



**Original Article:**

**Functioning of Primary Health Centers in the Selected Tribal Districts of Karnataka-India: Some Preliminary Observations**

DC Nanjunda, Karnataka Kidney Health Foundation (www.kkhf.org), Kushalnagar-34, Coorg dist, Karnataka

**Address for Correspondence:**

**Dr. DC Nanjunda,**

Karnataka Kidney Health Foundation,

Kushalnagar-34,

Coorg dist, Karnataka, India.

**E-mail:** ajdmeditor@yahoo.co.in

**Citation:** Nanjunda DC. Functioning of Primary Health Centers in the Selected Tribal Districts of Karnataka-India: Some Preliminary Observations. *Online J Health Allied Scs.* 2011;10(2):3

**URL:** <http://www.ojhas.org/issue38/2011-2-3.htm>

**Open Access Archives:** <http://cogprints.org/view/subjects/OJHAS.html> and <http://openmed.nic.in/view/subjects/ojhas.html>

Submitted: Jan 23, 2011; Accepted: Jul 15, 2011; Published: Jul 30, 2011

**Abstract:** The study was intended to find how the Primary Health Centers in the Selected Tribal Districts of Karnataka-India are functioning and to reveal their problems and prospects. Cross-sectional, Observational study was done in a total of 35 PHCs, randomly selected from the three tribal dominant districts of Karnataka (Mysore, Chamaraja Nagar and Kodagu). A total of 35 medical and 50 para-medical staff were interviewed with pre tested questionnaires. For qualitative data, 100 tribal beneficiaries were selected (50 men, 50women). Data was collected through open-ended questionnaires using interviews, matrix method and focus groups study and data analyzed using SPSS software. The study found that non availability of essential fundamental facility, ill-mannered behavior of the staff, and absence of adequate man power, were some of the major reasons why tribals have negative perceptions about the PHCs. Further, this study has shown that there is a need of policy change regarding working style of PHCs

**Key Words:** PHC; Health; Medicine; Tribal

**Introduction:**

In India, Primary Health Centers (PHCs) are the keystone of tribal healthcare. PHCs play a vital role as the first level of contact and a connection between individuals and the health system, bringing healthcare delivery as close as possible to where people live and work. In addition, these PHCs are charged with providing promotive, preventive, curative and rehabilitative care in urban tribal and tribal areas. Even though there are numerous reasons for a meager performance of PHCs, almost all of them stem from weak stewardship of the sector, which produces a poor incentive framework. Primary healthcare is indispensable healthcare based on sensible, scientifically sound and socially suitable methods and technology made generally reachable to individuals in the community through their full involvement and at a cost the community and country can afford to sustain at every stage of their advancement in the spirit of self-reliance and self-determination.<sup>1</sup>

Normally in India, a PHC covers a population of 20,000 in hilly, tribal, or difficult areas and a population of 30,000 in plains areas with 4-6 indoor/observation beds. It acts as a referral unit for 6 sub-centers and refers out cases to Community Health Centers (CHCs) (30 bed hospitals) and higher order public hospitals located at the sub-district and district level. Primary Health Centers (PHCs) form the backbone of the public health system in tribal India. The Mudaliar Committee (1955), Jungalwalla Committee (1965), Karthar Singh Commit-

tee(1973), the Shrivatsva Committee (1975), and the Bajaj committee (1986) have also highlighted the importance of up gradation of PHCs. Despite criticism they have faced concerning excellence of care and poor infrastructure, they continue to be the major primary care provider for the majority of India's population who reside in tribal areas.<sup>2</sup>

The Primary Health Centers (PHC) are not immune from issues such as the incapability to notice diseases early due to lack of multi-disciplinary medical expertise and a laboratory and other amenities and insufficient quantities of general medicines. Further, tribal patients usually do not visit PHCs in the early stages of their diseases. Therefore, healthcare providers (if at all present) are forced to focus only on seriously ill patients due to the heavy work load. Poverty and a low level of literacy are the basic causes for the poor health behavior among tribes. The absence of responsibility and accountability stems from the fact that there is no formal feedback mechanism and incentive to treat tribes as clients. Tribal Patients often find fault in the rude and abrupt behavior of health workers that discriminate against women and minorities from scheduled castes or tribes. The lack of accountability leads to absentee doctors, as it is hard to get qualified doctors to tribal areas). Unresponsive ANMs, inconvenient opening times and little or no community participation are some of the other problems faced by the PHCs in tribal areas.<sup>3</sup>

