

Book - Post

**SOUTHERN REGION PUBLIC HEARING  
ON  
THE RIGHT TO HEALTH CARE**

To

Contact Address:

**Tamil Nadu Science Forum**

245, Avvai Shanmugam Salai, Gopalapuram, Chennai - 600 086.

Phone: 044 - 2811 3630 e-mail : tnsf2@eth.net

**SOUTHERN REGION PUBLIC HEARING  
ON  
THE RIGHT TO HEALTH CARE**

**St. Thomas International Centre For Retreat And Pilgrimage**  
 Hill top, St. Thomas Mount, Chennai - 600 016.  
 Phone: 044 - 22135156 / 22345803.

9.00 am	Registration
10.00 am - 11.00 am	Inaugural Session
11.00 am - 1.30 pm	Two Parallel Session on Denial of Health Care
	Chairs : Justice Sri.Y. Bhaskar rao, Honable Member, NHRC  Smt.S. Jalaja, Joint Sec, NHRC
	Co-Chairs :Dr.B. Ekbal - National Convenor &Joint Convenors,JSA
	Testimonies, case studies and state reports from Tamilnadu, Pondicherry, Kerala, Andhra Pradesh and Karnalaka and responses from the panelists
1.30 pm - 2.15pm	Lunch
2.15pm - 4.30pm	Parallel session <i>cont....</i>
4.30 pm - 5.00 pm	Concluding Plenary
5.00 pm - 6.00 pm	Meet - the - press



**SOUTHERN REGION PUBLIC HEARING  
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at

## Programme

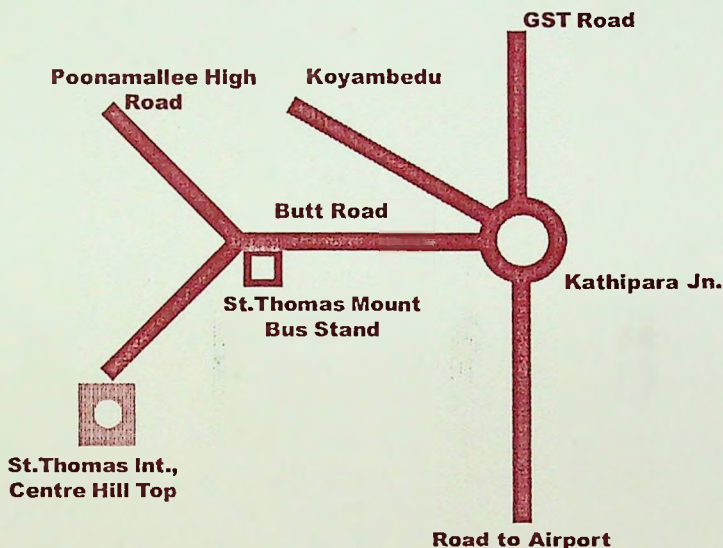
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## Route Map to St. Thomas International Centre



### To reach the Venue:

From Chennai Central railway station :Take a prepaid auto (fare - Rs. 100 approx) and ask for St. Thomas Mount - "HILL TOP"

(or)

Take a city route bus No 54 or 254 and get down at St.thomas Mount bus stop. From the bus stop, either walk up the steps leading to "HILL TOP" or take an auto (auto fare - Rs. 35 approx)

For further Assistance/details contact: TNSF - 044 - 2811 3630



# SOUTH REGION PUBLIC HEARING ON RIGHT TO HEALTH CARE

29-08-04

## REGISTRATION FORM

STATE:

S.NO	NAME & ORGANISATION NAME	CONTACT ADDRESS WITH PH NO & EMAIL ID	SIGNATURE

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# SOUTHERN REGION PUBLIC HEARING ON RIGHT TO HEALTH CARE

**29<sup>TH</sup> AUGUST 2004**

**Jointly organised by**

National Human Rights Commission (NHRC) &  
Jan Swasthya Abhiyan (JSA) [People's Health Movement – India]

**at**

St. Thomas International Center for Retreat and Pilgrimage,  
Hill Top, St. Thomas Mount, Chennai-600016

## PROGRAMME SCHEDULE

INAUGURAL SESSION	
Venue: Justice Tarkunde Hall (Main Hall)	
TIMINGS	SESSION
09.00 - 10.00 a.m.	Registration
10.00 -10.45 a.m.	<ul style="list-style-type: none"> <li>Welcome : Dr. G. K. Pandian, JSA (Tamil Nadu)</li> <li>Introduction : JSA Representative – Dr. B. Ekbal, National Convenor, JSA</li> <li>Inaugural Address : Justice Shri Y. Bhaskar Rao, Member, NHRC.</li> <li>'Kala Jatha' - Book Release by Hon'ble Justice Shri Y. Bhaskar Rao</li> </ul>
10.45 - 10.55 a.m.	Case Presentation on Mental Health – Basic Needs
10.55 - 11.20 a.m.	TEA BREAK

PUBLIC HEARING (PARALLEL SESSION I)			
Venue: Anandi bai Hall (Hall II)			
States: Andhra Pradesh, Karnataka			
TIMINGS	STATE	SESSION	PANELISTS
11.20 a.m - 12.50 p.m.	Karnataka	<ol style="list-style-type: none"> <li>Testimonies of the individual cases of health care denial.</li> <li>State Report on Public Health Services by JSA state representatives</li> <li>Responses from the State Health officials</li> </ol>	<b>Chair:</b> Justice Shri Y. Bhaskar Rao  <b>Co- Chair:</b> Dr. B. Ekbal, JSA  & Senior Health officials of Andhra Pradesh and Karnataka
12.50 pm. - 01.20 pm.		Responses of the panelists to the above presentations	
01.20 p.m. - 2.10 p.m.		Lunch Break	

**PARALLEL SESSION I**
*Cont'd...*

TIMINGS	STATE	SESSION	PANELISTS
2.10 - 3.40 PM	Andhra Pradesh	1. Testimonies of the individual cases of health care denial. 2. State Report on Public Health Services by JSA state representatives 3. Responses from the state Health officials.	<b>Chair:</b> Justice Shri Y.Bhaskar Rao <b>Co- Chair:</b> Dr.B.Ekbal, JSA & Senior Health officials of Andhra Pradesh and Karnataka
03.40 p.m. - 04.10 pm		Responses of the panelists to the above presentations	
04.10 p.m. - 04.30 pm	TEA BREAK		

<b>PUBLIC HEARING (PARALLEL SESSION II)</b> Venue: Justice Tarkunde Hall (Main Hall) States: Tamil Nadu, Pondicherry, Kerala			
TIMINGS	STATE	SESSION	PANELISTS
11.20 am. – 12.50 pm	Tamil Nadu	<ol style="list-style-type: none"> <li>1. Testimonies of the individual cases of health care denial.</li> <li>2. State Report on Public Health Services by JSA state representatives</li> <li>3. Responses from the State Health officials</li> </ol>	<b>Chair:</b> Smt. S. Jalaja, Joint Secretary, NHRC  <b>Co-Chair:</b> Dr. T. Sundararaman, JSA & Senior Health officials of Tamil Nadu, Pondicherry and Kerala
12.50 pm. - 01.20 pm		Responses of the panelists to the above presentations	
01.20 pm - 02.10 pm	<b>Lunch Break</b>		
02.10 pm - 03.40 pm	Pondicherry Kerala	<ol style="list-style-type: none"> <li>1. Testimonies of the individual cases of health care denial.</li> <li>2. State Report on Public Health Services by JSA state representatives</li> <li>3. Responses from the state Health officials.</li> </ol>	<b>Chair:</b> Smt. S. Jalaja, Joint Secretary, NHRC  <b>Co-Chair:</b> Dr. T. Sundararaman, JSA & Senior Health officials of Tamil Nadu, Pondicherry and Kerala
3.40 - 4.10 PM		Responses of the panelists to the above presentations	
4.10 - 4.30 PM	<b>Tea Break</b>		

<b>CONCLUDING PLENARY</b> Venue: Justice Tarkunde Hall (Main Hall)	
4.30 - 5.00 PM	<ol style="list-style-type: none"> <li>1. Observations and responses by Dr. Thelma Narayan, JSA</li> <li>2. Concluding remarks by Justice Shri Y. Bhaskar Rao, Member, NHRC</li> <li>3. Vote of thanks by JSA representative.</li> </ol>



**ANANDIBAI JOSHI** was India's first woman doctor to be educated in the US. Anandibai Joshi's life spans just about twenty-two years, from 1865-1887. She was educated at the Women's Medical College of Philadelphia, USA.

Life in the late nineteenth century in Maharashtra was preoccupied with the ancient rituals and traditions with no hope for independent thought or action, thus preventing all progress. Outside Pune there was a poor postal clerk, and a widower named Gopalrao Joshi who was possessed by the thoughts of widow-remarriages and education of women.

Having failed in finding a widow for remarriage, Gopalrao was forced to marry a 9-year- old pockmarked girl named Yamu. This is the story of that young girl Yamu who was renamed ANANDI after her marriage.

It was a struggle to get Anandi to share a room with her husband during the day for her lessons. Meetings between a husband and wife during the day were unheard of in those days. But once she learned to read Anandi discovered for herself the joy of reading and knowledge. They moved from Kalyan to Alibaag to Calcutta, any place where they would be left alone to learn together. The story of Anandi is the story of a woman's transformation from a reluctant pupil and obedient and scared wife to self-assured and independent woman.

