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Fertility, Morbidity and Mortality Trends along with Health Seeking Behaviour among Kondh and Porja PVTGs in Munchingput mandal of Visakha Agency in Andhra Pradesh

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Abstract: Tribes in India, the epidemiological history have been clearly indicate and shows very poor health and hygienic and nutritional status, high fertility, morbidity and mortality rates in many tribal communities of different tribal pockets. This situation is still worst in the case of Particularly Vulnerable Tribal Groups living in most economic backward condition, geographical isolation, lack of livelihood resources and in access to public health facilities. Large majority of the PVTGs population found to live in the resources scanty and scarce ecological conditions of interior forests, mountains, deserts and islands. Generally the ecology of tribes and in specific to PVTGs is known as 'ecology of malnutrition' and "endemic zone for malaria". The tribes inhabiting in the tropical forest zones are very frequently affected with the tropical diseases like Malaria, Yaws, Dengue, Goiter, Sickle cell anemia, and Diarrhea. For curing various diseases through which they are affected, still mainly depending on their own indigenous medical system. Both qualitative and quantitative methods secondary source of earlier studies review of literature also provided in the paper along with semantic and scientific explanations of Anthropological relevance.

Keywords: Health seeking behaviour, Fertility, PVTGs, Viskha agency, Mortality trends

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Introduction

In general, the tribals exhibits very poor health and nutritional status, added with high incidence of malnutrition, morbidity and mortality. Moreover, very poor maternal and child health observed in many tribal communities of India. The

health and nutritional situation of particularly vulnerable tribal groups population is very pathetic and precarious condition. The fertility and mortality rates are also very high among PVTGs population, when compared to other tribes and castes in rural and urban India. The tribal population in India is distributed in almost all the states except Haryana and Punjab. Large chunk of tribal population in India is concentrated in high altitude forested zones like Eastern Ghats, Western Ghats, North-Eastern, Central and Himalayan Mountains. Some section of tribal population in India is also found to live in deserts, islands and plain areas. The aboriginal people inhabiting in the tropical forest zone are very frequently affected with the Malaria, Dengue, Goiter, Yaws, Genetical disorders like sickle cell anemia, G6PD deficiency, red cell enzyme deficiency and water borne diseases.

Tribal Population and Cultural Background of Tribes

The newly carved Andhra Pradesh State consists of 34 tribes with the population of 27,39,919 (5.53%) as per 2011 census. The tribal population in the state is distributed in all the districts with varied in number. Large chunk of tribal population in this state is concentrated in tribal sub-plan areas of Visakhapatnam, Vizianagaram, Srikakulam, East Godavari, West Godavari, Prakasam, Kurnool and Guntur districts. The district Visakhapatnam represents sixteen major tribes with the population of 6, 18,500 which constitutes 14.42% to total population of the district. The high concentration of tribal population in the district is found in the Tribal Sub-Plan area of Paderu area mainly distributed in the tribal mandals of Arakuvalley, Ananthagiri,Dumbriguda, Hukumpeta, Paderu, Pedabayalu, Munchingiput, Gangaraju Madugula, Chinthapalli, Gudem Kothaveedhi and Koyyuru, where the present research study is ongoing with the financial support of I.C.M.R, New Delhi. The study is mainly focusing on Particularly Vulnerable Tribal Groups (PVTGs) like Gadaba, Kondh and Porja. The Particularly Vulnerable Tribal Groups are facing some serious problems like lack of basic facilities, acute shortage of food, housing, development transition, drinking water, acute poverty, good medical facilities, lack of essential agricultural technology, etc. (Nanjunda D.C 2019, P 213-214). The fate of Adivasis and forest are closely tied in the Attpady hills of Kerala, part of the Western Ghats and a bio-diversity rich region. The recently settled agriculturists have been facing malnutrition and infant mortality and their transition to cash crops has only adversely impacted their agriculture and thereby food security (Deepa Kozhisseri 2019, P 223). India represents 635 tribes with the population of 10,42,81,034 (8.6 per cent) as per 2011 census, distributed in almost all states except Punjab