Opening of essential primary health centers (PHCs) in tribal dominant districts was an integral part of various tribal development programmes implemented since 1947. The Bhore Committee Report recommended opening PHCs to cover only a population of 10000 and that each should have 6 specialist doctors, other required staff, and 75 beds. However, each PHC complex in the tribal blocks consists of 6 beds, 1 medical officer, 2 midwives and 1 ancillary person. Different governments have taken suitable measurements to upgrade the PHCs based upon various experts' committee reports. Recent national health policy has laid stress on a people-centered primary health care approach. Nevertheless, the ICMR report has exposed the fact that more than 80 percent of the population has no access to any form of health care. However, curative services, people's awareness about functioning of PHCs, preventive activities, and the attitude of the health staffs need to be properly evaluated through different research approaches. This current study examines the functioning of PHCs as viewed by the community in selected tribal blocks of south Karnataka.<sup>4</sup>

In Karnataka state, the PHCs were started only in the Ad hoc plan years after the Third Five Year Plan by opening 34 PHCs with 55 Sub-Centres. During the Fourth Five Year Plan, 24 additional PHCs with 66 Sub-Centres were opened. Thus, at the end of the Fourth Five Year Plan there were 236 PHCs and 141 Sub-Centres in the state. The total strength of the PHCs in the state at this time is 2,164. More than half of the PHCs are working in rural areas, with a small number (246) working in the tribal-dominant parts of the State.

#### Methodology:

This study was undertaken in three tribal dominant districts of South Karnataka (Mysore, Chamaraja Nagar and Kodagu). The average literacy rate of these districts is 61 percent with the moderate fundamental infrastructures.

The objectives were:

1. To find out the degree of usage of the health care services accessible in selected tribal PHCs
2. To ascertain the excellence of health care services delivered by the studied PHCs
3. To scrutinize community perception concerning the working style of PHCs.

This study was undertaken during August 2010 to November 2010. A Total of 35 PHCs were randomly selected in the three districts for the pilot study. A total of 35 medical and 50 para-medical staffs were interviewed. The sources of data included PHC staffs, patients, local politic leaders etc., collected by means of survey, case study, community norms study, participant observation, interview, content analysis and institutional ethnography (NGOs prospective). For qualitative data, 100 tribal beneficiaries were selected (50 men, 50 women). It was collected through open-ended questionnaires using interviews, matrix method and focus groups study. Quantitative data was analyzed using SPSS database and qualitative data has been analyzed using NUD\*ISD software

#### Results:

The results of the study are shown in tables below:

Districts	Total number of PHCs working	Number of studied PHCs	Mobile units
Mysore	27	13	2
Chamaraja Nagar	22	12	1
Kodagu	12	1	1
Total	61	35	4

Re-sponse	Men		Women		Total	
	f	%	f	%	f	%
Regular	26	26.00	48	48.00	74	37.00
often	37	37.00	39	39.00	76	38.00
Rare	21	21.00	13	13.00	34	17.00
No visit	16	16.00	-	-	16	8.00
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =4.666; P<.198		X <sup>2</sup> =39.099; P<.000*		X <sup>2</sup> =30.573; P<.000*	
	X <sup>2</sup> (Male*Female) =24.476; P<.000*					

Re-sponse	Men		Women		Total	
	f	%	f	%	f	%
Regular	53	53.00	42	42.00	95	47.50
often	42	42.00	51	51.00	93	46.50
Rare	3	3.00	3	3.00	6	3.00
No visit	2	2.00	4	4.00	6	3.00
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =51.243; P<.000		X <sup>2</sup> =45.701; P<.000		X <sup>2</sup> =96.038; P<.000*	
	X <sup>2</sup> (Male*Female) =2.811; P<.422					

Re-sponse	Men		Women		Total	
	f	%	f	%	f	%
Yes	46	46.00	58	58.00	104	52.00
No	49	49.00	36	36.00	85	42.50
Don't Know	4	4.00	4	4.00	8	4.00
No response	1	1.00	2	2.00	3	1.50
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =51.356; P<.000		X <sup>2</sup> =49.904; P<.000		X <sup>2</sup> =100.102; P<.000*	
	X <sup>2</sup> (Male*Female) =3.706; P<.295					

Re-sponse	Men		Women		Total	
	f	%	f	%	f	%
Yes	54	54.00	48	48.00	102	51.00
No	41	41.00	46	46.00	87	43.50
Don't Know	5	5.00	6	6.00	11	5.50
No response	0	00	0	00	0	00
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =23.561; P<.000		X <sup>2</sup> =23.605; P<.000		X <sup>2</sup> =49.874; P<.000*	
	X <sup>2</sup> (Male*Female) =0.731; P<.694					