On one level, Gopalrao and Anandi were facing oppressive society, but for Anandibai the struggle was much more complex. She soon realized the superficiality of traditional rituals and learned to probe deeper for the meanings in them.

By remembering Anandibai today, we are not only celebrating her achievement of becoming a doctor, but her insurgence as an intelligent, and independent woman that makes her an inspiration to the world, even today.



JUSTICE V.M. TARKUNDE was born in Saswad near Pune on July 3, 1909. He graduated from Fergusson College, Pune. He went to the UK and joined the renowned London School of Economics and subsequently passed the Bar-at-law. Returning home, he started his legal practice in Pune. He was a member of the Congress Socialist Party. But meeting M.N.Roy radically changed the political outlook of Shri. Tarkunde. Roy founded the radical Democratic Party and Tarkunde gave up his legal practice to work with him. Neither of them had faith in party -politics and they believed in conscientising people at the grass root level to promote democratic ethos. Shri Tarkunde resumed his legal practice in 1948 and became a judge of the Bombay High Court. He resigned in 1969 and set up practice in the Supreme Court of India.

In 1974, Shri Tarkunde with Shri. Jai Prakash Narayan (JP) founded Citizens for Democracy with the latter as President and Shri Tarkunde as General Secretary in 1976. During the Emergency, People's Union for Civil Liberties and Democratic Rights (PUCL & DR) was set up with JP as President and Shri Tarkunde as Working President. As a legal luminary, he was committed to civil liberties. He retired from legal practice in 1997.



Shri. Tarkunde was a man of vision rooted in idealism. He believed that humanism was the fountainhead of democratic ethos. He wanted this to be the basis of civil society. He symbolises a spirit of humanism and human rights. Being a rationalist, he had little patience for religion. In its stead he upheld values that transcended all faiths.

Shri. Tarkunde upheld the rights of labour and never appeared for the management. He was among the few who recognised early the genocidal nature of communalism and was uncompromising in his opposition to it. His sympathies lay with the rights of the people of Kashmir and North East. Shri. Tarkunde was one of those who kept alive 'the hope of a new day dawning' with the 'recognition of the inherent dignity of the equal and unalterable right of all the members of the human family in the foundation of freedom, justice and peace in the world'.

Justice V.M.Tarkunde passed away on 23<sup>rd</sup> March 2004 in New Delhi. It is a fitting tribute to the indomitable spirit of V.M.Tarkunde to keep green his memory and sustain his vision.



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RIGHT TO HEALTH CARE**

**Co-organized by**

**Jan Swasthya Abhiyan (Peoples' Health Movement, India) and  
The National Human Rights Commission (NHRC)**

**on 29<sup>th</sup> August 2004 at Chennai**

**STATUS OF HEALTH AND HEALTH SERVICES**

**OF**

**THE PEOPLE OF KARNATAKA**

**Submitted on ~~behalf~~ behalf of the**

**JAN SWASTHYA ABHIYAN**

**C/o Community Health Cell**

**# 359, Jakkasandra 1<sup>st</sup> Main, 1<sup>st</sup> Block, Koramangala, Bangalore – 560 034**

**Tel. : (080) 25531518 Telefax : (080) 25525372 Email : [chc@sochara.org](mailto:chc@sochara.org) Website : [www.sochara.org](http://www.sochara.org)**



# **Status of Health and Health Services of the People of Karnataka**

Karnataka is considered to be just above the national average as regards the overall health status of the people and just below the average among the states in the southern region. There has been improvement, as in other states, in the health status of the people over time, as shown by indicators such as life expectancy at birth, crude birth rate, crude death rate, infant mortality rate and under – five mortality rate. There has been control, to some extent, of vaccine preventable diseases, through widespread immunization. In family welfare, the couple protection rate has increased to a large extent. There is a wide network of health care institutions in the public and private sectors, functioning at the primary, secondary and tertiary levels. There are also a large number of professional educational institutions, affiliated to the Rajiv Gandhi University of Health Sciences, training doctors, nurses and other health personnel.

## **1. Issues of Concern that impact on the Right to Health Care**

There are many issues of concern requiring urgent action. These have been brought out by the Karnataka Task Force on Health and Family Welfare in its report of April 2001. Among them are:

- neglect of public health and distortions in primary health care
- widespread corruption; inequity in access to health care that widen the existing disparities in health and health care; implementation gaps between policies and practice
- inadequate emphasis on quality of health care
- absence of attention to ethics
- improper development of human resources for health, and
- inadequate allocation and utilisation of funds and resources.

Other important problems in the health sector include:

- inadequacy of the health budget,



- unacceptable quality of health care services
- inadequacy of certain categories of health personnel, both in numbers and quality
- poor nutritional levels, particularly among infants, children, adolescents and pregnant women
- inequitable access to health care and
- non-involvement of the community in planning, monitoring and evaluation of the health services.

## 2. Health Services Facilities (Governmental)

### Primary Health Care

The following facilities and infrastructure have been established by the State, are expected to provide primary health care:

- ⇒ Subcentres: 8143
- ⇒ Primary Health Centres (PHC): 1676 + 9 (urban)
- ⇒ Community Health Centres (CHC): 249
- ⇒ Primary Health Units (PHU): 583

(Source: Annual Report,  
Department of Health and Family Welfare, 1999-2000)

Of these health centers, the first three follow generally the norms of the Government of India as regards staffing pattern and infrastructure, even though there are many vacant posts and lack of buildings to house them. The availability of essential drugs has been a perennial problem. This affects the poor, who do not have the means to purchase the drugs from outside, with the prices of drugs rising constantly. This leads to avoidable deaths, permanent damage to health and indebtedness.

**Lack of buildings; or geographically inaccessible locations of PHCs; poor construction and maintenance, and the non-availability of drugs are major structural obstacles to fulfilling the Right to Health Care.**

Primary Health Units are peculiar to Karnataka (from Mysore State before the formation of Karnataka)

### 3. Vacancies of Health Workers

There are numerous vacancies in all cadres of health workers. An important group of professionals providing health care are the Junior Health Assistants - female (auxiliary nurse midwife, ANM) and their supervisors, the senior Health Assistants. (the Lady Health Visitors-LHV).

Vacancies of Female Health Workers (ANMs and LHVs)

#### *Gulbarga District : Talukwise*

Taluk	ANMs			L H Vs		
	Sanctioned	Vacant	% Vacant	Sanctioned	Vacancies	5 vacant
Gulbarga Taluk	58	0	0	6	0	0
Jeevargi	39	12	30.8	10	2	20.0
Aland	57	18	31.6	6	4	66.7
Afzalpur	40	11	27.5	9	7	77.8
Chinchoii	41	10	24.4	8	1	12.5
Chitapur	57	15	26.3	10	5	50.0
Sedam	35	13	37.1	7	2	28.6
Shahpur	48	17	35.4	7	5	71.5
Surpur	56	18	32.1	10	7	70.0
Yadagiri	53	20	37.7	10	7	70.0
Gulbarga Dist	484	134	27.7	83	40	48.2

Source: *Ibid*

Shortages of Male Health Workers, Lab technicians and other field staff are also significant. Mismatch between qualifications and postings / job responsibilities causes frustration and wastage of resources.

**Absence of trained and motivated Health Workers is the single most significant systemic obstacle to Right to Health Care, putting great additional strain on available health workers and leading to referrals to private health care.**

#### 4. Regional Disparities

There is wide disparity in the provision of services between the various districts.  
A sample from 3 selected districts is shown below

##### a) RCH Survey : Selected districts; selected indicators in percentage

District	Full ANC	Institutional Deliveries	Children not immunized	Family planning knowledge of methods
Udupi	78.9	76.6	0.5	70.7
Tumkur	68.7	48.4	0.5	40.8
Gulbarga	21.2	27.9	31.1	27.2
Karnataka State	52.2	52.4	8.3	46.1

(Source: Rapid House hold survey, RCH, 1998, Kanbangi, et al.,)

ANC : Antenatal care

##### b) RCH Survey, 1998 : Selected districts; selected indicators

District	CBR	CDR	Women using contraceptives	Safe Deliveries	Children 12-36 months fully immunized
Udupi	19.7	7.0	63.7%	91.5%	86.0%
Tumkur	24.1	8.2	61.3%	63.5%	88.0%
Gulbarga	30.1	10.7	39.2%	47.7%	25.3%
Karnataka State	22.5	8.5	58.1%	68.2%	70.5%

(Source : Human Development in Karnataka, 1999)

CBR-Crude Birth Rate, CDE-Crude Death Rate

Regional disparities that are not effectively and adequately addressed by proactive, regional, need based planning, but continue to be driven by normative planning focused on the whole state, is a policy obstacle to the Right to Health Care



### Public and Private health care institutions in Karnataka

	Institutions	Beds
Public	2624	43,868
Private	1769	40,900

(Source : Health Care facilities in the Non-Government Sector, STEM 1996)

There has been a gradual increase in private sector health care facilities in the state. There is a need for regulation, incentives and other means to ensure quality of care in the public and private sector, and access to health care for the poor and vulnerable.

## 5. Some Indicators related to Basic Determinants of Health

### a) Nutrition, Karnataka

There is considerable amount of undernutrition in Karnataka, leading to or contributing to death and disease. According to the National Family Health Survey, Karnataka, 1992-93, babies with low birth weight constituted 22% of all live births.

