A Study of Health Status and Health Service System of Madurai District in Tamil Nadu

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Abstract

The purpose of this study was to understand the health system and health service system at the district level through an assessment of the health status of the people in Madurai district of Tamil Nadu. This study takes a systems approach to analyze the health status of the people through an in-depth understanding of the health service system and its interaction with the socio economic and political institutions of the district. It focuses on both supply side and demand side factors that determines the functioning of the health system and health service system, besides, analyzing the interaction between supply side and demand side factors to understand both provider's perspective and community's/user's perspective. The findings suggests that the health status of the people of Madurai was far from satisfactory due to inadequate services offered by public health institutions, shortage of drugs and improper behavior displayed by the staff of these institutions. Furthermore, it was observed that wide gaps existed between Indian Public Health Standards (IPHS) laid down by the Government of India and their final outcomes at the ground level in terms of infrastructure, human resources, services delivered and bed availability.

Key words*: health status, health system, health service system, IPHS standards, Madurai district.*

AN OVERVIEW OF MADURAI

INTRODUCTION

Madurai district is located in the southern Indian state of Tamil Nadu. Madurai is the second largest city in Tamil Nadu and the 31st largest urban agglomeration in India. Madurai district comprises of thirteen talukas and revenue blocks, with the same name and the same boundaries. Under the gram panchayat system the district rural administration done by the panchayat villages and the taluka head quarters. The revenue blocks are further sub divided by

firkas. Madurai is a popularly called Thoonga nagaram meaning the city never sleeps, on account of the active night life. The city is recognized as the various names like 'koodal', 'Malligai nagar', etc. The word Madurai is derived from madhura [sweetness] arising out of the divine nectar showered on the city by the Hindu god Shiva. Another theory is that Madurai is derivative of the word Marutham, which refers to the type of Sangam age. Meenakshi Amman temple which acted as the geographic and ritual center of the ancient city of Madurai. The Madurai city also attracts a large number of tourists from within the country and abroad. The city also very famous for its Thirumalai nayakar palace, Gandhi museum, Eco park etc.

RESEARCH CONCERN

The purpose of this study was to understand the health system & health service system at the district level through an assessment of the health status of the people in Madurai district. The study takes a systems approach to analyze the health status of the people through an in-depth understanding of the health service system and its interaction with socio economic & political institutions of the district. This includes understanding district level organization of health system, its structure, function & place in each level within the larger program of development activity. Apart from that it will also analyze the nature of services provided by district health institutions at each level (district hospital, sub district hospital, PHC, SHC) with specific focus on the constraints & issues in health service delivery, social composition of human resources involved in health service delivery and the power dynamics associated with it. Attempts have also been made to examine the health status of the community/villages (reported morbidity burden) which the district health system caters to and its association with socio economic determinants, people's perception about health and their experiences & issues related to accessing & utilizing existing health system & health care services. This study also documents the nature of services provided by informal private practitioners who caters to the health needs of the community, their relationship with the community they serve, & interactions between the community and health institutions/health care providers.

OBJECTIVES:

- To understand the structure of district level health services system.
- To evaluate the infrastructure of district hospital, Sub district hospital, primary health centre and Sub health centre and the health services delivered by these institutions against IPHS standards & to analyze its implications on health services and people's health.

- To assess the reported morbidity burden and health seeking behaviour of the community by understanding people's perception about illness and the challenges they face in utilizing health care services.

DATA AND METHODOLOGY

For an in-depth understanding of district health service system, primary data was collected through direct Interview and focused group discussions with key informants at the district health office. Providers, specialists, and health workers at the grassroots level, users of health services at different levels of care, informal health providers in the community, community heads in the villages and representatives of nongovernmental organizations were recruited as participants for the interviews and focused group discussions. Non participant observation was also employed with an objective to gain insights into the quality of infrastructure and services delivered through physical verification of health institutions at each level.

Secondary data was obtained by reviewing documents of Indian public health standards (IPHS) revised guidelines 2012 published by directorate general of health services, ministry of health & family welfare, Government of India, for district hospital, sub district hospital and primary health centre in order to make a comparative analysis of health institutions against IPHS standards.

Madurai district of Tamil Nadu was selected as the study area. District level health administrators and health care personnel of district hospital, Sub district hospital, PHC, and SHC were chosen as the participants of this study. Key community members & households at the village level within the district, & informal private health care providers in the villages were interviewed. For community level study two villages namely kallandiri & keelakallandiri were visited. Data was also collected from Dai, Muslim religious healer, folk healer, etc, for assessing the health seeking behaviour of the community. Institutions such as the district health office, family welfare office, district hospital, Sub district hospital, PHCs and SHCs located in the villages covered under community level study were also visited for data collection.

The present study takes a systems approach in understanding the health status of Madurai district. It employs both quantitative and qualitative methods to assess district level organization of health system & community level health status. There are two levels of analysis in this study:

1) District Health Service Administration & Health Institutions at each level, district hospital/Sub district hospital/PHC/SHC (Infrastructure, health services & issues in delivery of health services).

2) Village level study, (social characteristics of the village, health status and reported morbidity burden, health seeking behaviour; problems in access to health care services at village level and informal health care providers).