Response	Men		Women		Total	
	f	%	f	%	f	%
Long hours of waiting	28	28.00	19	19.00	47	23.50
Distance factor	23	23.00	23	23.00	46	23.00
Absence of Doctors	21	21.00	28	28.00	49	24.50
Non availability of medicines	17	17.00	16	16.00	33	16.50
No upgraded facility	4	4.00	6	6.00	10	5.00
Rude behaviors of Staff	7	7.00	3	3.00	10	5.00
No lady Doctors	0	0.00	5	5.00	5	2.50
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =30.418; P<.000		X <sup>2</sup> =22.310; P<.001		X <sup>2</sup> =48.376; P<.000*	
	X <sup>2</sup> (Male*Female) =9.754; P<.135					

Re-sponse	Men		Women		Total	
	f	%	f	%	f	%
Yes	24	24.00	31	31.00	55	27.50
No	72	72.00	68	68.00	140	70.00
No response	4	4.00	1	1.00	5	2.50
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =38.632; P<.000		X <sup>2</sup> =42.305; P<.000		X <sup>2</sup> =79.983; P<.000*	
	X <sup>2</sup> (Male*Female) =2.805; P<.246					

Response	Men		Women		Total	
	f	%	f	%	f	%
Lack of knowledge	45	45.00	31	31.00	76	38.00
Not felt necessary	32	32.00	48	48.00	80	40.00
Not customary	6	6.00	8	8.00	14	7.00
No time to go	4	4.00	6	6.00	10	5.00
Traditional healers is sufficient	9	9.00	5	5.00	14	7.00
other	4	4.00	2	2.00	6	3.00
Total	100	100.0%	100	100.0%	100	100.0%
	X <sup>2</sup> =41.039; P<.000		X <sup>2</sup> =45.741; P<.001		X <sup>2</sup> =83.924; P<.000*	
	X <sup>2</sup> (Male*Female) =8.274; P<.142					

Response	Total	
	f	%
Grant is not enough	32	32.00
No facility for staffs	47	47.00
Distance factors	6	6.00
Safety factors	9	9.00
other	6	6.00
Total	100	100.0%
	X <sup>2</sup> =32.899; P<.000	

Sr. No.	Facility	PHCs ( percentage available ) out of studied PHCs)
1	Own building	32%
2	With Labour Room	62%
3	With Operation theatre	59%
4	With 4-6 Beds	62%
5	With 24 Hrs. Delivery Facility	74%
6	Without Electric Supply	2.7%
7	With Telephone	55.9%
8	With Toilet	73%
9	Generator Functional	51.9%
10	Vehicle Functional	64.6%
12	Gynaec OPD	41.2%
14	Linkage with Dist Blood Bank	16.3%

	Service	PHCs
1	Multipurpose Worker/ANMs (Female)	76 %
3	Doctor s	45%
4	General duty doctor s(Male)	78%
5	General duty doctors (Female)	61%
6	Staff Nurse s	82%
7	Laboratory Assistant	65%
8	Obstetrician & Gynaecologist	34%
9	Paediatricians	22%
10	RTI/SSTI Specialist	62%
12	Anaesthesiologist	55%
13	Radiographers	54%

**Discussion:**

This study revealed a number of critical problems: doctors are not available 45 percent of the time at PHCs. There is a high vacancy rate for medical personnel, especially for nurses (43 per cent), pharmacists (52 per cent), and lab technicians (23 per cent) Patients must purchase drugs from outside of the PHCs 20 per cent of the time even though they are entitled to get free medicines; stock-outs of drugs last up to 14 weeks; it is found that patients are prescribed drugs in quantities below the stand-

ard prescription size. The flow of funds for the purchase of drugs is circuitous. There are delays in the receipt of funds for drugs by the district government and in the procurement and delivery of drugs to PHCs and PHCs do not conduct proper accounting.

In this study, an attempt has been made to examine the perception of tribal beneficiaries about the quality of healthcare in their respective PHCs. This study has found that 26 percent of tribal people are prefer to visit nearby private health centers because of the non-availability of regular staff, equipment, medicine and diagnostic facilities at PHCs. Four percent of tribal population use indigenous medicines for their health issues in addition to modern medicine. It is also found that factors like rude behaviour of the staff, distance factors, transport problems, long waiting time, and the non availability of lady physicians are some of the other reasons why tribal beneficiaries do not show interest in visiting PHCs. These findings are corroborated with another study conducted in Karnataka on PHCs which concluded that the non availability of adequate man power, finance and equipment were some of the prime reasons why tribals have negative perceptions about the PHCs.<sup>4</sup>