#### Children under 4 years

Under weight for age :	54%
Under height for age :	48%
Wasted :	17%

**Nutritional grade distribution of children (12-71 months), 1996-97**

Status	Percentage
Normal ( $\geq 90\%$ )	9.4
Mild malnutrition (75-90%)	39.0
Moderate malnutrition (60-75%)	45.4
Severe malnutrition ( $< 60\%$ )	6.2
<b>Total</b>	<b>100</b>

Source: NNMB Rural, 1999 (Gomez classification)

Inadequate food and nutrition security in the state due to agricultural policies that promote cash crops over basic staple-foods (eg : ragi, oil seeds and dhal production in the state are inadequate, while production of silk, tobacco, and horticulture, for export are increasing); an inadequate public distribution system; and inadequate nutrition supplementation to vulnerable groups among under 5 populations result in a major denial of the Right to Health, since a low cost balanced diet is a minimum requirement and basic determinant of health.

**b) Health Revenue Expenditure, Karnataka, 1995-96**

As percentage of state budget : 5%

As percentage state GDP : 1.48%

**Distribution of health expenditure based on level of health care**

	Percentage
Primary Health Care	: 37.94
Secondary and tertiary case	: 31.08
Family Welfare	: 19.65
Medical Education and Training	: 9.26
Administration	: 2.08

(Source : Human Development in Karnataka, 1999)

While this may be slightly higher than in some states, it is very inadequate. Though costs of health care are rising, over the years the health budget and health expenditure per capita are declining, with most of it going for salaries, leaving very little for programmes and services reaching people.

**Public sector financing which is much below the norms is the main policy obstacle to operationalising the Right to Health Care in the state. Low health budgets and expenditure are directly correlated to structural and systemic inadequacies, resulting in poor quality of health services, and impacting negatively on the Right to Health Care.**

## **6. Water Supply and Sanitation**

There is inadequacy of water, both in quantity and quality. 71.68% of the households had access to potable water : 81% urban and 67% rural (1991). Improvement in some regions have taken place in the last decade through government programmes. The situation however is likely to become worse with drought and climate change resulting in further reduction in water availability. There is increasing chemical and microbial contamination, which require urgent steps to be taken. Inadequate access to water has also important social dimensions, with women, the rural poor, scheduled castes and scheduled tribes being more adversely affected.

Only 34% of the households have access to toilets: rural 6.85% and urban 62.5% (Human Development in Karnataka, 1999). Others use open spaces for defaecation. Poor access of households to sanitation facilities (toilets) and lack of environmental sanitation (sanitary waste disposal, drainage) are closely associated with microbial contamination of water. This is a major cause for diseases such as worm infestations, diarrhoea, typhoid, etc. Many of the slums in the urban areas have common toilets but they are poorly maintained and , hence, not used. Sanitary latrines were constructed under the Nirmala Grama Yojana, starting in October, 1995.



It is essential to link water supply and sanitation. Often measures for better sanitation fail because of lack of water. And, efforts at better water supply and absence of sanitation lead to faeco-oral spread of infection.

**Inadequate attention to universal water supply, availability of potable water and sanitation rank next to inadequate food/nutrition security as a major policy / structural / systemic obstacle to the Right to Health Care. Without adequate food and water, a healthy environment and a minimum wage – all basic determinants of health, the Right to Health remains a dream.**

## **7. Health Services**

The present structure of Karnataka Health Services has evolved over the years. The importance given to preventive and curative services has varied at various times. Earlier, there was an emphasis on and promotion of public health. But it disappeared in more recent times. The present structure of health services has the Ministers for Health and Family Welfare, Medical Education and Indian Systems of Medicine and Homeopathy. Next to the ministers, there is the Principal Secretary, Health, the Secretary, Medical Education and the Commissioner, Health. There are the Director of Health and Family Welfare, Director of Medical Education and Director of Indian Systems of Medicine and Homeopathy. There are Additional, Joint, Deputy and Assistant Directors. At the districts, there are the District Health and Family Welfare officers, the District Surgeons and Programme Officers.

The following deficiencies have been observed in the organization of the Health Services.

- ❖ Not enough importance to public health, with steep decline in the number of trained and experienced public health professionals in government service.
- ❖ Neglect of the North Karnataka Region in relation to health needs
- ❖ Not enough accountability to the public.

- ❖ Too wide a span of control for the Director of Health Services and the Commissioner, making the controls ineffective.

The many challenges identified by the Karnataka Task Force on Health and Family Welfare include the gross neglect of public health orientation to health teams; neglect of public health human power development; gross regional disparities; and an all pervading corruption. Though these are deep rooted policy and structural obstacles, they need to be addressed at the highest level to fulfill the Right to Health Care.

The Karnataka Task Force on Health and Family Welfare (KTFH 2001) has suggested changes in the organizational structure, keeping the following principles in view:

- ❖ The emphasis on public health should be revived.
- ❖ Separate cadres would be constituted for public health and medical (clinical) responsibilities of the Department.
- ❖ All health personnel up to the district level will form the District Cadres.
- ❖ The higher posts would constitute State cadres; selection based on competence and not only on seniority will be the mode for filling these posts. The state cadres will constitute the Karnataka Health Services.
- ❖ National Health Programmes would be integrated into the health system, ensuring better supervision, management, and health outcomes.
- ❖ The expertise and morale of the staff will be built up, enhancing skills and through a transparent transfer policy.
- ❖ Northern districts will get special attention, with an additional Director under the Commissioner.

(Not surprisingly the KTFH report was entitled 'Towards Equity, Quality and Integrity')

## 8. Karnataka Panchayat Raj Act, 1993

An important step in decentralization of health care services was taken with the enactment of the Karnataka Panchayat Act, 1993. The Panchayat's promote local initiatives to meet the local needs, vesting power with the people.

According to the Act, the Zilla Panchayats are to look after hospitals and dispensaries, excluding district hospitals and hospitals under direct government management (those with more than 50 beds) and the implementation of schemes for maternity and child health, mainly family welfare and immunization. They are expected to deal with the district sector budget and other state sector schemes, entrusted to them by the State Government. The Zilla Panchayats have a standing committee for education and health. Taluk Panchayats are to look after health and family welfare programmes and promote immunization; supervise health and sanitation at village fairs and festivals. The Taluk Panchayats look after the maintenance of the health subcentres and anganwadi centers. Gram Panchayats deal with family welfare programmes, preventive measures against epidemics, participation in immunization programmes, regulation of sale of food articles, licensing of eating establishments and the regulations of offensive and dangerous trades. The Panchayat also deals with rural drinking water and sanitation schemes.

**Strong commitment to Panchayati Raj Institutions and their orientation and involvement in basic health care can be one of the most significant policy commitments to establishing the Right to Health Care in the state.**



## 9. Health situation in the Southern States

It is useful to compare the health situation in the four major southern states (selected indicators)

State	IMR (1996)	CBR (1996)	CDR (1996)	MMR* (1995)	Sex Ratio (1991)
Andhra Pradesh	73	22.8	8.4	436	972
Karnataka	53	23.0	7.6	450	960
Kerala	14	18.0	6.2	87	1036
Tamil Nadu	53	19.5	8.0	376	974

(Source : Family Welfare Programme in India, GOI, 1996-97; The progress of Indian States, UNICEF, New Delhi, 1995)

State	Life expectancy at birth 1993	Human Development index		
		1	2	3
Andhra Pradesh	61.5	0.400	0.392	0.413
Karnataka	62.5	0.448	0.442	0.468
Kerala	72.9	0.603	0.597	0.628
Tamil Nadu	63.3	0.438	0.432	0.511

Source : Human Development in Karnataka, 1999. 1. Shivkumar (19981-92); 2. HDR of South Asia ( 1992-93); 3. UNFPA(1992-93))

#### Underweight children below 4 years

Andhra Pradesh	49%
Karnataka	54%
Kerala	29%
Tamil Nadu	48%

While Karnataka, Tamil Nadu and Andhra Pradesh differ from each other marginally in different indicators, they are all still significantly behind the health indicators of Kerala – the fourth southern state which continues to demonstrate good health at low cost with focus on land distribution, female literacy, a functioning Public Distribution System and a network on rural libraries that provide community information. This should be studied, reviewed and emulated

#### 10. Health Policy

The Karnataka Cabinet approved the Karnataka Integrated Health Policy in February 2004. The focus is on strengthening comprehensive primary health care and public health. The state government has initiated several measures over the past years to implement recommendations of the Task Force and other governmental programmes. Several linkages with NGOs and the private sector have been initiated. These have been positive initiatives, which need to be followed up with implementation of the state health policy and the integrated health, nutrition and family welfare project.

## Tamil Nadu's Health Sector

A brief note presented to the National Human Rights Commission.

Prepared by the Tamilnadu Science Forum  
on behalf of

Jan Swasthya Abhiyan -Tamilnadu

Based on inputs from  
Dr. V. R. Muraleedharan and Dr. T.Sundararaman.

Submitted to  
N H R C

August 29<sup>th</sup> 2004



## 1. Introduction

Tamil Nadu's health status and healthcare services witnessed major significant improvements in 80s. The gains were most dramatic in state's total fertility rate which fell to near replacement level by the early nineties.

Tamil Nadu's healthcare infrastructure has 1400 primary health centres, and about 8500 health sub-centres, with a large number of secondary healthcare institutions in the districts. This compares favourably to most other states. Adjusting for urban populations, very few states have comparable public health facilities in proportion to population.

The state has also the distinction of having initiated many health interventions that have served as models for other states to emulate.