In short, this study focuses on both supply side & demand side factors that determines the functioning of the health system & health service system, besides, analyzing the interaction between supply side and demand side factors to understand both provider's perspective & community's/user's perspective.

HEALTH SERVICES SYSTEM OF MADURAI DISTRICT

Directorate of Medical and Rural health services and Family Welfare Services:

The Government of Tamil Nadu provides curative health and medical services to the people of the state, especially the poor to get a benefit through the government health institutions. The Directorate of Medical and Rural Health Services (DMRHS & FW) administers and controls the functioning of 135 Nursing homes, 8 Government hospitals, 51 Primary Health Centre, 4 Voluntary Health Agencies. The Directorate is responsible for the planning and implementation of various schemes for the development of these secondary level hospitals.

Monitoring and Supervision:

The Joint Directors of Medical Services functioning at the district level under the Directorate of Medical and Rural Health Services coordinate and implement various programmes such as rural health services for the provision of health care to the poor people. In DMRHS&FW office, more that 50% of clerical staff position were vacant (as per the raw data from DMHS office.)

Location:

It was located within the area of Madurai city at Vishwanathapuram. It had 4 rooms. One was for Family Welfare office, (FWO) by the Deputy directorate of family medical officer, which was shared by Data Entry Operator with computer, Stastistical Assistant, Mass officer, Block Health statistician etc. Another room was Deputy Directorate Medical Officer (DDMO) with one computer systems. Third big hall was for deputed Administrative officer along with

office superident, steno typist, the one who maintains all the records and reports. Fourth room was a conference room cum store room.

Deputy directorate of medical services office attendance book reveals that out of fourteen Block health Statistician sanctioned posts but only 5 were in permanent basis remaining post are vaccant. When I interviewed with 30 yrs Experience of Block Health Statistician [BHS] He says that I am the person only expert and much experience in stastistics remaining members are newly joined and doesn't know anything because of this issue I am getting too much of work load for analysing the data for Madurai district. Mass officer was 13 but 2 were in position .DPHN post also Vacant for the area of family welfare office.

DISTRICT HOSPITAL

Selected health care facilities hospital at all levels	
District hospital Subdistrict hopital PHC SHC	Usilampatti Thirumangalam kallandiri keelakandiri
Fig.1 Selected health care centers	

Objectives of district hospital under IPHS standard:

The District hospital was- visited to get the exposure of health structure at district level and the secondary referral level resposible of district for district hospital. The Indian public health standards lay down the bench marks for these district hospitals.

The IPHS set the objectives for the district hospital to provide specialist services to the urban and rural population to achieve and maintain the standard of quality of care to provide

wide ranging technical and administrative support and education and training for primary health centre.

Usilampatti District Hospital Conditions as against the IPHS Standard for District hospital:

Health service system and assessment with IPHS standards of district hospital:

District hospital is classified as a Grade 4th, hospital with 150 beds capacity. It is also secondary level care in Madurai district. District hospital is a secondary level referral unit for PHC/SHC to provide comprehensive secondary level of care which includes specialist and referral services. It caters to a defined population living in the urban areas in the district. The referral unit for district hospital is state medical colleges research centre i.e. Government Rajaji hospital include 1574 bedded hospital which provides tertiary care services for more than 20 million people per year. GRH also provides wide range of technical and administrative training and support to PHC/SHC and peripheral worker

Physical infrastructure:

Location:

Location of the district hospital is outer from main city 22 km, just near to the bus stand with parking space. The health facilities were located in easily accessible area. The area chosen had facilities for electricity [with generator] adequate water supply and telephone. The district hospital infrastructure has received funds from charitable institutions. The separate maternal and child health care building was under construction is funded by World Bank. The hospital premises and patients were disturbed by noise because of building constructions. There is no proper infrastructure building for isolation ward and neonatal emergency unit.

Area:

Health facilities at district hospital were not well ventilated with adequate space and equipments but in sub district hospital were well ventilated with less equipment. There was proper area for registration at district hospital.

Waiting area:

This district hospital does not have adequate space and seating arrangements for waiting patients, most of the patients were sitting on the floors and also waiting area has no fans, benches and chairs. Booklets/ leaflets were provided in the waiting area in district hospital

Outpatient department:

The District hospital and sub district have 4 operation theatre by the numbers of 2/2 most focusing cases are maternity cases, gynaec cases, ortho, general cases etc. OPD has have facilities registration through HMIS system. There were separate cubicles for labour room, x ray room, laboratory room, drug distribution and registration room.

Inpatient department:

There was separate ward for male and female. In case of emergency ward patients are entering inside the ward without any restrictions. The toilets were separately available for the male and female but were not clean due to lack of sanitary workers

Table.1 showing Number of IPD/OPD Patients Treated in District Hospital

Sl. No.	Details	Adult		Children		Total		
		F	M	F	M	F	M	Total
1	No. of Out Patients Treated including ISM	15289	15602	2429	2869	17718	18471	36189
2	Average Out Patients per day (Col.01/No. of days in the month	510	520	81	96	591	616	1206
3	No. of In patients treated (Actual No. of Admissions)	429	138	133	113	562	251	813
4	In patients Days (Daily in Patients Census added for one month)	1916	623	367	275	2283	898	3181
5	Average In Patients per day (Col.04 / No. of days in the Month)	64	21	12	9	76	30	106
6	No. of In Patients on Hospital Diet	1504	533	78	51	1582	584	2166