and Hariyana, large chunk of tribal population in India is concentrated in forests, mountains, deserts and islands, sustaining with limited food resources. In general the tribal economy is considered as agro-forest based and subsistence economy. Out of the total tribes in India, 75 have been classified as particularly Vulnerable Tribal Groups (PVTGs) based on the criteria of pre-agricultural stage of economy, very low literacy, stagnant or diminishing population, living in most economically backward conditions. In general, the PVTG populations Food Insecurity, Poverty and Malnutrition among Particularly Vulnerable Tribal are struggling hard to eke-out their livelihood and encounter the problems of food insecurity, poverty and malnutrition. All these problems are closely associated with the ecology in which they live from centuries together and its exploitative technologies mainly in food production and food material collection or gathering (foraging). The media brings the people together and helping for the globalization process in the modern scientific era. All of the problems of the world are communication problems and all the problems in this world can be solved by more and better communication to health (Subramanyam.Vet.al,2006). Even today, the foragers are seen among certain PVTGs specifically living in forests, mountains, deserts and islands. The foraging tribal communities primarily depend on its physical environment forcefully to meet their subsistence (food) requirement. The problem of food insecurity very much prevails in tribal population more specifically among PVTGs of different tribal pockets of India. Poverty and food insecurity are the root causes for high incidence of morbidity, mortality and malnutrition among aboriginal people in India. These are the major causes for underdevelopment among many tribes including PVTGs in India. In development perspective, the tribal population stands at the bottom of the human development index.

Tribal Population in Andhra Pradesh

The newly carved state of Andhra Pradesh consists of 34 tribes with the population of 27,39,919 (5.53 per cent) as per 2011 census. Tribal population in Andhra Pradesh state is distributed in all the 13 districts, varied in number. Large chunk of tribal population in the state is concentrated in tribal sub-plan areas of Visakhapatnam, Srikakulam, Vizianagaram, East Godavari, West Godavari, Kurnool, Prakasam, Guntur and Nellore. Most of the tribal habitats are located in Eastern Ghats forest environment where the hill tribes and particularly vulnerable tribal groups live. These two categories of tribal groups numbered about 31, adapted to the forest environment of Eastern Ghats have established symbiotic relationship with the forests since

age immemorial. The population of hill tribes including PVTGs draw their food material mostly from the forest flora and fauna in addition to agriculture. The rest three plain tribes namely Lambada / Sugali, Yerukula and Yanadi, their population is distributed in Deccan plateau region of rural village economy, maintaining symbiotic relationship with the castes and integrated into rural villages. The castes and the plain tribes population directly or indirectly depend on agricultural land owning traditional peasant castes for meeting their food requirements. In general, the problems of food insecurity, poverty and malnutrition prevail among the tribal populations belonging to Chenchu, Gadaba, Kondh, Konda Reddy, Konda Savara and Porja tribes. As per 2011 census the PVTG population in Andhra Pradesh state is 4,52,456 (16.51). PVTG population and predominant place of habitation is shown in the below Table.

PVTGs population in Andhra Pradesh as per 2011 Census

Sl. No	*Name of the Tribe*	*Population*	*% to total PVTG population*	*% to total tribal population*	*Predominant place of habitation*
1	Chenchu	47315	10.46	1.73	Prakasam Kurnool and Guntur
2	Gadaba	37798	8.35	1.38	Srikakulam, Vizianagaram and Visakhapatnam
3	Kondh	102378	22.63	3.74	Visakhapatnam
4	Konda Reddy	90937	20.10	3.32	East Godavari, West Godavari
5	Savara	137613	30.41	5.02	Srikakulam,Vizianagaram and Visakhapatnam
6	Porja	36145	8.05	1.32	Srikakulam, Vizianagaram and Visakhapatnam
	Total	**452456**	**100.00**	**16.51**	

