, inadequate food intake, disease and early death. This has led to an increase in awareness among planners about the importance of good nutrition.

Today, 'Malnutrition' is no longer considered an outcome of food deficiency or a health problem but as a multi-dimensional problem interfacing all efforts of developing human resources. The nutritional status of a nation is closely related to food adequacy and its distribution, levels of poverty, status of women, rate of population growth and access of its population to health, education,

safe drinking water, environmental sanitation, hygiene and other social services, while the extent of economic growth forms its bed rock. The nutritional status is, thus, as outcome of complex and inter-related set of factors. The nutrition problems of major importance can be classified in three broad groups :

- i. Protein Energy Malnutrition
- ii. Micro-Nutrient Deficiencies, and
- iii. Prevalence of Chronic Diseases

The extent of Protein Energy Malnutrition (PEM) is reflected by the growth indicated by height and weight of children and adults in comparison to the established standards. This is often a direct outcome of maternal nutritional status resulting in foetal intra-uterine malnutrition and the low-birth weight of infants.

Micronutrient Deficiencies relate to poor intake of vitamins and minerals and can be identified by specific overt clinical signs. Among micronutrient deficiencies those of vitamin 'A', iron and iodine in particular are widely prevalent and have no relevance to the calorie and protein levels in the individual diets.

Prevalence of Chronic Diseases like obesity, hypertension, cardiovascular diseases and diabetes mellitus are closely linked to some metabolic disorders or to inappropriate diets often characterised by excessive intake of energy and fat, particularly the saturated fats, and low fibre intake.

The **Nutritional Anaemia** due to iron and folic acid deficiencies is the most widely prevalent micronutrient deficiency affecting all age groups and both sexes, the prevalence of which ranges from 50 to 80 per cent in the country. The problem of anaemia is significantly higher in tribal groups, young women particularly during pregnancy and infants born to anaemic mothers. Anaemia is also an important cause for maternal mortality in the country.

Public health is a State subject and Government of India provides funds and technical support to States to address the health needs. Ministry of Tribal Affairs has advised and given guidelines the Tribal Development Departments of State Governments to address the problem of malnutrition promptly. One of the major advices is the use of traditional food, and minor millets in the food basket, through intervention in PDS and also for supplementing food with iron and folic acid. Funds are also provided to States, as Special Central Assistants to Tribal Sub-Plan (SCA to TSP) and grants under Article (275(1)) of the Constitution of India, for addressing health needs of Tribals. In 2016, the funds allocated to provide nutritious food was for 10-15% of allocation under health sector.

The Government of Andhra Pradesh is implementing various schemes for the welfare of tribals. Tribal sub-plan utilises most of the funds for the welfare activities but specific focus on nutrient intake in the food is not yet taken up. GCC (Girijan Corporation) and PDS are distributing most of the food items that are not indigenously grown by tribals and which are not historically a part of their diet.

Change in Food Habits

Food habits of tribal people living in the Agency areas of the district have undergone a major change because of supply of subsidised rice through ration depots of the Civil Supplies Corporation. Availability of rice at such a cheap price has induced the tribal communities to shift gradually from the highly nutritious millets to rice consumption. The reasons for declining health conditions among women and men among the tribal communities is the shift in their eating habits from foods that include sorghum, finger millet, pearl millet, foxtail millet, barnyard millet, and little millet.

The availability of rice at Rs.1 per kg is an irresistible temptation to opt for rice. A number of other factors such as hardship in hand processing of millets, coupled with the absence of millet processors, and psychological factors such as pride in consuming rice over millets led to the decrease in diverse food base. The major food crop in the tribal area is finger millet followed by little millet.

During the past one decade, tribal people got accustomed to consumption of rice and, in the process, brought down consumption of millets as well as their cultivation. The Central Government, of late, has realised that production of millets has been drastically declining in the rural and Agency areas. It has woken up to the negative impact of their changing food habits and, on a war-footing, launched the millets mission to boost its cultivation. The Central government is also making efforts to restore the pride of place of the district in millets production by promoting it as a nutritional supplement.