Source: District Medical Office

Labour room:

Labour room at the district hospital has 5 labour tables along with new born care corner. The deliveries at all health facility levels are handled by staff nurses. The gynecologist only comes in complicated deliveries such as LSCS and forceps delivery. The per day delivery load is 20-30 with 50-60 caesarean section monthly and 300-400 deliveries per /month. 30% of women coming for delivery are anemic and at the time of delivery they required blood. Blood bank of this hospital was functionning properly, still now they have transfused blood 84 cases. There was a separate ward of NICU [CEMONC] with 15 warmers along with ventilator facilities. IMR of the areas is 1% and MMR 4% deaths per 400 deliveries. There were no hygiene and privacy maintain at labour room at all levels to prevent infection.

Services Delivery:

The essential services which district hospital provided include OPD, indoor and emergency services. General medicine, general surgery, obstetrics & gynecology services, family planning services, pediatrics', immunization, emergency (accident & other emergency), critical care/intensive care (ICU), anesthesia, ophthalmology, orthopedics', pharmacist, dental care, integrated counseling and testing centre, STI clinic, laboratory services, blood bank. X ray, sonography, ECG, endoscopy, physiotherapy, psychiatry, otorhinolaryngology (ENT) and including geriatric services were provided at the district hospital. Security personnel were recruited by private crystal agency at the district hospitals. There are three blood banks at district hospital usilampatti and other nearby blood bank is at Madurai GRH. They request blood from private sector in case of non availability of blood from meenakshi mission hospital runs by the charitable trust.

HUMAN RESOURCES:

All the levels of health institutions are facing acute shortage of staff. The doctors sanctioned for the district hospital were 35 but only 32 doctors were in place managing the whole district hospital, a shortfall of the 3 doctors. Among these 35 sanctioned doctors half of

them are belongs to PG Madurai medical college student. It shows that Tamil Nadu government has lack of manpower for recruiting the experienced skill doctors; still they were managing district hospital with post graduate medical students.

The main reason for such large number of vacant positions is low incentive to doctors & staff. Doctors at all health facility level complain of stagnant salary below the expectation of doctors when compared to private medical sectors. There is no career trajectory in government health sector as compared to other public, semi public & private sectors. There is a cadre based service system with strong hierarchy levels which have huge implication for decisions making as at the lowers level doctors, nurses and ANM, has no authority in managing the delivery of health services. A lot of doctors currently employed at health facility level are new doctors with less than five years of service came to work in rural area with aspiration to get selection in post graduation. These doctors after the one year of experience at health facility level leave the job and go for post graduation. Almost 90% of the doctors working in the district are from south India. In Madurai district as a result after initial six month of posting they deploy themselves to their native place through political connection. This is same for the periphery level health workers also. Political connection of doctors and health workers make such deployments easy. Political connection of doctors and health workers also hinder monitoring of health services. Very few experienced and dedicated doctors are from Madurai district & working for more than 25 years. It is because of dedication of such doctors in spite of low salary and no career growth the health service delivery system is still working. Even the new doctors pass out from public medical colleges want to work in private sector due to profitable career path. This lead to wastage of doctors produced in the country.

Doctors complain that bureaucratic system of running a health system will lead to collapse of public health system in next five years. Technical people are the need of hour for making the public health system functional. Shortage of the staff has huge implication for the public health work & for the management of the health facilities level at all levels. One doctor at a health facility level mainly a specialist or an medical officer is burden with responsibility of administrative work of managing the whole health facility functions leaving little scope for outreach services or health education. Other doctors at the health facility level are also burden with additional responsibility of managing two or three departments. This has implication in terms of efficient delivery of services and patient satisfaction. In case of absence of doctors one doctor has to cater many of the patients. The doctor per patient's time gets reduced and

there are always long queues of the patients waiting for long period to get treated. This leads to dissatisfaction of the patients as many of the times patients who come to health facility travelled a long distance and are agriculture labour & wage labours they don't have the option to leave jobs for long period as it cuts their wages. As a result long period of waiting time at public health institutions force them to either ignore treatment for minor illness (self treatment) or go for private providers and only in serious chronic illness they come to district hospital or PHC level. The shortage and absence of doctors at these levels has serious implications as RGH [Madurai medical college hospital] & Sub district hospital is referral unit. The shortage of doctors & other hospital staff at this tertiary & secondary level care unit is serious issue in the light of non functioning SHC as many of the patients directly come to RGH [Madurai medical college hospital] and PHC for treatment. (Table 2 below shows district hospital, health personnel in position, sanctioned and vacant)

Table. 2 Shows Total Number of Health Personnel in Position District Hospital

Sl. No.	Name of the Category	Sanctioned	In Position	Vacant
1	Chief Civil Surgeons Specialists	10	9	1
2	Senior Civil Surgeons Specialists	9	9	
3	Senior Civil Surgeon Dental	1	0	1
4	Asst. Surgeon+Senior Asst. Surgeons+Civil	14	13	1
5	Asst. Surgeon (Dental)	0	0	0
6	Nursing Superintendents Gr. I + Gr. III	1+2	0+2	1+0
7	Staff Nurses	34 +2	34 + 0	0+2
8	ANMs+Maternity Asst.	0+1	1	
9	M.S.O.+Chief Pharmacists + Pharmacists	1+1+7	1+1+7	
10	Chief X-Ray Technician + Radiographers	1+2	1+2	
11	Dark Room Assistants + X-Ray Attendants	1+2	1+1	0+1
12	Laboratory Technicians Gr I + Gr II	1+3	1+2	0+1
13	Drivers	5	3	2
14	ECG Technicians	0	0	0
15	Plaster Technicians	1	0	1