Kondh

In Andhra Pradesh, Kondhs are mainly concentrated in Visakhapatnam district, distributed in all the eleven tribal mandals of tribal sub-plan area of Paderu. Their habitats are mostly found on the hill tops and slopes of the interior of forests of Eastern Ghats. The Kondh habitats are composed of rugged hills, uninhabited Jungles and deep water courses, surrounded by pathless wilderness forests or valleys and are pervaded by a pestilential atmosphere. The climate of the Kondh territories was highly insalubrious. The economy of Kondhs is agro-forest based and largely considered as subsistence economy. They also rear pigs and fowls and draw most of their food material from shifting (podu) cultivation and gathering of edible fruits,

leaves, seeds, nuts, tubers and roots. The available food materials in their habitats are not meeting the subsistence requirement of its entire population throughout the calendar year. Hence, they Food Insecurity, Poverty and Malnutrition among Particularly Vulnerable Tribal... 85 are forced to depend on the public distribution system of G.C.C, D.R. Depots. The problem of food insecurity very much prevails among them. The food system of Kondh tribe is mainly agro-forest based and supplemented with the livestock (cattle, fowls and pigs).

Proja

It is one of the particularly vulnerable tribal groups in Andhra Pradesh. As per 2011 census the population of this tribe is 36145. The population of this tribe is mostly concentrated in Visakha agency area of Paderu ITDA. The economy of this tribe is agro-forest based, and subsistence economy. The Porja families also rear cattle, fowls, and pigs. Food insecurity very much prevails in the habitats of Porja. Majority of the Porja families are facing the problems of poverty and food insecurity. Still Porjas are largely dependent on the forest resources. The food system of Porjas is agro-forest based and linked with the forest ecosystem. The data collected from Porja and Kondh tribes in Munchingput mandal on the issues of health seeking behavior, fertility and mortality trends, presented in this research paper with qualitative and quantitative explanations. The statistical data pertaining to the age group wise sample covered on Porja and Khond tribes in Munchingputt mandal. Out of 331 samples 318 sample are covered in Porja tribe and 13 samples are also covered under Kondh tribe in the study area. It also tries to present a few earlier relevant studies findings on the health issues of tribes and PVTGs. The health problems of tribal communities of India and more specifically PVTGs still need special attention from health administration at central and states levels. The available earlier research studies on tribal health problems clearly pointed out that tribal population has distinctive health problems which are mainly governed by their habitat, difficult terrains, and ecologically viable niches (Basu S 1996), The health, nutrition and medico- genetic problems of diverse tribal groups have been found to be unique and present a formidable challenge for which appropriate solutions have to be found out by planning and evolving relevant research studies.They derive most of their food material from shifting (podu) cultivation and minor forest producecollectionV. Subramanyam & S. Narayana Rao (2023).

The Primitive Tribal Groups (PTGs) of India (now termed as PVTGs) have special health problems and genetic abnormalities like sickle cell anemia, G6PD,