Research suggests that the haemoglobin level of an average tribal woman is 7 grams to 9 grams which would be increased through use of millets. Regular use of millets can lead to significant health benefits and might help in reducing the incidence of cardiovascular diseases, constipation, diabetes, and in improving the overall health of people. A study conducted by NIN(National Institute of Nutrition) on tribal group of chenchus in Andhra Pradesh showed that the intakes of food and nutrients were lower than the recommended levels. The prevalence of underweight, stunting and wasting among under five children were 42 per cent and the major causes of death were premature delivery, low birth weight, alcoholic cirrhosis of liver, accidents, snakebite and pulmonary tuberculosis.

Research Study in Rampachodavaram

The Integrated Tribal Development Authority (ITDA) of the district, which is a regional group of the predominantly tribal population mandals/blocks, is headquartered in Rampachodavaram. The ITDAs in the state are also characterized with high forest cover. High levels of forest cover, isolated geographic location, poor access to PDS (Public Distribution System) and nutritious food provide ample scope for malnutrition incidence and as a result show high levels of anaemia.

Due to the forest cover and the scattered habitats, the population density of ITDA is extremely low and as the table indicates, it is almost 10 times lower than that of the district. The implication of such low density is that delivery of public services becomes relatively ineffective, as supervision of such large thinly populated areas requires tremendous resources both on the organizational and personal fronts. It should also be noted that the ITDA region has limited mobile connectivity, which adds to the hassles of supervision in this area.

Specific Objectives

- ✓ To understand PVTG (Particularly Vulnerable Tribal Groups) living conditions and their food habits.
- ✓ To study their cropping practices and millets consumption.
- ✓ To understand overall functioning of institutions in the village.

Research Design

To examine the objectives of research, exploratory and cross sectional study will be undertaken to provide rich and meaningful information through structured in depth interviews. Exploratory studies are those which are undertaken when there is very less available and much has to be explored regarding the topic. Cross sectional studies are those in which research is designed by taking a cross section of it at one time from the population (Ahuja R, 2001). This research design will be undertaken keeping in mind the type of information that was required out of respondents, particularly their lifestyle and dietary habits. For this purpose, a combination of qualitative and quantitative methods will be used namely informal interviews and interview schedule.

Research Site: This study will be conducted in two villages. The reason behind selection of these villages is their geographical distance from ITDA, profile of village in terms of poverty and incidence of diseases.

Sample Size : The samples for this study will be chosen from 2 villages as shown in the area of study. All the villagers in 2 villages will be taken as sample.

Sampling Procedure: Random stratified sampling technique will be used for the study at all the places. Sufficient care was taken that people from different ages and sexes would be interviewed. The interviews were conducted in morning hours as well as evening hours based on the flexibility and available time of respondents. The data collection will be done over a period of three months from October to December in 2017.

Analytical Framework: Questionnaire will be prepared before hand and interviews will be done accordingly. Data will be noted on the questionnaire and a note will be taken whenever there were descriptive answers.

Study report on Chavidikota Village of Maredumilli Mandal

Chavidikota is a Hill top village and a major Panchayat having 10 hamlets in Maredumilli Mandal. This village particularly has 2 castes i.e., Valmiki and Konda Reddys(PVTG) with 80 households. Valmikis reside at the centre of the village with 51 Households. Whereas Konda Reddy community are scattered in 3 colonies i.e., 1.Doravari Veedhi (contains 12 Households), 2.VeruPanasa (5 Households), 3.Mattala Gommi (12 households).

In this village, people cultivate different millets and pulses like wild Red Gram(konda kandulu), Pearl millet(gantelu), Sorghum(jonnalu), finger millets(sollu), konda chamalu, broad beans(konda chikkullu), Legume (alasanalu), cowpea (bobbaru), little millet(samalu), thivaleru, paddy (Budamalu) in a single season. All that is produced is preserved and is used for household purposes only. There is very little that reaches the outside market. In addition to their produce, Rice is consumed which they get from PDS.