On the other hand, a majority of the staff of PHCs have expressed their problems as including lack of proper accommodation, lack of amenities in PHCs , poor quality buildings , transport problem, an inadequate supply of both medicines and equipment, and bureaucratic practice in transferring physicians and p.m staff. Regarding the process of medical care, the frequent transfer of doctors and health staff, lack of their dedication, indifferent attitude towards people, lethargy, doctors lack of interest in going to tribal areas, and insufficient or untimely supply of medicine are observable in tribal PHCs. Regarding the outcome of service in tribal areas of Karnataka, there is lack of aftercare services, lack of attention towards prevention of diseases before their actual attack, and lack of follow up methods.

Selecting a PHC to seek health care and treatment depends upon several criteria. Most often, there are several reasons why the beneficiary families do not visit the Primary Health Centres in their jurisdictions. The common causes for the low level of the choice of PHCs for health care treatment are the lack of knowledge among the beneficiary families about PHCs, lack of funds at PHCs to provide efficient service, and the repeated absence of doctors at the centers. When all these factors come together, people prefer to go to private hospitals instead of PHCs. In this study, it was discovered that policymakers, PHC users, communities, and even NGOs are not fully aware of the various problems. Both communities and NGOs lack access to relevant information on health services, and they are not involved in monitoring service providers. Furthermore, local government bodies responsible for health services are not accountable to communities.

Choosing a PHC to seek health care and treatment depends upon several criteria among tribes. Most often, why the beneficiary families do not visit the primary Health Centers coming under their jurisdiction have several reasons. The common causes for the low level of the choice of PHCs for health care treatment are the lack of knowledge among the beneficiary families at PHCs, lack of funds at PHCs to provide efficient service, and the repeated absence of doctors at the centers. When all these factors com together, people prefer to go to private hospitals instead of PHCs.

The functioning of PHCs in tribal areas as well as urban areas is not free from impediments. Several impediments on the path of functioning of PHCs such as illiteracy of the people, lack of response from beneficiaries, lack of fund from the government, lack of staff at PHCs and lack of interest on the part of people occupying authority positions was observed at the time of fieldwork. The overall performance of PHCs is greatly affected by

these impediments. They also affect the attitude of the people towards accepting the services of PHCs. However, all PHCs are not having the same degree of these impediments. Therefore, it is essential to identify the specific impediments confronted by each PHC in Urban areas.

**Suggestive Conclusions:**

The first step is to provide adequate facilities and equipment for the existing PHCs (land, building, equipment, and supplies) previously set up by the government. Every PHC should consist of a preliminary screening room with a computer, an examination room for the doctor, a laboratory for medical tests and supplies, and toilets. A majority PHCs lack even such a basic element of infrastructure as electricity. The government should consider providing either solar panels or diesel generators (depending on a cost-benefit analysis) connected to batteries for uninterrupted electric power for computers. Additionally, each PHC should have a full time staff consisting of a lady doctor, a paramedic to perform initial screening test, a trained nurse or physicians' assistant, and a laboratory technician.

The State should provide every PHCs a computer and all required lab equipments. Patients visiting PHCs should also be provided health education by the staff through posters and through audiovisual demonstrations. Staff should try hard to create awareness about family planning and communicable diseases amongst the tribes. Community programmes in collaborations with Non-Governmental Agencies (NGOs) and social workers will complement these activities. As a final step, we advise increasing the diagnostic capability of PHCs through video consultations wherein the patient (through the PHC) will access a physician (and even a specialist) via a two-way video camera and monitor, if possible with the help of NGOs.

**Acknowledgements:**

Author is grateful to ICMR, Prof. Annapurna M, Mr. Venu gopal P N, M Dinesh P T, and Mr. Muddu raju for their logistic support.

**References:**

1. Aldana JM, Piechulek H, al-Sabir A. Client satisfaction and quality of health care in rural Bangladesh. *Bull World Health Organ* 2001;79:512-517 (s) Available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2566452/pdf/11436472.pdf>
2. Jones P, Hillier D, Comfort D. Primary health care centers in the UK: putting policy into practice. *Property Management*. 2009;27( 2):109-118
3. Mavalankar D. Primary Health Care under Panchayati Raj: Perceptions of Officials from Gujarat. *Asian Journal of Development Matters*.2009;4(3):23-28
4. Srinivasa RG. An analysis of primary health care administration in Karnataka. *Punjab University Journal*. 2001;12(6):24-28
5. Raghvan K. An analysis of primary health care administration in Pune district. *World Health Journal*. 2001;6(2):23-26