16	MNAs+FNAs	1+ 0	1+0	
17	Hospital Workers	8	7	1
18	Sanitory Workers	8	0	8
19	Cook	1	0	1
20	Refractionist + Physiotherapist	1+1	1+1	0
21	Health visitor	-	-	-

Source: District health office Madurai

Problems and Implications:

One of the important drawbacks of the whole health administration structure of Madurai district is that there is no link between the primary, secondary units & tertiary level. The district has a separate district hospital for urban & nearby rural population under the administration of the joint director. 51 Primary Health Centers (PHC), 314 Sub centre's & 1057 ANM at the village level are a separate structure with referral system. PHC & Sub centre's function under the deputy director of medical services and zilla parishad. The health care delivery system in Madurai has no referral links among the three levels primary, secondary & tertiary as a consequence of such a structure there are implications on implementation of national health programs & health services delivery at health facilities where there is no support from the district level. The district hospital is a unit with specialized services & referral link to higher level medical colleges at state levels without a proper referral mechanism at PHC/SHC patients are directly referred to state hospital at RGH or private hospital adding to out of pocket expenditure of patients family. Family & patients do not wish to be referred to higher health facility level away from their home as it affects their livelihood activities & they have to expend indirect cost on food & shelter. Such arrangements of health service system lack a comprehensive integrated approach where primary, secondary & tertiary at each level are required to provide certain minimum services & a strong referral system to higher health facility level for specialized services. Lack of referral system increases the patient loads at the district & state level hospitals.

There is no state policy for recruitment of the staff. As a consequence the demand for more staff by the health administration at district level is never met even though the state

government is aware about it. There is shortage of staff even at the administrative level. One officer at the district administrative level manages two to three programs influencing the effective implementation of national health programs leaving little scope for field visits to understand the ground realities. There is no proper government building to run for the district deputy director of health service office & family welfare office in Madurai district. Shortage of staff has also implications for monitoring of health facilities & health workers. For recruitment the district higher a job consultancy but very few applications come in vacant posts. There are only two Gynecologists in the district hospital of Usilampatti. As a result it is very unlikely that complicated cases of pregnancy delivery referred to PHC or RGH hospital is attended at all times. Shortage of gynecologist in the district hospital has serious implications for health of the pregnant women's. Large majority pregnant women usually go for deliver either at PHC or at private hospital due to lack of gynecologists and fear of complications & death across. There is also lack of proper transport with public transport not working properly.

Family planning targets in the district are not achievable as there is low preference for temporary methods among the community and there are many doctors in whole district are equipped with skills for conducting sterilization operations. For the family planning program in the district CAMP approach is used which is not appropriate as the women get married at the age by 19- 21 years of age the family has adequate number of children and go for sterilization so women in a very early reproductive age are getting sterilized. Also the onus of sterilization is on the women not men under the family planning program. For medical termination of pregnancy (MTP) at PHC the gynecologists is delivering the services but no record keeping as lot of paper work is involved. Indirectly gynecologist is directing women seeking MTP to private practice which has implication for unsafe abortion and irrational charges for abortion.

The district also has 9 senior civil surgeon, 14 assistant surgeon posted at usilampatti district hospital, but the equipments were not in working condition most of the critical or accidental cases are usually referred to RGH. The attitude of the doctor towards patient was not appropriate. For them patient was not the first priority. A clear hierarchy of power relationship exist where the doctor leave the patients unattended at any time during the OPD hours & not giving any opportunity to patients for explanation of disease symptoms or receiving any information beyond what the doctor say to patients. A lot of patients even in the inpatient wards seeking urgent help were not attended by the staff nurse or doctor.

One of the problems which the periphery workers face is lot of paper work. Different service delivery registers for different programs with too many columns which the health workers have to enter for record keeping column. Such record keeping for monitoring purpose adds to burden of health workers and takes away the essential time which could be given for health education & service delivery. It also frustrate health workers many of the times leading to entering wrong information.