## 2. Reasons for Concern: Stagnation in health status improvements

From mid-1990s, there has been considerable slow down. There were no further reductions in birth rate, death rate, or infant mortality rates which have remained static. The share of neonatal deaths (which account for more than 60 percent of the infant deaths) has remained static. It is very difficult to obtain an official estimate of MMR for the state. Estimates range from 450 deaths per 100,000 deliveries to around 140 (1999). The wide divergence between rural and urban rates is also a cause for diquiet as health inequity is unacceptable in itself and point to a huge remdiable rural health gap.

Very few new institutions are added in the public sector. though growth in the unregulated private sector has been enormous.

The reduction of fertility rate in TN is one of its best known achievements but even here the birth rate has not fallen further during the last 7 years.

The average nutritional status in TN shows an even more worrying picture (Table 1 below). The nutritional status as such is lower than its neighbouring states. For example, the calorie intake per capita in TN is 1814, compared to 2231 in Kerala, 2196 in Karnataka, and 2430 in Andhara Pradesh (1999 figures).

Table 1: Average Food Intake in Southern States

Item	Tamil Nadu	Kerala	Karnataka	Andhra Pradesh
Calories	1814	2231	2196	2430
Protein (gms.)	44.4	57.1	55.5	57.6
Calcium (mg)	455	696	839	518
Iron (mg)	20.2	22.8	30.6	26.2
Vitamin C (mg)	29.9	50.3	32.7	34.0
Vitamin A (mg)	184	214	286	352

Source: Data extracted from a survey conducted by the Ministry for Consumer and Public Affairs, GOI, 1999, as reported in the Monthly Report of Family Welfare Department, GOIN (November 2000).

National Family Health Survey (NFHS) 1998-99 showed the highest level of moderate or severe anaemia among the pregnant women (32%), and among the children, (47%) .

### **Access to and Utilization of primary health services:**

- 47% of total inpatient days in Tamil Nadu (rural and urban) is met by public hospitals – all India average is 51%. This is less than one would expect but still represents a very large use of public hospitals. In terms of number of hospitalization, public hospitals in Tamil Nadu account for only 28% of the total 12 million hospitalizations – the average for India (rural and urban) is reported to be 44% of the total. SC/ST populations account for about 20% of the total number of hospitalization, while the national average is around 24%;
- Public institutions in TN cater to 29% of all outpatient care (rural and urban), compared to the all-India average of 19%. In rural TN, they account for 32% compared to Indian average of 18.3%;
- In all these, more than 50% of the total hospital care is utilized by patients from the richer expenditure groups. This should not be read as a case for so –called better targeting. Indeed the 50% of the poor are able to get some quality of care in public hospitals only because other sections also use it and thereby sustain public accountability. There is a need to cover invisible payments in addition to public provisioning of health care. Transport, cost of stay for patients and relatives and illegal payments are three major payments whose costs can be so high as to exclude a significant portion of the poor from any public care.
- Public institutions account for 52% of total inpatient days for childbirth (rural and urban), while they account for about 35% of the total institutional deliveries in the state; 77% of the total inpatient days for childbirth among SC/ST populations is accounted for by public institutions, while the corresponding figure for all-India is 61%;

Only 60% of PHCs in the state actually conduct deliveries. About 35% of PHCs conduct one delivery per month. Overall, only 9% of PHCs conduct more than 10 deliveries per month. On average each doctor or ANM conducts only 1.7 deliveries per month.

- Public service is also the major if not only service provider for most villages for immunization and for antenatal care.

### **Critical Gaps in Manpower; Infrastructure in Primary Health care:**

Manpower gaps still need to be addressed. The vacancy position of doctors in PHCs continues to remain at 20%. A substantial number of PHCs do not have laboratory assistants. 336 positions (35%) are vacant. Some districts have a vacancy of more than 80% for these positions. Vacancy for laboratory technicians is at 58% ; Pharmacists and ophthalmic assistants vacancy about 10% and Staff nurse vacancy in PHCs is about 8%.



As for infrastructure out of 1400 PHCs, only 65 are functioning in rented buildings, but only 400 of them have staff quarters. As for HSCs, nearly 3000 are still working in rented buildings and closing this gap is an urgent necessity.

### **Failure to organize secondary referrals for Emergency Obstetric and for sick neonates:**

The stagnation of health statistics on infant mortality and maternal mortality may relate to the serious failure to provide quality referral services to those child-birth cases and those newborns who require immediate hospitalization and emergency care. Most community health worker programmes have shown that a reduction of IMR can be achieved from high levels to about 50 per 1000 by simple community level steps. They have further shown that further decreases are slow and require high degrees of referral back up. The government is committed to the provision of one such back up for every 1 lakh population- the CHC concept. Unfortunately there has been inadequate thought and effort in this direction. By the existing norms, TN should have more than 400 such institutions, but it has only 59 at present. Few of these are functional as per norms. A move a few years back to open 24hour services for PHCs and strengthen them with an additional doctor and an ambulance did not result in adequate improvements and was not followed up adequately.

Recently, the government of Tamil Nadu has announced the up-gradation of 40 PHCs to 20-bedded hospitals but not only will they take time to complete they will face problems of getting the required specialists.

The first referral unit concept for providing CS sections on a priority basis has also floundered. In the year 2001, out of 163 FRUs in the state, 75 did not perform caesarian operations, 21 of them had specialists but did not perform any caesarians. About 45 FRUs have performed caesarian operation without blood bank facility. Clearly, mal-distribution of medical personnel is one of the major causes for lack of emergency care in these institutions - for example, the state has 243 obstetricians, yet nearly 40 FRUs have no obstetricians.

Ambulance services is another major part of this aspect. Yet Ambulance usage for emergency services is abysmally low at 0.2 cases per PHC per month. Only 70% (983) of 1410 PHCs have sanction for vehicles. Of these, only 76% are road worthy. Only 894 (90%) have sanction for drivers, of which 24% are vacant. On average, each vehicle was used only for 9.6 days per month.

### **Overcrowding of the district hospital:**

As a result of failure of referral arrangements and district and taluk level the district hospitals are overcrowded and unable to perform tertiary or indeed good quality of any care. Instead of being referral centers- they serve as urban primary health centers and secondary centers for the entire district. An average district headquarters hospital has more than 2000 outpatients per day, averaging not more than 2 minutes of consultations per patient. State level hospitals should perhaps have even a lower average.



In addition to this overcrowding all secondary and tertiary hospitals there is a serious shortage of staff at lower levels (conservancy staffs in particular) leading to dismal sanitary situation.

#### **The role of the private health sector:**

In recent times, policymakers have made frequent references to the need to collaborate with private sector in order to achieve public policy goals. What options exist for the government to collaborate with the private sector. There are four constraints to effective partnership between private and public sectors. These are: (1) weak regulatory regimes to over-see the behaviour of private health sector; (2) weak capacity of government to design and implement contractual arrangements with the private sector; (3) lack of a research and information base on the dynamics of private providers; (4) lack of a policy framework for engaging private health sector in health – till date, the private health sector has grown passively, without any proactive policy.

And finally, the "private practice of public doctors during office-hours". The government has not dealt with this issue with adequate determination. What is most objectionable is private practice during office hours, which requires stern disciplinary action against those guilty of such mistakes. The talk of public private partnership when even this minimum cannot be done is fraught with danger.

#### **What TN health department needs to be congratulated for:**

The TN Medical Services Corporation (TNMSC) in 1995. It was created as an autonomous body, under the Companies Act 1954. This was the most pragmatic response to the dire situation in pharmaceutical supply for government institutions at all levels. It is governed by a Board chaired by the Health Secretary and is managed by a Managing Director. Prior to the formation of TNMSC, hospitals purchased drugs on their own, directly by the three directorates, namely the Directorate of Medical Education, Medical and Rural Services, and Public Health and Preventive Medicine. There were frequent complaints about misuse of funds and misappropriation of funds for non-essential drugs. Once TNMSC was established, these three budgets were put together for drug procurement. Now, drugs procured through open tender process are delivered directly by the suppliers to the district warehouses. District officers are given fixed transport allowances to transfer these drugs to respective institutions.

After the formation of TNMSC, the drug list has been rationalized, and the number of drugs on the list has been reduced to about 250, all of which were generic drugs. Excellent transparent procurement and distribution and quality control systems have made this the benchmark for all states. Over the years, TNMSC has been able to finance purchase of diagnostic instruments for hospitals across the state in a similar transparent manner. It is a shame that though this is acknowledged by all studies and reports and repeatedly cited as a bench mark worth emulating very few states and even the central government have moved to make their procurement and distribution arrangements as effective. There is a need to make the implementation of a similar system mandatory as part of the enjoyment of the public's right to access essential drugs.

In order to increase the mobility and thereby the effectiveness of VHNs employed in HSCs, loans for acquiring mopeds were extended to VHNs in 5 different districts. This scheme was introduced in late 1990s, with funds from DANIDA. As part of this scheme, special training sessions on "mobility and campaign" were also introduced on a pilot basis in Dharmapuri district. An evaluation study of this "mobility scheme" shows that VHNs were able to save up to 60% of their time on travel. As a result they were able to cover 3 to 4 villages a day compared to 1 to 2 villages a day. They are also reported to have increased time spent on patients and attend to more emergencies. Needless to say, this programme encountered certain difficulties: A major constraint faced by VHNs was the expenditure for fuel. This needs to be overcome.