The living conditions, cleanliness, sanitary practices of Valmikis are better compared to Konda Reddys. Even though both of these tribes belong to same village, there is a clear demarcation between the two castes. Valmikis are maintaining good dietary habits. They take rice thrice in a day and maintaining better health and sanitary conditions whereas Konda Reddys mostly live in kutcha houses with unclean sanitary conditions. Both of them do not maintain individual latrines, bathrooms and mostly go out for toilet purposes.

The main reason that villagers are not using the toilets is their lack of understanding on hygiene and lack of water facilities. The water tank that is available in the village does not provide running water and cannot be used for drinking since it is not cleaned for number of years and presently, the tank itself is leaking. Hence, the villagers use the water from nearby stream for drinking purposes. The water appears to be clean on a cursory look but there is no way to say it can be used for drinking. Hence, we took samples to be sent for testing with RWS (Rural Water Supply) department. It came out that the water is contaminated and has to be boiled before drinking.

Valmikis use boiled water for their household needs. But Kondareddys directly use water from the stream. This makes them more vulnerable to diseases. Particularly, children roam around in the streets and play in unhygienic conditions. It was observed that most of them were having scabies and itching. The whole village integrates on one point, consumption of alcohol. Almost every adult member of the family consumes local toddy twice in a day, morning and at night. This is one of their major nutrient supplement from local trees (jeelugu chettu).

Institutional arrangements for education and health are in place. The village having Anganwadi centre and primary school are both running as per schedule. A.N.M. visits the Village on every 3rd Wednesday and gives immunization, vaccines regularly. Power supply is there but there are power cuts for longer durations.

Based on this study, medical camp was conducted in the village and arrangements were made by the Tribal welfare engineering department to stop the leakages from the tank. Solar powered LEDs were distributed from the ITDA to this village.

Study report on Chaparai Village of Y.Ramavaram Mandal

Chaparai village consists Budidagondi, Bhandha veedhi, Borrai konda, Madhra veedhi and Dhadlanka habitations. In all, there were 72 Households with Only one community i.e., Konda Reddys inhabit all these habitations.

Podu Farming is the only activity of the people. They cultivate different types of Millets like Little Millet (Sama), Pearl Millet(Gantelu), Sorghum(Jonnalalu), Finger Millet (sollu), Foxtail Millet (korralu), thimerlu, black gram (minumulu), Cowpeas (Bobbarlu), Legume (Alasandalu), Redgram (konda kandulu) and also vegetables like Ridge Gourd (beerakaya), Bitter Gourd (kakra kaya), Pumpkin (gummadi), Brinjals (vankaya), Green chilli (mirchi) , Termeric (pasupu), Drumsticks (munaga), tamarind (chintha) and a minor area of tobacco.

This was a village where a dozen people have died due to malaria but was not reported to the outside world due to lack of connectivity. The, then Project Officer, Mr. A.S. Dinesh Kumar took sequence of steps that the same situation would not recur and people stay healthy. By the continuous efforts of the Health Department, now the situation in the village is good. They are living in good sanitary conditions. Every household is maintaining their surrounding area clean. Though the source of water is from local stream, people are using water filters for drinking water supplied by the Government and also using mosquito nets, solar lamps properly.

Children were healthy. Women are involved in their regular activities of helping in podu cultivation. One pregnant women, kondla Pottamma (child marriage, 14 years) in her 9th month was getting proper nutrition and regular health checkups by the A.N.M. Every day the villagers take Raagi malt (ambali) in the morning and millet rice with curry or dal for Dinner. There is no concept of afternoon lunch. They prefer to eat non vegetarian twice in a month. Majority of the people consume alcohol (natu sara, jeeluga and panasa).

There are no individual latrines in this village also. Even if constructed, providing water facility would be a major problem. There is lack of power supply on regular basis. The major interventions required for the village lies in promoting horticulture crops and supply of drum stick seeds.