The provision of alternate system of medicine apart from allopathic is not adequately provided at all health facility levels. There was no health facility where there was fully functional AYUSH OPD where patients were seeking treatment. The system still needs to be strengthening for population as community strongly believe in siddha medicine traditional system of healing specially for chronic illness. 300 + 175 ISM Clinic established in PHCs (479 already established Siddha units) bringing the total of ISM clinics in PHCs to 954 of which 50 will have naturopathy and yoga established in already functioning Siddha units. The perception for AYUSH integration with allopathic is indifferent among doctors & administration at district level. They don't believe in the capacity of AYUSH doctor to provide for treatment

A majority of non medical services are outsourced at all the health levels such as cleaning & laundry. The class IV workers are contractual at the district hospital level. There class IV employees get with very minimum salary (1400 Rs) & no other incentives. Such contractual workers are not provided gloves & other safety measures to prevent from infections. They are required to perform services outside their job responsibilities. Such outsourcing of services & contractual nature of staff could be seen in the light of health sector reforms where non medical services were contracted out or outsourced to reduce cost & increase profitability of market by making opportunity for profit generation within public health sector. The contractual nature of jobs under NRHM further adds to problems as there is a growing demand by contractual staff for permanent position. They are frequently going for strikes severely influencing the health services delivery where there is already a human resource shortage. NRHM policy of disbursement of funds to each level & increase in incentives of health workers has improved the financial power of health facilities. But at the same time it has increase the documentation work for monitoring. Increase documentation with paucity of staff further delay the health services delivery. There are only 20 accounts in the whole district for management of account records.

For provision of food under JSY & JSSY scheme the health facilities currently outsource from ICDS- SHG centres. Such system will soon be transformed to complete outsourcing of food from SHGs to improve quality. Under the RCH 2 there is provision of providing training to doctors for are specialist services such as anesthetic, family planning operation etc. But the quality of such trainings is questioned as doctors at health facility level reported that they have low competence to deliver such services and hire other personnel from outside.

The lab & radiology department require more lab assistance and new machines for specialized test such as diabetes, cholesterol, sonography, cancer treatment etc. The demand for such equipments & test kits are not fulfilled despite the fact of repetitive request by health personnel to state level. Patients in demand of such services are referred to Madurai city which frustrated the patients as they desire services to be delivered at PHC only. This shows the apathy of the state with huge pooling of resources to health sector under NRHM not been able to meet the basic demands for efficiently delivering the services forcing patient to seek services from outside. Doctor was also prescribing high antibiotic dosages to patients for minor illness under the free medicine scheme of TNMRB.

The state of Tamilnadu has a scheme of free medicine. Under the scheme people get free generic not branded medicine. Free medicine scheme strengthen the demand side as it greatly reduce the out of pocket expenditure of patients major part of which is spend on purchase of medicines. There is a drug store centre establish at the district hospital level from where the generic drugs are supplied to whole district health institutions. But there are problems with such schemes. Health administration & doctors at district level and PHC have reported many problems with the implementation of this scheme. The major problems is not availability but of inventory management of medicine. Medicines are supplied to health institutions at all levels according to drug list made for each health institutions. But such lists are not exhaustive enough and don't give any flexibility to doctors to prescribe medicines outside the drug list of different compositions. Supply of medicines is not always according to the disease loads.

This result in many times shortage of medicines for a particular disease when a patient load increase for that particular disease. For example if five to seven patients of snake bite come to health institutions in a month and availability of venom antidote per month is three only than there is shortage of drugs. Drug list is made so that there is no wastage of drugs but operational implementations of schemes do not look at field realties. Shortage of drugs often forces patient & their families to purchase medicines from private pharmacies diluting the whole objective of such free medicine schemes leaving an impression among people that such scheme does not work. People coming to health institutions reported of purchasing drugs from outside.

There is also strong resistant from doctors and private providers to free medicine schemes as this scheme curtail their profit making from branded medicines. Free medicines schemes are conceptualized on the idea of free and quality health care to all classes irrespective of purchasing power. It shows epistemic community ideas of right to free health care among groups of health activist. But such ideas face a strong resistance from doctors; drug industry and government for their vested interest which pose a threat to future of generic medicine scheme. Even though free medicine scheme profit the government and retheir medicine budget as they have to purchase the medicine at lower generic cost (not branded) from the drug companies.

SUB DISTRICT HOSPITAL: [Thirumangalam]

Objectives of Indian Public Health Standards (IPHS) for Sub-district Hospital

Sub District hospital is a Grade 4th 145 beds capacity. It is also secondary level care in Madurai district. Sub District hospital is a tertiary referral unit for PHC/SHC to provide comprehensive tertiary level of care which includes specialist and referral services. It caters to a defined population living in the urban areas in the district. The referral unit for Sub district hospital is state medical colleges research centre ie Government Rajaji hospital include 1574 bedded hospital which providing tertiary care services for more than 20 million people per year. GRH also providing wide range of technical and administrative training and support to PHC/SHC and peripheral workers.

Area:

There was proper area for registration at district hospital. In sub district hospital were well ventilated with less equipment. In sub divisional/ sub district hospital area with more space but not arranged in well set up manner.

Waiting area:

The waiting area of sub district hospital was more spacious with seating arrangements and even having the facilities of community kitchen it provides facilities to the patient to prepare by own with the help of attenders. They have to pay Rs 10 per/ hour. Patients and attenders were satisfied with this system.

Residential accommodation

In case of sub district hospital there were quarters for doctors , but in PHC they were quarters for doctors, nurses, pharmacist including 4th class workers

Service delivers:

The essential services which the sub district hospitals deliver are surgery, medicine, obstetrics and gynecology, pediatrics', dental, laboratory services (with blood storage facility). No eye specialist services, emergency cases in surgery such as accidents or surgery are referred to Madurai GRH hospital and Aravind eye hospital District hospital provides family planning services with IEC for family planning could be seen with in the campus. Among the national programs district hospital major focus was on RNTCP with 21 TB units in district, one TB unit in PHC, thirty four designated microscopy centre's and the incidence of TB patients approximately death-5%, failure-2.5%, default 7% and the registered cases from 15/6/2011 to till date is 7972 cases under 13 districts of Tamilnadu

Introduction:

PHC covers the population of 30,000 in plain area, and 20,000 in hill area. It act as referral unit for 6 SHC.The PHC constituting tertiary level of health care was designed to provide essential maternal and child health services and family planning services to the rural population coming to the primary health centre.