### Testimony of late P

Ms. P, a young woman aged 20 residing at Srirampuram slum in Bangalore went to Primary Health Unit in Srirampuram for her antenatal check up. The patient's aunt said, as they could not conduct the delivery there they referred her to Vanivilas Hospital. When she went to Vanivilas Hospital on 28<sup>th</sup> June 2004, the junior doctor came and examined her and said she would deliver the next day. But the senior doctor came and told that she had to undergo an emergency surgery, as he felt the foetus not ok. The junior doctor came and said she would do the next day the surgery.

They gave her glucose the whole night. The next day before they could do the surgery her stomach bloated, they informed the doctor, and he came and saw and went away. About 7.30 am Papu died in the hospital. When She ate well her dinner in the night and went to bed and she passed away in her bed. When hospital authorities came to know that she is dead, they told the relatives to take the body immediately.

Though the senior doctor told to do the emergency surgery, since the junior doctor delayed the surgery, Papu died on 1<sup>st</sup> July 2003. The doctor or nurses were not available during emergency. They were not aware of the moments when she breathed her last. The family sources said they spent about 3000 rupees during her hospitalization. It seems the family members questioned the authorities for the negligence but did not get any satisfactory responses. *" They did not even do the cut open her stomach (post mortem) to remove the baby. In the grave yard we had to get one man to cut open the stomach, remove the baby and bury the mother and the baby separately."* Now it is just over since the incidence took place, her husband has been married to Papu's younger sister.

#### Denial of health care: Negligence

Delay in health care in the emergency

Non –performance of postmortum and delivery of the 'dead' baby.

#### Consequences:

Death of the baby and mother

Psychological trauma

Unnecessary expenditure.



## Testimony of Ms. D

Ms. D, aged 25 years, residing at Thippasandra, Bangalore -560 074 went to the Austin town maternity home to deliver her Third child on 25<sup>th</sup> July 2004. She said she went around 6.30 am, immediately she was taken to labour room and was asked to lie down on the labour table. She requested the nurse on duty that she would like to walk around for some time, as the pain is not severe. The nurse forced her to lie down on the table and started doing PV which was very painful. Added to that the nurse called the ayah and other female worker to press her stomach and forced her to push the baby. Finally a boy baby was pulled out around 10.30 am.

She said the nurse forced her like this because she wanted to finish conducting the delivery before she finished her duty and take the money. She said she was afraid that she would die for the way they treated. *"I was suffering from pain, I was exhausted, when I dosed, they sprinkled water on my face and woke me up. They scolded me like, are you a woman, you would deliver without problems only when you give alms to the poor, go first give alms to the poor. I was very tired, they pinched with hands and the instruments, and there were scars on my legs."* She said she says all these because she doesn't want these things to happen to other women.

The baby had scars on the head, which they suspect happened while pulling the baby out by the nurses. When they asked the nurse for explanation she was told it was nothing but dirt. *"I am worried if my child would have any problems in future because of this"*

The nurse demanded Rs.500. Her husband works as a coolie, he had borrowed Rs. 250 from his work place and came to pay. They insisted that he paid the remaining amount while discharging. During hospitalization HIV test was done for which she had to pay Rs.15. She was prescribed an ointment and tablets for pain, which she had to buy from the private medical store for Rs. 50.

Finally while leaving the hospital she had paid Rs. 250 for the nurse who conducted the delivery and 30 for giving injection, Rs. 20 for the helper and ten for the watchman.

**Denial of health care:** incompetence and negligence

Forcing delivery, leading to harm to baby.

Bribery

**Consequences:** psychological trauma to mother

Possible trauma and after effects to baby.

## CASE HISTORY OF ER

I am a widow with 4 children and am a victim of HIV/AIDS. I was happily married to Mr. V an auto driver. Though we hailed from KGF and Jolarpet we settled in Bangalore to earn a living. Our family life was good until my husband started falling ill often. He started getting fever and handaches and was taken to a Private hospital where he was treated for jaundice. Later the doctors told me that he was also infected with T.B, we were asked to buy the medicines, which we could not afford. We then went to Jolarpet to seek help from his people. His brother took him for treatment for two months and later returned to Bangalore. By now I was pregnant and expecting our fourth child.

My husband started falling sick once again, and this time his condition worsened. He was rushed to NIMHANS from where he was later referred to Bowring hospital. The treatment meted out there was very hurting. We were made to wait for a long time in order to get admission. The hospital staff did not bother to attend on us in spite of our pleading to them to give us admission. After a lot of pleading and bribing, my husband was put in the ward, where no one even came to check on him. Even though beds were available he was asked to sleep on the floor. This experience was very painful and frustrating. My husband did not want to stay there and we got him discharged and went back to the concerned doctor at NIMHANS who then referred us to Freedom Foundation where he was admitted and treated. It was here that I was tested positive, however my children were tested negative. I lost my husband two years ago.

Positive people undergo a lot of difficulties. They not only have to face the trauma of being positive but also face stigma and discrimination. On behalf of our positive group I request the panel to **help us get treatment with any discrimination**

### Case history of H

I am a victim of HIV/AIDS. I am 25 years old and come from Davangere. I have studied till class 10. My husband Mr.X is an auto driver who hails from the same place. I come from a large family and my parents thought that I should get married even though I was not interested in getting married at that time.

After four years of marriage I conceived, but here I was told that I was infected with T.B. It was routine to do a HIV test for all pregnant women and when it was done it was found that I was tested positive. My husband was also asked to undergo the test, but he tested negative. Instead of telling us our results the doctors called my family members and told them that I have AIDS. This created a commotion in the hospital between both families, thus causing them to disown us and ill-treat us mentally. Dejected with life we left our hometown Davangere and came to Bangalore in search of a living. Ismail found it very difficult to get a job and I did not show any interest in taking a job as I thought that my days were numbered and death was nearing.

I was 2 months pregnant I went to Arogaya Kendra center near my house. After knowing my status the doctor there did not want to treat me and referred me to Vani Vilas hospital. My husband Ismail was tested and was found to be positive, by then. Thinking that my child would be orphaned we decided to terminate the pregnancy. When we requested them to terminate my pregnancy they refused and asked me to go to a private clinic who demanded Rs.5,000/- which I could not afford. I went through a lot of mental strain not knowing what to do. After sometime with help of my neighbors contacted a doctor at a NGO, who was willing to help me, but by now it was too late and I went ahead with the pregnancy and had a normal delivery. However I lost my child.

Today our lives have changed and we are now back in our hometown Davangere and it's all thanks to MILANA. Here we underwent counseling and this helped us look at life in a positive way.

My humble request to the panel is to make the hospital authorities treat us with respect and concern. Infections come through many routes but the attitude of people remains the same that of ill-treating us. Counseling and confidentiality plays a very important role, which has to follow strictly. All those would help us lead a positive life.

Denial of Health Care :	Stigma and discrimination
	Refusal to provide treatment
	Demand for bribe
	Violation of confidentiality



### Testimony of Late. Mr. H

Mr. H, 35 years old, a chronic alcoholic and chain smoker, was suffering from stomach pain. His wife was interviewed on 16<sup>th</sup> August 2004 at 2.00 pm at her residence in Ragigudda slums, in JP Nagar.

His wife Mrs. H took him to Jayanagar General Hospital six months ago; she does not remember the exact date. Since she showed her yellow colour ration card they had taken only 50 Rupees for registration. She said otherwise one has to pay for everything.

He was taken to the hospital at about 9 am. The doctor examined him and said he has ulcers in stomach and told her to admit him. When she complained to the sisters that he suffers from pain they would come and give an injection. They gave six injections, which she bought, from a private medical store by paying Rs. 100. He was also prescribed tonic, which he bought for Rs.55. With all these his pain never subsided. X-Ray and blood test were done. She said she did not pay anything for the X-Ray but for the blood test the lab technician took 500 rupees and told her, not to tell any body that he had taken 500 rupees. He told her to tell if anyone asks that she had paid Rs.100 only. The patient was given 3-4 bottles of glucose every day for five days. She (wife of the patient) said she decided to bring the patient home, as he was feeling better.

She again took him to the hospital as he started complaining of pain after two days. This time also they admitted him and administered glucose. He was suffering from pain, many times he himself would go to the sisters to call them to come and attend. To this the sisters would respond, *"you are a headache, if we have four patients like you, our lives would be gone."* She ( wife of the patient) said many times when she went to call them (the nurses) to come and attend to her husband when he was suffering from pain, they had scolded her and said why did she come to disturb their sleep? The doctor was not available when needed. The sisters (nurses) demanded 20 or 30 rupees every time they came to give him injections or came to attend. *"if you don't pay they will not attend to you"*

This time he was there for 5 days. The doctor sent them away by saying he would get better if she buys the medicines and tonic they had prescribed. She bought half of them from inside the medical store and half from outside the hospital by spending Rs. 200.

He was brought back home in a bad condition. She immediately took him to Bowring hospital. She paid Rs. 65 for the auto. They admitted him and put a tube through his nose and removed 4-5 bottles of fluids every day. She spent here about 1000 rupees for medicines. They did not have pain killer injection when he was suffering from pain; she had to buy from outside. After a week she decided to bring him back home as it was too far. She had four little children to care for. She was also afraid of seeing patients dying in front of her. The doctors told her that he still needs treatment and investigations had to be done on him.