red cell enzyme deficiency and sexually transmitted diseases (Commissioner Report for Scheduled Tribes and Scheduled Castes (1986-87). In sanitary conditions, ignorance, lack of personal hygiene and health education are the main factors responsible for their ill health. Some primitive tribal communities are facing extinction like the Onges, Jarawas and Shompens of Andaman and Nicobar Islands. Certain of the health problems as indicated by the investigations include a) endemic diseases like Malaria, introduced from outside or otherwise like tuberculosis, influenza, dysentery, high infant mortality and malnutrition b)Venereal diseases, induced abortion, inbreeding, addition to option, custom of easing tubers of discern (may cause sterility as they contains substances used in oral contraception) and c) disturbed sex ratios leading shortage of women. Still lot of research studies are required on different primitive tribes of India, which are small in size and vulnerable to various kinds of diseases (Subramanyam.V et, al. 2006). Forest ecology is closely associated with the health problems of PVTGs. Deforestation and environment degradation directly affects the health and well being of tribals in the poor and under developed regions. The forest degradation has resulted to the disappearance of certain varieties of edible roots, tubers, fruits, medicinal plants, small animals like wild goats, sheep, pigs, rabbits, fowls etc., in many areas which affected the nutritional standards of the tribal population and increases mortality rate (Subramanyam V and B.Veerabhadrudu 2014), Maternal Mal - nutrition is quite common among the tribal women especially those who have many pregnancies too closely spaced. Tribal diets are generally grossly deficient in calcium, Vitamin-A, Vitamin-C, Riboflavin and animal protein (Subramanyam V, et, al 2006). Experts opined that the established tribal health seeking behavior should not be under estimated citing them as illiterate or superstitious. Even today, major sections of PVTGs are not ready to accept modern healthcare system because of their cultural background (Nayak 2014). It is assumed that health behavior depends on heath culture, geographical area and Eco-system. Medical Anthropologists opined that modern health programmes failed to respect tribes inherited culture, emotions and spiritual meanings associated with health and disease. Moreover, it is found that health seeking behavior of the tribes varies according to the type of illness, causation of illness, gender and age of the persons affected by a disease and illness. Hence, health interventions must be culture specific.

The Study Area

The study was conducted in Munchingput mandal of Paderu, I.T.D.A, covering the PVTGs like Kondh and Porja rehabilitating in the villages such as labburu,

Jappara, Menha, Panasa, Valaibeeru, Talabirada, Asarada, Vanagumma, Sangada, Dominiputtu, Kirambo, Kodaputtu, Enugurai, Gadelaburugu, Agraharampeta, Bondaput, Jerrela. Out of the total villages, Porja tribe represents 16 villages. Kirambo village represents Khond tribe. Porja tribe is highest 96.07% of samples covered in the study area.

Table 1 :Village and tribes wise number of samples covered in Munchingput Mandal

S. No	*Name of the village*	*Name of the Tribe*		*Total*	*% to Total Sample Respondents*
		Porja	*Khond*		
1	Labburu	58	0	58	17.5
2	Jappara	33	0	33	10.0
3	Mebha	34	0	34	10.3
4	Panasa	26	0	26	7.9
5	Valaibeeru	11	0	11	3.3
6	Talabirada	23	0	23	6.9
7	Asarada	9	0	9	2.7
8	Vanagumma	21	0	21	6.3
9	Sangada	11	0	11	3.3
10	dominiputtu	17	0	17	5.1
11	Kirambo	0	13	13	3.9
12	Kodaputtu	8	0	8	2.4
13	Enugurai	16	0	16	4.8
14	Gadelaburugu	10	0	10	3.0
15	Agraharampeta	21	0	21	6.3
16	Bondaput	9	0	9	2.7
17	Jerrela	11	0	11	3.3
	Total	318	13	331	100.00

The table 1 presents the data pertaining to village and tribe wise number of sample respondents covered in Munchingput mandal of Paderu ITDA, Alluri SeetharamaRaju district of Andhra Pradesh state. Out of the total sample respondents 96.07% of them belongs to Porja tribe and the rest 3.93% sample respondents belongs to Khond tribe. The study tribal mandal Munchingput consists of the PVTGs and Nooka Dora and Kotiya also found to inhabits along with these two particularly vulnerable tribes. Large number of Porja PVTGs people found to live in this mandal. Among the sample villages the Kirambo tribal habitat represents only Khond tribe, the rest of the villages comprises of Porja PVTG population. Generally the PVTGs settlements are small in size and mostly scattered in nature

and exhibits the feature of geographical isolation, relatively in access to the public health facilities and mostly confined to the traditional health care system with indigenous medicine of their own. At present majority of the Porja and Khond people are in access to public health facilities and experiencing with health exclusion.