Objectives of PHC under IPHS standard:

The IPHS set the objectives for the PHC to provide maternal and child health services and family planning services including proper referral services

IPH'S standard for primary health centre in comparison to the [kallandiri] at community level:

Primary health centre:

PHC is a referral unit for 6 SHC to provide maternal and child health services and family planning services including proper referral services. It caters to a defined population living in the rural areas in Madurai district. The referral unit for PHC is state medical college research centre [GRH]. It is a type B PHC attached with 30 bedded.

Physical infrastructure:

Location:

Location of the primary health centre is outer from main city 13 km; it is also located in the main road, just near to the bus stop with transport facility and adequate parking space. The health facilities were located in easily accessible area for community people.

Area:

Health facilities of PHC were well ventilated with adequate space. There is proper infrastructure for service and administration building with well set up manner.

Other Amenities:

There was adequate pipe water supply at kallandiri PHC. There was a three phase electricity connection at the PHC. Laptop provided to the PHC staff members to maintain computerized data base monitoring and maintained since 2000 which is updated every month.

Service delivers:

The IPHS guidelines recommendations are availability of General, Medicine, Surgery, Obstetrics & Gynecology, Pediatrics, Dental and AYUSH services. Eye Specialist services (at one for every 5 CHCs), Emergency Services Laboratory Services National Health Programmes. Every CHC has to provide the some essential services like care of routine and emergency cases

related to surgery and medicine, maternal health and newborn child heathcare. Some of the services include both Essential and Desirable services like family planning, national health programmes and non communicable diseases. All States/UTs must ensure the availability of all Essential services and aspire to achieve desirable services which are the ideal that should be available. These are all services available in kallandiri PHC, The range of services available to this PHCs and the availability of resources at the PHC level are more than the recommendations of IPHS

24 Hours Delivery care services:

Kallandiri PHCs were functioning 24 hours for deliveries. These PHCs are well equipped with modern facilities. The PHC's are getting funds only from Tamil Nadu Health system project for building and equipments. The maintenance of PHCs is found good.The PHC also provide maternal health services with three early registrations, antenatal checkups (ANC) & associated services. There are twenty four hour delivery services including normal and Caesarean-section deliveries with minimum 48 hours of stay after delivery. Janani Suraksha Yojana (JSY) is also provided to pregnant women. For family planning sterilization PHC adopts a mini laparoscopy method. One of the striking things is that no consent prior to temporary or permanent method of family planning is taken. This indicates that women could be forced to go for sterilization or temporary method of family planning to achieve the targets (coercion method). Many of the time insertion of IUCD immediately after the delivery to women lead to high expulsion rate & complications. This could be seen in low demand for temporary method by women as compared to permanent method of family planning. National programmed for prevention and control of cancer, diabetes, cardiovascular diseases and stroke (NCD) is focus of the PHC as lab & X-ray unit does have adequate facilities for conducting test for diabetes, tuberculin test etc & cardiac disease and there is no specialist doctor for such services. The PHCs also provide all the essential services. PHC kallandiri has lab facility and vaccines were stored in ILR and lab has long Tables to monitor temperature of freezers. MTP facility, HIV test facility for pregnant women, emergency services & AYUSH services are provided at the PHC. PHC has a designated microscopy centre for tuberculin test

Adolescent and reproductive health information & counseling is focused under RCH program services Implemented through 14 Medical colleges by establishing Teen Clinics, Third year MBBS students and Nursing students are trained in Adolescent health. Linkage with the improved School Health Programmed Biannual deworming and weekly

supplementation of Iron tablets on every Thursday to school and non school going girls. State Government has does free distribution of sanitary napkins to rural adolescent girls. This scheme which has been launched on 27th March 2012 and benefit over 41 lakh adolescent girls in the 10-19 age group in rural areas covering all the districts of the state."When I intervene with middle school children at Kallandiri, they said that teachers are colleting money from the student ie per napkin Rs. 1

Oral health is given priority to the school children in PHC. Dental Clinics established in 148 PHCs is expanded to all institutions having more than 30 beds PHCs with 60 more units this year. PHC has a dentist and there was a separate cubicle for dentist with a dental chair or even a head mirror. School Dental Camps to identify caries and fill up or remove milk teeth.

Human resources:

In the district there is a PHC with two doctors as per guidelines and very few PHC with one doctors. At the PHC level currently thirty eight personnel are posted less then sanctioned forty six positions leading to a shortfall of sixteen personnel. PHC has employee seven extra staff nurses & one extra accountant as per the PHC records with the BMO at the PHC level. One of the striking things is that posts of public health specialists & public health nurse (PHN) are vacant with no multi rehabilitation/ community based rehabilitation worker or counselor employed at any health level. This shows that public health is not a property of state government only curative care is a main priority.