She kept him at home for four days and took him to Shekar hospital in Jayanagar as he became very serious. They admitted him after taking Rs. 3000 as deposit. They immediately operated on him by telling her that he had appendicitis. After surgery they told her that had ulcers in his intestine and it is not appendicitis. They brought and showed her pieces of his intestines. One month they kept him there. She spent about 5000 rupees for medicines. The doctor there by seeing her condition of poverty gave her 3,000 rupees. When the final bill came it was about 28,000 rupees. Since she did not have the money, they discussed and told her that she need not pay. They arranged an ambulance and sent them back home by saying it is difficult for them to manage. He died the next day at home. She had spent about 10,000 rupees for medicines. She has borrowed about 5000 rupees and 5000 rupees was give to her by known people.

**Denial of health care:** bribery, corruption and poor response to patient's need, mismanagement, and incompetence.

<b>Consequences:</b>	Death (avoidable) if proper treatment had been given in time. Loss of money: becoming indebted, dissatisfaction with public health care services
<b>Recommendation:</b>	Greater vigilance and supervision by senior staff of the Health Services and Medical Education Departments.

## CASE PRESENTATION

(By a NGO Health Care Provider)

### SUBJECT : DENIAL OF HEALTH CARE

Name of the patient: Mr K.              Wife Lakshmi 32 years, 5 children

Age: 35 years

Sex: Male

Address: Vivekanagar Post, Kormangala, Bangalore 560047

Marital status: Married

#### Origin. Duration and progress:

We have a Charitable Health Centre in Vivekanagar slum for last 2 ½ yrs. The patient first visited our clinic in or around September 2003.

He was a chronic alcoholic with recently diagnosed Diabetes.

#### ❖ Episode I

On 14.11.03 at around 8.00 pm Mr. K came to our clinic with h/o vomiting blood (haematemesis) and passing black stools (malena). Immediately after attending 2 patients I advised and accompanied them for hospitalization. We reached Bowring Hospital Casualty at around 9.00 pm.

- ❖ At Bowring Hospital after issuing his card he was examined by the doctor in the casualty. As he was a known case of Diabetes before starting any treatment his blood sugar level examination was a must.

**Ironically there was no Glucometer in this Tertiary Care Government Teaching Hospital!!**

Approximately an hour was wasted without any single treatment. Poor, ignorant relatives couldn't understand the severity of the situation.

Then doctor on duty asked the relative to go and get the blood sugar level done from another private hospital (that too at 10.00 pm)



As I was accompanying the patient I asked the doctor on duty if they can suggest any private laboratory from which we can get the investigation done.

Above all not a single sister/nurse was ready to take the blood sample so that we could go and give the blood sample for the test promptly.

They were also not having bulbs for the blood sample collection (for Random blood sugar test).

None of the doctors were having information about the private laboratory which would be open at 10.00 pm.

They suggested two laboratories where we went but they were closed and by that time it was 11.00 pm.

Then I decided to go to Wockhardt Hospital. We went there and got the bulb and syringe for patients blood collection.

Reached Bowring Hospital at 11.30 pm

Ultimately a patient who was admitted with hematemesis and malena with Diabetes Mellitus at 9 pm was tested for blood sugar at 2.00 am. All the cost of the investigation + Commutation was borne by the poor patient, adding one more expense to the already worried family.

Patient was diagnosed as having – Type I Diabetes Mellitus + Pseudo pancreatic Cyst + alcoholic liver disease Total Hospital stay was from 14.11.03 to 19.11.03.

- ❖ Episode: 2 In next episode of illness in the same patient because of severe poverty, grave illness and inadequate treatment he developed diarrhoea and vomiting on 8.6.04. This time he also had severe jaundice. He was examined by me at his home and I referred them to get immediately admitted to Bowring Hospital. He was admitted there on 10<sup>th</sup> June 2004 with history of severe weakness, severe jaundice, dehydration and pedal edema.

Within last few months patient had lost almost 6-7 kgs of weight.

When he was admitted this time they really had quite a painful and horrifying experience at Bowring Hospital

In 4 days of stay the patient was given only 2-3 pints of intravenous fluid. That too was purchased by relatives. The Doctor on duty also suggested more 25% Dextrose; the relatives purchased them, but they were not given to the patient neither was any other IV solution suggested.

In a patient with severe dehydration jaundice and Diabetes Mellitus careful intravenous treatment is a must. But except 2-3 pints of IV solution, no other IV infusion was given in those 4 days of hospitalization.

Because of negligence the patient's condition worsened in the hospital. The jaundice got worsened and probably he might have developed hepatic encephalopathy as he started rowdy behavior from the 3<sup>rd</sup> day of admission.

And this is not all.

In a general ward, with continuation of diarrhoea (black stool) and jaundice because of negligence and irresponsibility he was worsening day by day.

All through his admission his 12 year old son was there with his ailing father mother could not stay in the hospital as she had a small child and other 3 children to take care of.

No other relatives were there when they readily needed them. On 4<sup>th</sup> day of admission, because of the rowdy behavior of the patient **one of the ward boy gave a strong punch on the chest of the patient**. Poor 12-year-old boy could not tolerate this. He was shocked as his father **immediately after that punch the patient had a blood vomit**. The small, tender boy was afraid that the ward boy may kill his father. He was so much afraid and shocked that he did not inform anybody (not to nurse/doctor) he did not even take any of the case papers and took his father home and explained to his mother with his continuous cry, about what had happened in the hospital.

This is not only a denial; it is case of great negligence on the part of the public health system.

For this illness the patients' wife spent Rs.600.00. Their son went for begging and wife for extra work.

Story is not yet over.

3 days after they came from hospital, which is on 16th June 2004, the patient died at his home.

Now his wife and 5 children are living in immense poverty with no hope.

\* \* \*

## Issues:

- |  |   |            |
|--|---|------------|
| 1. No Glucometer to test for blood sugar is a tertiary care teaching hospital.   | } | Denial     |
| 2. No special tubes to collect blood sample for blood sugar test is a tertiary care hospital   | } |            |
|  | } |            |
| 3. Referred to a private hospital from a public hospital for blood collection and sugar test at extra cost for patient.                  | } |            |
| 4. Inadequate intravenous hydration of the severely ill and inadequate communication of severity and requirements to patients relatives. | } | Negligence |
| 5. Violence on a patient with mental health complications due to worsening diabetes.   | } |            |
| 6. Inadequate response: supervision of case and behavior of case and behaviour of health staff by senior health staff.                   | } |            |
|  | } |            |



## Testimony of Ms. L

Ms. L 37, years old, lives in Ragigudda slums. She is a widow and she works as a housemaid. She was admitted 1 ½ years ago at (Sanjay Gandhi Hospital) Jayanagar General Hospital for hysterectomy. The admission was free. They gave her all the medicines and told her that she needs blood. "*They are doing operation like business.*" They asked for AB negative blood which Ms. L's family could not find any where. They had agreed to do the surgery by taking the signature of his children a 20 years old daughter and 18 years old son. She was in the hospital she stayed 11 days after the surgery. The anesthetist came and told her before the surgery that she must give him Rs. 200. The helpers demanded Rs. 50 to shift her to the ward from the operation theater, otherwise he tells the patient to walk and go. "*How could we walk? So we had to pay*". The X ray technician and the lab technician took money from her. The nurse who gave her injection demanded Rs. 5 be paid to her every time she gave an injection. "*They do surgeries and throw away the patients like animals.*"

While discharging they demanded Rs. 2500, she did not have that much money. She paid only Rs. 1500. While taking the money they said, "*we have saved your life, is this much worth only*". She said the doctor who does the surgery earns through bribe every week 7-8 thousand rupees. How much they would be earning in a month? She asked.

She was told to stay in the hospital till her scar was healed and go away. The sutures came of the next day when she came back home. She was profusely bleeding. She immediately went to a private hospital because she did not want to go to that hospital again after experiencing the ill treatment and improper care from the staff at the Jayanagar General Hospital. "*I do not want to go to a Govt. Hospitals they ill treat the patients.*"

She said at Jayanagar General Hospital they do suturing without giving anesthesia. "*I have seen patient reeling under pain while they did the suturing.*" She said she spent about 20000 rupees for treatment both at Jayanagar General Hospital and Private hospital where she went twice. She is still repaying the debts.

**Denial of health care:** bribery, corruption, and ill treatment of patients.

**Negligence:** suturing coming off

**Consequences:** dissatisfaction with the service in the Government hospital, loss of money, debt to be repaid.

## Testimony of Mr. D

Mr. D, aged 10 years is suffering from epilepsy. He lives in Wahab Garden in Benson town. He went to NIMHANS for treatment on 29<sup>th</sup> February 2002. He had to wait for a long time and the end was simply sent away without prescribing or giving any medicines.

He went to a private practitioner who prescribed him the medicines for epilepsy. He used to get the fits more than 10 times a day. With the medicines prescribed the attacks were reduced but he has to buy more than 300 rupees worth of drugs every week from private medical stores. After he came to NIMHANS and started treatment his father expired. Since then the economic condition of the family has deteriorated. He went again to NIMHANS with his mother and this time examinations were conducted on him. They asked them to produce yellow colour ration card and told them that he would be given tablets free of cost only if they produces it. With great difficulty he managed to get his name included on his aunts family's ration card with the help of civil supply department. Even though they produced the yellow card, they are giving them the prescription to buy the medicines from private medical stores. Each week he has to spend Rs.100 for the tablets. The family finds it difficult to buy the tablets.

**Denial of access:** Not given free medicines even though he produced the yellow card.

Delay in care (not attended in the first instance)

**Consequences:** Huge, unaffordable expenses for the purchase of medicines.

**Recommendation:** Doctors must be trained and instructed to provide the care to which the patients are entitled.

Institutions must supervise and ensure that the rights of patients are respected.