Conclusion

The study has delved not only into nutrition but also many factors surrounding it. Tribals seem to be malnourished based on the standards set by general population. But the food that they take is heavily defined by their cultural aspects. Hence, introducing specific food into their diet may not work easily. More than that, their cultural ways have to be amended to change their nutrition intake and get them out of primitive life style especially when it comes to hygiene. This would require strong will power of administration and special focus as the locations of these villages are far from the governance systems. The conditions in Chavidikota more or less reflects the situations in all hilltop villages dominated by PVTG.

References

- [1]. Ministry of Tribal Affairs. Tribal sub plan. Government of India, 2013-14. [Accessed on April 2, 2018]. Available from: [http://tribal.nic.in/Content/Special Central Assistanceto Tribal Sub Plan.aspx](http://tribal.nic.in/Content/Special%20Central%20Assistanceto%20Tribal%20Sub%20Plan.aspx) .
- [2]. Ministry of Tribal Affairs. Statistical profile of scheduled tribes in India. Ministry of Tribal Affairs, Statistics division, Government of India 2013. [accessed on June 15, 2017]. Available from:www.tribal.nic.in .
- [3]. Vithal CP. Socio-economic transformation of a primitive tribal group: a study of *Chenchus* in Andhra Pradesh. *Man India*. 1992;72:189-206. [PubMed]
- [4]. Adivasi-Tribal India. Starvation Deaths in *Chenchus* Adivasi of Nallamala forest, Andhra Pradesh 2009. [accessed on June 2, 2017]. Available from: [www.Adivasi. Ozg.in](http://www.Adivasi.Ozg.in) .

- [5]. Hyderabad: National Institute of Nutrition; 2009. National Nutrition Monitoring Bureau (NNMB). Diet and nutritional status of tribal population and prevalence of hypertension among adults- Report as second repeat survey. NNMB technical Report no. 25.
- [6]. Geneva: WHO; 1983. World Health Organization (WHO). Measuring change in nutritional status: guidelines for assessing the nutritional impact of supplementary feeding programme for vulnerable groups.
- [7]. Geneva: WHO; 2006. World Health Organization (WHO). Child growth standards. Length/height-for-age, weight-for-age, weight-for-length, weight for-height and body mass index for age: methods and development.

QUESTIONNAIRE

DEMOGRAPHIC INFORMATION:

- 1. Name of the Respondent:
- 2. How old are you? Age in completed year's _____
- 3. What is your marital status? 1) Married 2) Widow 3) Divorced 4) Separated
- 4. What is your education? Illiterate / literate
No. of years of education _____
- 5. Family type: 1) Nuclear family 2) Joint Family
- 6. What is your religion? 1) Hindu 2) Muslim 3) Christian 4) others
- 7. Community (Specify the Name).....

SOCIO ECONOMIC INFORMATION

- 1.Details of family members

SOCIO ECONOMIC INFORMATION

Serial No.	Name	Relation with Respondent	Age	Sex	Education	Marital Status	Occupation	Income per Month

- 2. Does your household have any BPL card?
If yes, which color? _____ (mention color)
- 3. Do you have NREGA card? Yes /no
- 4. Do you have any membership on SHG's or any co-operative? Yes/no

LANDHOLDING AND CROP PRODUCTION

- 5. Do you have your own land? 1) Yes 0) No
- 6. How many times you're done cropping in a year? 1) one 2) two 3) three 4) more than three
- 7. What are the major crops produced in your land?
1) Rice 2) wheat 3) cereals 4) pulses 5) vegetables 6) fruits 7) others
- 8. Can you tell me about the livestock you own, if any?
a) Do you have goats/sheep? 1) Yes 0) No (b) Do you have cow/ buffalo? 1) Yes 0) No
c) Do you have chicken/ ducks? 1) Yes 0) No

LIVING CONDITION

SOURCE OF WATER SUPPLY:

- 1. What is the main source of drinking water for members of your household?
1) Piped into dwelling 2) Piped to yard/plot 3) Public tap/standpipe 4) Tube well or borehole /hand pump 5) Tanker truck 6) bottled water 7) any other

2. What is the main source of water used by your household for cooking and hand washing?
 - 1) Piped into dwelling 2) Piped to yard/plot 3) Public tap/standpipe 4) Tube well or borehole 5) Tanker truck 6) bottled water 7) any other
3. Where is the water source located?
 - 1) Elsewhere 2) In own plot 3) In own dwelling
4. How long does it take to go there, get water, and come back in one trip?
Time in Minutes _____, 99) Do not know

WATER HYGIENE:

5. Do you treat water in any way to make it safer to drink? 1) Yes 0) No
If 'yes' What do you usually do to the water to make it safer to drink?
 - 1) Let it stand and settle 2) Strain through a cloth 3) Use alum 4) Chlorine tablets 5) Boil 6) Use electronic purifier 7) any other

HOUSEING CONDITION

6. Type of house
 - 1) Kuccha 2) Semi-Pucca 3) Pucca
7. Do you have a separate room which is used as a kitchen?
Yes / no
8. What type of fuel does your household mainly use for cooking?
 - 1) Electricity 2) LPG/Natural gas 3) biogas 4) kerosene 5) coal/ lignite 6) charcoal 7) wood 8) others
9. In this household, is food cooked on a stove, a chullah or an open fire?
 - 1) Stove 2) Chullah 3) Open Fire 4) Other (Specify)

SANITATION FACILITY

10. What kind of toilet facilities do the members of your household usually use?
 - 1) No latrine facility. 2) Communal/ shared latrine 3) Private latrine
11. (Ask, if 2 or 3) what kind of latrine is it?
 - 1) Open pit 2) Water sealed 3) Sanitary latrine 4) Flush toilet 5) dry toilet
12. Do you share this toilet facility with other households? Yes / no
13. How do you clean your hand after defecation?
 - 1) Do not wash 2) Wash with only water 3) Wash with ash 4) Wash with soap
14. How do you wash your hands before preparing food?
 - 1) Do not wash 2) Wash with only water 3) Wash with ash 4) Wash with soap
15. How do you wash your hand before eating?
 - 1) Do not wash 2) Wash with only water 3) Wash with ash 4) Wash with soap

DIETARY HABITS AND FOOD CONSUMPTION PATTERN

1. How many meals for a day you are consuming?
 - 1) One 2) two 3) three 4) more than three.
2. What is your dietary habits?
 - 1) Vegetarian 2) non-vegetarian 3) mixed diet
3. During the past 1 months, did you buy any items at a PDS shop? YES / NO
If yes what are the items you are purchased at PDS shop?
 - 1) Rice. Yes/No 2) wheat. Yes/No 3) sugar. Yes/No 4) kerosene. Yes/No 5) edible oil. Yes/No
4. What kind of food you're consumed during the past 1 months? s

Serial No.	Food Items	Yes / No	If yes Frequency of consumption Daily / Weekly / Occasionally
a	Rice / Wheat		
b	Bajra / Jower / Maize		
c	Pulses		
d	Sugar / Honey / Sweets		
e	Milk & Milk Product		
f	Meat / Fish / Eggs		
g	Fruits		
h	Green leafy vegetables		
i	Other vegetables		

5. Do you consume iron / folic acid supplements? Yes / no

If yes how many times you have consumed?

1) Occasionally 2) regularly 3) never 4) I don't know

6. What type of health care facilities are utilized?

1) Private clinic 2) Registered medical practitioner 3) AYUSH medical practitioner 4) traditional healers 5) Govt health service (SUB CENTER/ PHC/CHC/ HOSPITAL) 6) any other.....

7. Any intoxicants taken regularly? Its frequency: ----

8. How do you preserve food? _____

9. What all types of food are preserved in your home? _____

Take a picture also