Monitoring and evaluation:

The overall control of PHC and SHC under the control of deputy director of health services at Madurai district. The Block Medical Officer (BMO) sits at the kallandiri & manages PHC & sub centres under it. For monitoring and supervision at the health facilities monitoring is done through internal mechanism through routine record maintenance & monthly reporting to higher level. The online system under the NRHM is in place form 6 (for sub centre's), form 7 (for PHC) & form 9 (for state level) are provided at each health facility levels where work output of each health facility level is recorded and send to higher level for consolidation, finally a performance report is send to the state level. Apart from this weekly meeting at sub centre & PHC level and sectoral meeting once a month are held at DDHS office at gnanaolipuram & district level for performance tracking & streaming ling of the programs implementation. External monitoring is through Rogi Kalyan Samiti (RKS) Village Health Committee health

administration visits to lower levels, as per the guidelines under NRHM. Although RKS is established at PHC & SHC levels there is no information on their functioning and monitoring by PRI/ Village Health Committee health administration. There was a display board with Rogi Kalyan Samiti members. It was headed by local MLA. On interview with medical officer incharge said that "there were no meeting were conducted under RKS. All the requirements and demands of the hospitals will be discussed with the MLA and they both will take the decisions. Most of the time these political party members were not available in their locality and other members were not bothered about these deliberations". Non functional RKS may be one of the factors for the poor health services in this institute.

The priority given in online monitoring & monthly meeting agenda are mainly on staff performance in terms of target achievements & certain programs such as family planning, maternal & child care, immunization, polio programs etc. The main focus is on the family planning programs from periphery to higher levels with major focus on other communicable vector born disease & non communicable disease. There is also no discussion on the problems in effective delivery of health services by staff at institutional level & periphery level. The major focus is on streamlining the programs implementation.

Problems and implications on health services:

PHC has two ambulances both not working. Even though there is free public transport still they are not functioning well and people particularly pregnant women's come by personal bike & private transport (Rs 200) to health institutions. The district has many big private hospitals only small nursing home or individuals clinics.

Sub centre:

The Sub-Centre is the most peripheral and first contact point between the primary health care system and the community. One Sub Centre is to cover a population of 3000 in Hilly / Tribal / Difficult areas and 5000 in Plain areas. Each Sub-Centre is required to be manned by at least one Auxiliary Nurse Midwife (ANM), and one Male Health Worker. They will carry out all the activities related to various programmes in an integrated manner when visiting the village/ households.

Physical infrastructure:

This SubHealth Centre keelakallandiri is rented and made up of thatched house was not having adequate furniture. People are unaware about the location of SHC but they can able to identify the health care personnel and their role [Auxiliary Nurse Midwife, Anganwadi health worker,and Village health Nurse] with in the village. ANM, AWHW was staying near by the SHC. Skill Birth training was also given to ANMs.

Every Wednesday they organize the immunization facility. Educate mother, family, community on home management of diarrhea and ORS, personal hygiene especially hand washing before feeding the child. Provide care and treatment for Diarrhea, ARI and other common newborn and childhood illnesses. Assistance to MPW(F) for administering all UIP vaccines like OPV, BCG, DPT, TT, Measles, Hepatitis B, etc. to all the beneficiaries including pregnant women and provision of Vitamin A, prophylaxis as per immunization schedule.

Under the family planning scheme they provided the contraceptive for control the pregnancy. They also gave the family planning and health education and they always suggest the people 19 year age for marriages.

Angwadi scheme is most impotent link between poor and good health. In the keelakallandiri village anganwadi center participations in executing this programme. They conduct the pre-schooling activities, Antenatal check up, regular health surveys of all families, provide the nutrition and health education, breastfeeding, to motive the adopted the family planning, provide the newborn care, new babies to 6 yr old baby immunized the polio and other immunization, they also provide the food supplementies pregnant women and 2 to 6 yr old child.

Village Health and Nutrition Day (VHN Day): The VHN day is conducted once a month in keelakaalndiri village. The VHN day is held on Friday at the Aganwadi centres (AWCs) within the panchayat. A clinical session including Ante Natal Care will be conducted in the forenoon by the VHN and IEC activities will be conducted in the afternoon. When I intervene with ICDS beneficiery scheme about to postnatal mother in keelankallandiri village, she belongs to OBC community (moopanar) she told that during home visit by the village health nurse (VHN) she use to threat and collect Rs 500 for every newly antenatal registration mother. It shows that VHN also doing corruption based on status of the beneficiary.VHN threatening the mothers that if you don’t want give money I will never come to your household for routine immunization& providing nurtricious powder on regular basis

Community Health Status & Health Service System

Diseases Prevalent

Major communicable diseases prevalent in the villages are malaria, typhoid, diarrhoea, tuberculosis skin diseases, anaemia, low weight for age both among adults & children (malnourished), frequent fevers and headache are prevalent across all age groups. Accidents such as road accidents, sanke bite & dog bite etc. Among women there are skin disease, body ache, backache, excessive menstrual discharge, anal itching, white discharge, abdominal pain, dizziness, joint pain and heart burning. Male mainly suffer from hypertension, insomnia, body ache, backache and dizziness. Among the children there is high prevalence of worm in stools, pneumonia and common cold and cough. Some time children often eat opium from the fields and become seriously ill. Among the old people major health problems are arthritis, astham, hypertension, urgency, body ache, and insomnia and vision problem.