## Testimony of Mrs. Da

Mrs. Da aged 45 years was admitted in Jain Hospital after a wall near her house collapsed and fell on her. She had undergone tubectomy few months ago in a Govt. hospital. When the wall fell on her, the suturing gave way. She was bleeding and her uterus came out. Treatment was given to her immediately and medicines were continued for five days but she got no relief. As the family members insisted, the doctors to do a scanning, a scanning was done. The scanning results showed a tear in her uterus. Doctors told her the uterus was poisoned and she needed an emergency surgery. They demanded that she paid 16,000 rupees for the surgery. Since the family was unable to pay, they requested the doctor to refer them to Bowring hospital. She was referred accordingly on 20<sup>th</sup> July 2004. When she reached Bowring hospital it was about 3.00 pm. About 12 doctors at Bowring hospital teased her for going first to Jain hospital, her inability to pay and for coming to Bowring hospital. By the time the consultants came to see her it was 5.00 pm. He suggested emergency surgery. But the other doctors refused to take her for surgery by saying; already there are so many patients are waiting. They decided to admit her at 7.00 pm. after her begging for a long time. She had to wait for a long time for the surgery. When she agreed to pay Rs.5000 to the doctor, all that she needed for the surgery was brought. All the medicine they prescribed, she had to buy from private medical stores spending Rs.5000. She spent almost Rs.15000 in the hospital. Apart from spending she had to spend a lot of money, every nurse who attended to her demanded 50 rupees and the nurse who put glucose also demanded 50 rupees.

**Type of denial:** Bribery at the government Hospital to get the services  
Demand for huge payment at the private hospital.  
Delay in investigation in the private hospital;  
Delay in admission at the government hospital.

**Consequences:** Huge expenditure.

**Recommendation:** Institutions must supervise and ensure that the rights of patients are respected.  
Greater vigilance and supervision by senior staff of the Health Services to check bribery.



### Testimony of Mrs. A

Mrs. A w/o Mr. N, 24 years residing at Sriramanahalli, Sasalu Block, and post, Doddabalapura taluk, Bangalore Rural district went to prenatal care at Saslu Primary Health Center (PHC) three times. The last visit was on 25<sup>th</sup> February 2004. Medical officer was not available at the PHC. The patient was made wait 2-3 hours at the PHC. During the prenatal care no weight was taken. She did not get any drugs from the PHC, she was given a prescription and she had to buy them from a private medical stores. The medicines bought were tonics, antibiotics, tablets and Vit.A syrup. No documents available were available at the PHC, no registration was made during the visit only patient's name was entered into a register. If money is not paid the patients are referred to the taluk hospital under some pretext. The patient was not given any transport facility when referred.

The doctor comes at 11. 00 am to the PHC and leaves at 1.00 pm. There are neither ANM nor any other staff available at the PHC. The PHC lacks good building, equipments and drugs. There is no privacy for the patient while being examined. There are no furniture in the center. There are no drugs available at the PHC. Dr. Ramraj Urs is not available during emergencies.

Denial of health care:	Prenatal care unavailable.
Consequence:	The foetus died during 8 <sup>th</sup> month of pregnancy in the
Recommendation;	Make the medical officer available at the PHC. Make all the drugs available at the PHC Stop the practice of bribery from the PHC.

**Testimony of Smt. T**

A lady by name Smt. T aged 38 years of Sriramanahalli died after undergoing abortion. She had gone to the PHC to get her fore pregnancy aborted. The doctor was not available and the ANM who was not well versed in conducting the abortion. During abortion the lady died. The ANM had dragged the dead body and made it to squat in the bathroom and locked the PHC and absconded.

## User Fee & Denial of Health Care

### Mr. V was denied access for de addiction at National Institute of Mental Health and Neuro Sciences, Bangalore.

Mr. V a 28 years old young married man currently resides in a registered slum at Sudhamanagar, near Hindustan Aeronautical Limited (HAL), Bangalore. As the result of many years of excessive drinking from the age of 13 years onwards, he has severe physical, social and economic problems. Mr. V is a coolie worker at a scrap collection centre. He earns Rs. 100 per day and spends all the money for alcohol consumption. If he has no money gets it from his wife, who is the breadwinner of the family. She earns money by doing domestic work. He has 6 years old son and 9 years old daughter. His wife and children are psychologically affected.

Mr. V went to NIMHANS on 23<sup>rd</sup> August 2003 to get treatment for alcoholism. Since Mr. V was a chronic alcoholic with severe withdrawal symptoms, Mr. V needed admission for treatment of his physical and psychological dependency. He was asked to deposit Rs. 2000 for the treatment as per the policy of NIMHANS. For patients submitting Below Poverty Line (BPL) ration card the deposit was Rs. 250. and for all others without the BPL card, including urban poor and migrant people the deposit was Rs. 2000. Since Mr. V did not have a BPL (yellow coloured) ration card and could not deposit Rs. 2000, he was NOT admitted and treatment was denied to him.

Now Mr. V is miserable and sick, not being able to receive the treatment due to the 'user fee' Policy at government hospitals. He again visited NIMHANS on 03/05/04 with very severe condition and this time too he was denied treatment because of not having a BPL card and because he was not able to deposit Rs. 2000.

**Denial of Healthcare:** Refusal to admit and give treatment, because the patient could not produce BPL card or deposit Rs. 2000/-

**Consequence:**

- Continued dependence on alcohol
- Loss of money
- Psychological trauma of the patient and family

**Recommendation:** The insistence of 'user fee' and 'deposits' should be waived in such cases. The availability of BPL cards should be improved, so that people like Mr. V and migrant labour have access to them and through them to the needed healthcare.



## STUDY ON IPP VIII CENTER – KORAMANGALA

### Back ground

Koramangala slum is one of the biggest slums in Bangalore. More than 70,000 people are living in this slum. More than 10 Non-Governmental organizations are working in this slum for these people's development. This shows the status, need of the koramangala area people and the extent of the area. One IPP-VIII health center is located inside the slum. The Center is situated in a strategic place; from center the peripheral point of the target area is one Kilometer far away from the center. In Jansunwai, which is going to be held in koramangala slum with officials and people, the denial of health care testimonies and the status of this area health center will be presented. For this purpose S.D.Rajer.diran, member, board of visitor of BMP and Community Health Cell team and Ameer khan .K, fellow in Community Health Cell visited this health center on 20/07/04 and 03/08/04. They met the health center staff and documented the current status of the health center.

### Purpose of the Visit

Jan Swasthya Abhiyan (India chapter of People's Health Movement) has organized a country wide public hearing along with NHRC. The theme for the public hearing is 'Denial of health care'. This campaign is part of the **Right To Health Care (RTHC)** campaign, initiated by Jan Swasthya Abhiyan. Joining in the National movement the NGOs working in the Koramangala Slum decided to conduct public hearing for Bangalore slums. The purpose of study about IPP VIII center is to contribute to this campaign.

### Need of the Health center

In this biggest slum there is no hospital (includes private hospitals) other than this IPP –VIII health center. In the slum 4 clinics are run in the daytime by non-qualified persons and one clinic in the evening by a qualified allopathic medical practitioner. Due to this reality Koramangala people are much dependant on this health center. For this locality people this health center is the first contact point and for any emergency these people have to first step into this health center. For any kind of Government initiatives in preventive, promotive and curative health care this is the only government institution as a medium for intervention.

### Expected Services from IPP VIII Health center

1. RCH/Antenatal services / Post natal services
2. Family Welfare services like Copper 'T', Oral Pills & condoms
3. Immunization services
4. Outreach programmer

5. School Health Services
6. Awareness Programme
  - Environmental Health
  - Nutrition / Breast feeding
  - Epidemic diseases
  - Gastro entities
  - Malaria, Tuberculosis
  - HIV / AIDS
7. RNTCP
8. Referral Services
9. IEC / Counseling
10. Camps for HIV/ Eye Defects / Cancer Detection, etc.
11. Minimum Laboratory services
12. Family Health Awareness Campaign for HIV / AIDS.

#### Services Available in the IPP-VIII Center- Koramangala

This information was elicited from the health center staff.

1. Ante - natal care, post natal care for the pregnant women, includes the medical care and lab medical investigations. Family welfare Services like Copper 'T', Oral Pills & condoms are available in this center.
2. Immunization services to the Children.
3. Regular medical check ups (once in a year) for school going children with immunization program. For this year the center has not done the program and they don't have planned to do at that time of visiting.
4. Referral services. But this center is not provided with ambulance, staff will refer the patients to the Austin town maternity home and other hospitals.
5. Services for TB patients.
6. Minimum laboratory services are available in this center like Urine test for Pregnancy confirmation, blood test for hemoglobin, and blood group identification by the laboratory technician from Austin town maternity home. But due to the lack of lab technician the tests are not done for more than 3 months. (Lab technician went on maternity leave). So, all the patients are referred to Austin town maternity home for these tests, which is located at one - and- a half kilo meter away from this center.
7. Apart from these services center has provided assistance and space for the health camps (for instance, in July month Jain Mahaveer hospital conducted surgical health camp in the premises of the center with the help of the staff) and other health related programs.