Table 2: Tribe and sex wise population distribution in sample households of the selected villages in Munchingput mandal

S. No	*Name of the Village*	*Name of the Tribe*				*Total males and females*	*% To Total population*
		Porja		*Khond*			
		Male	*Female*	*Male*	*Female*		
1	Labburu	219	229	-	-	448	12.18
2	Jappara	122	131	-	-	253	6.90
3	Mebha	120	130	-	-	250	6.80
4	Panasa	165	193	-	-	358	9.73
5	Valaibeeru	55	68	-	-	123	3.34
6	Talabirada	180	190	-	-	370	10.06
7	Asarada	40	58	-	-	98	2.66
8	Vanagumma	146	162	-	-	308	8.37
9	Sangada	26	36	-	-	62	1.70
10	Dominiputtu	58	82	-	-	140	3.80
11	Kirambo	-	-	85	65	150	4.08
12	Kodaputtu	29	33	-	-	62	1.68
13	Enugurai	65	72	-	-	137	3.72
14	Gadelaburugu	98	117	-	-	215	5.84
15	Agraharampeta	221	179	-	-	400	10.90
16	Bondaput	29	41	-	-	70	1.90
17	Jerrela	112	120	-	-	232	6.31
	Total	1685	1841	85	65	3676	100.00

The table 2 shows about the PVTGs tribe and sex wise population distribution in the sample villages of Munchingput mandal. Totally the sample villages represents the population, 3526(65.92%) belongs to Porja tribe, the rest 150 (4.08%) belongs to Khond tribe. In regard to sex wise population 1770 (48.15%) are males and 1906(51.85%) are females. The data clearly shows that sex ratio in these two PVTGs in imbalanced. the Porja population comprises of more number of females whereas the khond population consists of more number of males. Both the tribes population put together the females population is higher than the males. In general, the female population is more number in majority of the tribes in visakha agency

area of Andhra Pradesh. Gender discrimination also noticed in tribal society too, because of cultural contact with the neighbouring castes.

Table 3: Age group wise Sample Households Population Munchingput Mandal

Age group	*Sex wise population*		*Total*	*% to Total*
	Male	*Female*		
1+ yr	40	9	49	2.96
2-5 yrs	221	186	407	24.65
6-10 yrs	176	139	315	19.07
11-15 yrs	53	76	129	7.90
16-20 yrs	14	52	66	3.99
21-25yrs	19	48	67	4.05
26-30yrs	104	124	228	13.80
31-35yrs	128	68	196	11.87
36-40yrs	75	47	122	7.38
41-45yrs	22	12	34	2.05
46-50yrs	11	0	11	0.66
51-55yrs	0	11	11	0.66
56-60yrs	12	4	16	0.96
Total	**875**	**776**	**1651**	100.00

The table 3 shows about age group and sex wise population in the sample households covered in Munchingput mandal. The sample households consists of the population of 1651. out of the total, 875(53.00%) are males and 776(47.00%) are females. The data clearly indicates that males population is higher than females population in the sample households covered. In regard to age group wise population 27.61% of population falls in the age group of 1-5 years, 26.97% of them falls in the age group of 6-15 years, 8.0% of them falls in the age group of 16-25 years, 25.67% of them falls in the age group of 26-35 years, 9.43% of them falls in the age group of 36-45 years 1.32% of them falls in the age group of 46-55 years, only 0.96% of them falls in the age group of 56-60 years. The data clearly indicates that the aged population is very less in both the PVTGs Porja and Khond. Generally the life span of tribal people is very less when compared to castes population of the region. Usually the morbidity and mortality rates are very high in PVTGs specific and other tribes in general.