Health Institutions at Villages Level

All the health institutions are connected by a pucca road from villages and accessible. Keelakallandiri villages have a sub centre & three Anganwadi Centres. Jolar Village also has two one VHN& one AWW. Villages also have a strong dominance of informal private providers. There are traditional providers such as Muslim religious healer & informal private medical practitioners such as Un trained male nurse providing home care to the community people.

Village level is the first treatment method is denial of illness or self medication in the form of herbs or purchase of medicines from local shops particularly for minor illness. After this when the disease become aggravated they seek help of Muslim Religious healer. Ulema are traditional providers mostly male dominated working generations after generation. When the cases become critical Ulema refer the patient to health institutions. There are other informal medical providers such as Quack working in the villages such doctors haven‟t learned medicine in professional colleges. They only know about few medicines mostly antibiotics & technique of giving injections & glucose drips. For villagers this is the second resort for treatment where they get few medicines, glucose drips for any kind of illness & quick relief. Some people have faith in Quack doctor’s capacity to cure others dont have faith as treatment provided by Quack doctor is not effective but still prefer as they are easily accessible. Quack doctor charge RS.150-200 for treatment. When villager’s dont get cure or relief from Quack doctors and disease become more serious they rush to PHC or district hospitals.

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Mostly people directly go to district hospitals as most of the SHC in the district are not working. There is also no preliminary treatment given by the health workers. People dont have faith in the government health facilities as the attitude of the providers is not good towards villagers also there is no efficacy of government drugs for curing. At the district level there are doctors working in public health institutions doing private practice. Such doctors usually refer patients coming to public health institutions to their private clinics or people directly come to their clinics. So a concept of commercialization of health services within the public sectors is

prevalent in the district where patients are refer to private sector for treatment and for diagnostic tests as there lab and x ray facilities in public health institutions such as ultra sonography, diabetes, cholesterol test etc are not provided.

The lady when I interviewed with agricultural labour and earning on daily basis. She replied that Women‟s health problems such as, body ache, backache, excessive menstrual discharge, white discharge, joint pain and burning sensation in throat can be attributed to the excessive work load. Women‟s are triply burden as have to look after the household chores, fetch water, care for children, elderly and work on fields. There work activities are very heavy during the whole day with no time to eat & rest. Such heavy work load affects women‟s health as they are severally anaemic & malnourished and this becomes cause for menstrual & white discharge problems. Heavy work during pregnancy often leads to miscarriage and high risk pregnancies. Such triple burden of work & its implications on women health is because caste and class inequalities and health inequalities are differently experienced by women from different classes. Women in poor class families work outside to augment the household income, look after the household,s domestic responsibilities and child caring and rearing. This triple burden in women,s life started from the early years of childhood where she is required to look after the domestic responsibilities, agricultural or informal work, and sibling care when the mother go outside for work. A caste and class based division of occupation lead to most physical labour and menial activities assigned to lower classes.

Health workers report RTI/STI problems with lack of hygiene but ignore the heavy workload on women & lack of adequate water for cleanliness. There is also a „culture of silence‟ among rural communities where RTI/STI problems are not discussed with anyone in the family not even with husbands. There is denial of illness and considered normal in women reproductive life prefer self treatment. It is only when the disease becomes aggravated then only women seeks treatment. Often women have no knowledge of health institutions where they can access treatment for RTI/STI and are dependent on male members of the household for accessing health institutions.

Programs for combating diseases such as malaria, TB, hypertension, childhood infections and feeding programs etc ignore many facts. There is ignorance of the fact that the district has a high number of people going for seasonal migration. Migration can be a cause for HIV prevalence & STI/RTI diseases among men are prone to get due to job pattern ie lorry driver. There is large number of people anaemic and malnourished. Treatment for such disease will be effected only when the body is adequately nourished. Malnutrition and anaemia are

very common in the villages as the agriculture production is not sufficient to feed the whole family and people work hard and eat only meals a day. The meal is very monotonous with no micronutrients and protein. Epidemiologically three factors under nutrition, infection & poor socio economic condition coexist and make an individual susceptible to diseases. One of the reasons for existence of malnutrition among children's & adults in these areas is the multiple nutrition programs with epidemiological gap in understanding the interrelationship of nutritional deficiency. There are separate program for management of calorie protein deficiency, iron deficiency & vitamin A deficiency for different age group. Vertical approach to combat malnourishment does not look at nutrition deficiency as combination of calorie, protein & micronutrient deficiencies which coexist within a chronically poor Indian population & has a common cause which is lack of food & poor environment making susceptible to infection or infestation

Conclusion:

Health services system of Madurai district is suffering from acute shortage of human resources at all levels still the health system is working. There is apathy of state government towards the issues and problems of the health service system. Such apathy is paving way for the private sector with weak public health institutions. Although there is a much large private sector developed in the urban area as it is an economically improved area with cadres of informal private providers & individual clinics have come up after urbanization of Madurai district. Weak public health system upset the poor people and they become more and more dependent on private sector which becomes another source for exploitation of poor people. Public health institutions need a dedicated cadre of staff and doctors to work in weak health system.

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