Table 4: Tribe and Age wise Mothers Sample (15 - 45 Years) Covered in Munchingput Mandal

Age group	*Tribe wise sample covered*		*Total*	*% to total*
	Porja	*Khond*		
20 Years	66	0	66	19.9
21-25 Years	36	1	37	11.2
26-30 Years	123	5	128	38.7
31-35 Years	65	6	71	21.5
36-40 Years	3	0	3	0.9
41-45 Years	25	1	26	7.9
Total	318	13	331	100.00

The table 4 presents the data pertaining to the age group wise sample covered in Porja and Khond tribe in Munchingput mandal. Out of the total sample respondents 38.7% of them falls in the age group of 26-30 years, followed by 21.5% in the group of 31-35 years, 19.9% of them in the age group of 20 years 11.2% of hem in the age group of 21-25 years, 7.9% of them in the age group of 41- 45 years and 0.9% of them in the age group of 36-40 years. The sample mothers covered in both Porja and Khond tribes falls in the reproductive age group ranging from 20 years to 40 years.

Health Problem: (Morbidity in the Study Area)

Table 5: Village and Tribe Wise Sample Respondents Affected with Various Kinds of Diseases during Household Survey

S. No	*Name of the Village*	*Name of the Tribe*	*Suffered with disease*						*Total*	*% to Total*
			TB	*Pits*	*anaemia*	*Body pains, fever, cough*	*jaundice*	*Not affected and suffered*		
1	Labburu	Porja	6	4	31	29	2	9	81	24.47
2	Jappara	Porja	2	3	11	20	-	-	36	10.90
3	Mebha	Porja	1	3	16	8	2	2	32	9.66
4	Panasa	Porja	-	2	6	2	-	-	10	3.02
5	Valaibeeru	Porja	2	-	5	-	-	-	7	2.11
6	Talabirada	Porja	-	-	4	7	1	-	12	3.62
7	Asarada	Porja	1	-	4	-	-	-	5	1.51
8	Vanagumma	Porja	1	-	8	20	3	-	32	9.66
9	Sangada	Porja	-	-	3	5	-	-	8	2.41
10	Dominiputtu	Porja	1	-	8	2	-	-	11	3.32
11	Kirambo	Khond	-	-	1	-	-	-	1	0.30
12	Kodaputtu	Porja	-	-	6	-	-	-	6	1.81
13	Enugurai	Porja	1	-	5	-	-	-	6	1.81
14	Gadelaburugu	Porja	1	-	3	-	-	-	4	1.20
15	Agraharampeta	Porja	3	-	7	35	2	12	59	17.82

S. No	Name of the Village	Name of the Tribe	Suffered with disease						Total	% to Total
			TB	Pits	anaemia	Body pains, fever, cough	jaundice	Not affected and suffered		
16	Bondaput	Porja	-	-	6	-	-	-	6	1.81
17	Jerrela	Porja	-	-	3	12	-	-	15	4.53
	Total		19	12	127	140	10	23	331	100.00

The table 5 presents the data pertaining to village and tribe wise sample respondents affected with various kinds of diseases during the last one year period. From the table it is noticed that 21.75% of respondents affected with the diseases like TB, Pits, anaemia, body pains, fever, cough, jaundice, and 10.90% of them affected with the diseases like TB, pits anaemia body pains, fever and cough, 9.06% of them suffered with the diseases like TB, Pits, anaemia, body pains and jaundice. It is noted that about 38.37% of them affected with severe anaemia, 42.30% of them suffered with the ailments like body pains, fever, and cough. It is also noted that 5.74% TB cases recorded in the sample households belongs to Porja tribe and 3.02% of jaundice cases recorded only among Porja tribe, only a single case of severe anaemic case recorded in Khond tribe. In the total sample respondents 6.95% of them are not affected with any kind of diseases during last one year period. The data clearly indicates that about 93.05% of the respondents affected with the various kinds of diseases. Among the fever cases, majority of them are Malaria. The incidence of Malaria is very high among the tribes (including PVTGs, Porja and Khond) in the studied mandal of Munchingput in specific and visakha agency area in general. In the study area, the PVTGs were taken treatment for curing of their health problems either from public health facility or from indigenous medicare system of their own during the field work. The details of which given below:

Mortality Rate: (Maternal, Infant and Child Mortality)

Table 6: Age and Sex Wise Mortality Rates of Live Births

Period	Total		Total
	Male	Female	
Perinatal (< 7 days + still births)	4	3	7
Neonatal (28 days)	7	5	12
Post neonatal (29-365 days)	2	3	5
Child mortality (< 5 years age)	2	1	3
Total	**15**	**12**	27

The table 6 presents the data related to age and sex wise mortality rates of live births in the sample mothers respondent. Out of the total live births 3.27% of children died during prenatal, neonatal, post neo natal, and below 5 years age. Among the total child mortality case 15 are males and 12 are females. Male child deaths are slightly higher than that of the female child deaths in the sample live births. The data shows that among child deaths, majority of children died during neo-natal period, followed by prenatal, post neonatal and below 5 years age. It is observed in the studied mandal and area that, now the 5 years age. It is observed in the studied mandal and area that, now the PVTGs women are access to maternal and child health care facilities of government and also availing and utilizing it due to the influence and intervention of local ASHA and Anganwadi workers. It is clear that at present the community Health Workers Scheme (ASHA) is very effectively functioning in the PVTGs habitats too.

Physical Status Body Mass Index of Respondents

Table 7: Percentage Distribution of Respondents (Mother) According to their Body Mass Index in Study Area

BMI of Mothers	*Frequency*	*Percent (%)*
Under Weight	106	32.0
Normal	192	58.0
Over Weight	20	6.0
Obesity	13	3.9
Total	**331**	100.00

The *table 7* shows about the body mass index of the respondents in the sample villages. Out of the total respondents 58% of them falls in the normal BMI category, 32% of them falls in the underweight category, 6% of them falls in the overweight category and 3.9% of them falls in the obesity category. The data clearly indicates

Table 8: Percentage Distribution of Respondents (Children's) According to their Body Mass Index in Study Area

BMI of children	*Sex wise Children BMI*		*Total*	*% to total*
	Male	*Female*		
Under Weight	180	282	462	51.33
Normal	115	108	223	24.80
Over Weight	68	32	100	11.11
Obesity	82	33	115	12.78
Total	445	455	900	100.00

that considerable number of PVTGs falls under weight and malnutrition category. The incidence of malnutrition is also very high among PVTGs population in the studied mandal and area.

The table 8 presents the data pertaining to the body mass index of respondents children in the sample villages of Munchingput mandal. A total of 900 children covered in the households of respondents. Out of the total 900 children, 445 (49.44%) are males and (boys) and the rest 455(50.56%) are females (girls). Out of sample children 51.33% of them falls under the body mass index category of under weight, 24.80% of them falls in the BMI category of normal 12-78% of them falls in the BMI category of obesity and the remaining 11.11% of them falls under weight. The data indicates that large majority of PVTGs children belongs to Porja and Khond tribes are malnourished and under weight. It is observed that the ICDS initiated nutrition programmes through Anganwadi centres also not yet enhanced the nutritional status among the children, pregnant women and lactating mothers of PVTGs.

Fertility and Pregnancy Out Come of Respondents

Table 9: Details of Pregnancy among Sample Respondents

Characteristic	*Frequency*	*Percent (%)*
Number of live births	826	99.3
Abortions	6	0.7
Still births	0	0
Number of pregnancies	832	100.00
Mean number of pregnancies	2.51	
Mean number of live births	2.49	
Mean number of surviving children	2.41	

The table 9 shows about the details of pregnancy among sample respondents belongs to Porja and Khond tribes. The pregnancy results of respondents clearly reveals that 99.3% of it are live birth and 0.7% are abortions. There is no single case of still birth among the sample women respondents. The data indicates that the mean number of pregnancies are 2.51, mean number of live births are 2.49 and mean number of survival children are2.41. Based on the data it is understood that there is positive impact or effect of immunization programme on the PVTGs of Porja and Khond in the studied mandal Munchingput.

Health Seeking Behaviour of Respondents of Khond and Porja PVTGs

Table 10: Type of treatment taken by the respondents from selected sample villages in Munchingput mandal

S. No	*Name of the Village*	*Type of Treatment taken*				
		Modern medi-care (PHC, CHC ANM ASHA)	*Traditional health healers Disari, Guruvadu/ Yejjodu*	*Treatment not taken*	*Total*	*% to Total*
1	Labburu	70	2	9	81	24.47
2	Jappara	28	8	-	36	10.90
3	Mebha	28	2	2	32	9.66
4	Panasa	10	-	-	10	3.02
5	Valaibeeru	7	-	-	7	2.11
6	Talabirada	11	1	-	12	3.62
7	Asarada	5	-	-	5	1.51
8	Vanagumma	29	3	-	32	9.66
9	Sangada	8	-	-	8	2.41
10	Dominiputtu	10	1	-	11	3.32
11	Kirambo	-	1	-	1	0.30
12	Kodaputtu	6	-	-	6	1.81
13	Enugurai	6	-	-	6	1.81
14	Gadelaburugu	4	-	-	4	1.20
15	Agraharampeta	45	2	12	59	17.82
16	Bondaput	6	-	-	6	1.81
17	Jerrela	15	-	-	15	4.53
	Total	288	20	23	331	100.00

The table 10 shows about type of treatment taken by the respondents for various diseases in the selected sample villages of Munchingput mandal. Out of the total respondents 93.05% of them affected with different kinds of diseases and 6.95% of them not affected with any kind of disease. Among the morbidity cases. 93.50% them taken modern health care treatment from PHC (Primary Health centre, C.H.C (Community Health Centre), ANM (Auxillary Nurse Mid Wife) and ASHA worker, the rest 1.52% of them taken treatment from their traditional medicine men like ***Disari***, ***Goravadu*** or ***Guruvu*** and ***Yejjodu***. The data clearly

indicates that now majority of PVTGs people belongs to Porja and Khond tribe are access to modern health care facilities and for curing various diseases rather than confining to their own indigenous medicine. Only a few respondent still have strong belief and faith in their own indigenous medicine. It is observed that majority of the PVTGs people using both Indigenous and modern medicines but not totally depending either of these two forms of curing practices.

Poverty is the main causative factor for high incidence of malnutrition and considerable number of maternal and child deaths noted in the study area. The health seeking behaviour of PVTGs people in the study area slowly changing from indigenous / traditional health care to modern health care system due to public health intervention through Community Health Workers Scheme at gross root level of village itself. The public health delivery system is not yet effectively functioning in PVTGs habitats due to geographical and ecological constraints. The PVTGs people are still experiencing geographical isolation that is why they are unable to receive outside health service timely and in emergency situation.

Summary and Conclusion

It is observed that once the PVTGs and other tribes people totally depended on their own indigenous / traditional health care system but now they are accepting the modern allopathic medicine the health and medical awareness camps by the health as well as strengthening of primary health care services in tribal areas are slowly improving accessibility, availability, and utilization of it by the PVTGs too in some extent. The traditional health care system still persists and they have strong faith in shamanism and superstitious belief in witch craft, sorcery and black magic. There is a felt need to documentation of indigenous / traditional health care system and its medicinal practices by the tribal people including PVTGs. Still the indigenous and traditional health care practices are vogue in the PVTGs habitats, because modern health care facility is not within their reach due to geographical and ecological factors. The empirical observations and practical experiences in the field clearly indicates that an urgent need for scientific validation of tribal herbal medicine and in turn it should be integrated in to the modern medicare system, so that the aboriginal people (including PVTGs) willing to accept it and avail the modern medicare system with out any kind of hesitation non the grounds of cultural reason. The age old practice of Disari Vaidyam (traditional health care system) still persists in almost all PVTGs habitats even today. The PVTG aboriginal people are not reaching them within the need of hour due to geographical and ecological

constratnts along with the severity of exclusion associated with impoverishment marginalization and deprivation. The study clearly indicates about both modern and traditional health care system practices of PVTGs in the Munchingput tribal mandal of A.P state. It bencae as a document evidence.

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