8. The last family health awareness camp (STD identification camp for Ladies) was done on August 2003.

All the above services are provided at free of cost. For lab services user fees are collecting. (Information about the User fees is given separately)

#### Services not available in the center

1. This center had nutrition promotion program many years ago. now this center is not having any nutrition promotion program.
2. This center is not equipped to provide treatment for any type of minor ailments.
3. Neither the health center staff got any training on environmental and sanitation management nor the center have program on environment and sanitation.
4. The center did not form any Social Health and Environment (SHE) clubs.
5. Though the center is formed for preventive and promotive care now-a-days center did not involve with any kind of awareness program.
6. One of the responsibilities of the center is referral service it does not have ambulance.
7. Center does not provide any counseling services and IEC activities.
8. Center is not equipped for conducting camp for identifying eye defect and cancer detection.
9. The previous doctor was doing Medical Termination Practices services. The in charge doctor is not showing interest to do MTP, and the reason they said was, they are not provided with any emergency medicine and services. So, they don't want to take any kind of risk.

#### Poor Utilisation

The out patient register shows very small numbers of people were accessing the facilities provided in this center (population of this slum is more than 70,000).

#### Information gathered on 20<sup>th</sup> July 2004; Number of users : OPD

- |                 |   |
|-----------------|---|
| <b>20/07/04</b> | -None of the ANC & PNC patients were treated (All the ANC &PNC patients were asked to come on Thursday because the doctor went on leave). 25 general patients are treated by ANM. |
| <b>19/07/04</b> | -Eight patients   |
| <b>18/07/04</b> | -Sunday   |
| <b>17/07/04</b> | -32 patients  |
| <b>16/07/04</b> | -17 patients  |



15/07/04 -18 patients

Information gathered during on 3<sup>rd</sup> August 2004; Number of users: OPD

26/07/04 - 27 general patients. All the ANC patients were sent back due to the non-availability of the doctor.  
 27/07/04 -19 general patients  
 28/07/04 -No patients  
 29/07/04 -30 patients  
 30/07/04 -5 patients

All the general patients are looked after by the ANM. Through the dialogue with her we were able to understand that most of these patients are given only paracetamol tablets.

Allotted staff member for the center

Lady Medical Officer -1  
 Lady Health Visitor -1  
 ANM - 3  
 Link Workers -10  
 Peons - 3

One Pourakarmika and one helper is deputed from Bangalore Mahanagarapalike

Availability of staff member

**1. Lady Medical Officer**

One lady doctor was appointed. Now she is on maternity leave. Instead of her one doctor was deputed to this center. Both the days of the visit, the doctor was not available. She was on casual leave. Due to the doctor's non availability, center is not able to do its duty. All the ANC patients were not treated for long. No drugs requirement was sent from the center. All the patients were referred to the other centers.

**2. Lady Health Visitor**

One lady health visitor was appointed; both days of the visit, she was not available in the center.

**3. Junior health assistants / ANM**

Two junior health assistants were appointed: one has gone on maternity leave and no one is deputed on her place, one post is yet to be filled. Both the days we were able to meet the ANM present.

**4. Pourakarmika**

One Pourakarmika was available in this center while we visited.

**5. Helper**

One helper is available in this center while we visited.

**6. Lab technician**

One lab technician will come once in a week from Austin Town Maternity home. Now she is in maternity leave.

**7. Peon**

Three peons were appointed for this center. When we visited first time to this center, both the peons were not available, while at the second time one peon was available. Staff said that, one peon is always irregular and nobody is able to control him including the doctor.

One post is vacant.

**9. Link worker**

This center had link workers at the time of running of the center under IPP-VIII scheme. As soon as that scheme period was over, the link worker concept was stopped.

**Infrastructure**

This government building is provided with regular electric supply, water supply, autoclave facilities, refrigerators and toilet facilities. When we visited the center, inside of the center premises was clean and maintained properly.

Between the center compound wall and the building there was lot of bushes, People used the open place as lavatory. Health center wastes are burned in one corner of the building. The drainage was fully blocked. Health center is affected with severe water scarcity. There is no bore well in the center. The center has to meet its water need through the corporation water supply. There is an over head tank but the tank is not capable of storing the water. Toilets are not in useable condition due to the non-availability of water. There is no drinking water supply too. There are no drainage or rain water pipes and drainage tank iron covers. It is probably stolen and not replaced. All the window glasses were broken.

**Investigation facilities**

Health center is providing investigations facilities for urine test for pregnancy confirmation and blood test for Hemoglobin, blood group identification and VDRL test. But due to the non-availability of the lab technician from last 3 months there is no test is done. Patients are referred to Austin town maternity home for the blood and urine test.

For Urine test (User fees) - Rs. 10

For Blood test (User fees) - Rs. 10

**Availability of medicines**

Health center is supplied with anti rabies medicine, drugs for TB, antibiotics and other drugs for the services that they offer. Medicines for ear and eye infection are not available. The health center offers temporary family



planning services through issuing condom, pills and providing copper – T facilities. List of the medicines available at the center on the day of visit is enclosed.

### **Suggestions for improvement (Staff's View)**

When staff were asked to give suggestions to improve the health center, they are able to tell us the need of the link worker and big walls to prevent the people coming into the premises in order to keep the premises clean.

### **Community's view**

There is strong dissatisfaction among the people about this center. They said that, by 12 noon they would not get treatment from this center (The working time of the O.P unit is 9.a.m to 1.p.m). Usually they will get treatment only after waiting long time. Two pregnant mothers complained that one day they waited more than two hours. When they were waiting staff do not look after any other patients too, they added. Some gave five to ten rupees for injection. All of them are not satisfied with the way they are treated in the center. As a whole, there is no surprise that the center does not get any co-operation from the people.

### **Visitor's Observations**

- Though the center's doctor is on leave, the ANM seems to be committed to run the center as much as she can.
- The surroundings of the health center are in dreadful condition; it is stinking and people are using the place as toilets.
- Two men were lying besides the building and playing cards at the time we visited.
- The behavior of the peon and inability to control him seems to be because of some vested interest of the authorities on him. So, the burden of work is shared by the other staff.
- There is no community participation in the center's activities.
- There is no citizen's or patient's charter available.

### **Denial of Health care**

Antenatal care denied to those who came to the centre as also other health care, because of absence of medical officer. No laboratory test because of absence of laboratory technician. No school health program. Poor environment and no water supply.



### Consequences

Non – utilization of services, dissatisfaction with the services and non co-operation with the centre.

### Suggestions

- Doctor should be available on all the days and the center should create confidence among the people about the services and the doctor's availability.
- The link worker concept would be useful to provide effective services to this big slum.
- Developing proper relationship between the center and the Community is very important for the smooth functioning of this center.

## Study on Austin Town Maternity Home

Date of Visit: 12-07-2004 & 16-08-2004

Austin Town Maternity Home is easily accessible for people belonging to Jayaraj Nagar, Koramangala, Vivek Nagar and Neelachandra area. In these areas the majority of the population belongs to lower stratum of society economically. It is not easy for them to pay 5 to 6 thousand rupees for a normal delivery in a private hospital. (The nearest private hospital in this area is St. Philominas Hospital. Here the patient has to pay 5 to 6 thousand rupees for a normal delivery). So, the people need and depend on the maternity home for deliveries and other health care services.

**The services offered at the above centre are as follows.**

### Out patient

Treatment of minor ailments, immunization for women and children, antenatal and post natal care for women.

### In patient

1. Deliveries
2. Tubectomies (Every Wednesday)
3. Cesarean sections and Hysterectomies, where indicated.

### **Personnel allotted for maternity home**

- One doctor (gynecologist)
- One pediatrician for two maternity homes
- Four staff nurses
- Three ayahs
- Three pourakarmikas
- Five peons
- One Lab technician
- Second division clerk
- One Dhobi

### **Persons available in this maternity home**

#### Doctors

Dr. Shobha is the Lady Medical Officer. She is available in the centre from 9.00 am to 1.00 pm (duty hours are from 9.00am to 4.00 pm). In addition a Paediatrician is also available. In their absence in case of an emergency a corporation doctor (Dr. Siddappaji, who work in an other corporation hospital) who resides nearby is called.

#### Staff Nurses

Two staff nurses are on duty while two posts are vacant. Among the three posts of ANMs two are filled.

In addition to the above the following personnel work at this centre.

Lab Technician -1 (In charge available on Mon and Fri from 9.00 am to 1.00 pm. Regular Technician is on Maternity leave)

Pourakarmikas - While there are three posts of Pourakarmikas only one was available on duty



- First Division Clerk- 1 (The post is vacant for almost 5-6 years)  
 Second Division Clerk-2 (One is deputed to DHO Malleswaram and another works for 4 hrs here and 4 hrs at another centre)  
 Aayas-3 -Three Aayas are available in the home  
 Dhobi-1 - One dhobi is available in the home  
 Peon - Three peons are available in the home and Two posts are yet to be filled.

The peon whom we met stated that the deliveries were conducted by the staff nurse herself (We are not sure whether this was in the presence or absence of the doctor)

### Infrastructure

The centre operates out of a corporation building. Regular water supply and electricity is available. The building suffers from leakage. Due to this, the plaster has started to peel off from the roof and the walls. The toilets are in a very dirty condition and in one of them the taps were leaking. The numbers of beds available are thirty (**The allotted beds strength is 34**) and all of them seemed to be in a usable condition. The lockers provided for the inpatients were in a rusted and dirty condition. While the Labour Room was in a working condition, the Labour Cot had begun to rust and the rubber sheets used were in a very bad (unhygienic) state. The staff explained there was a shortage in the supply of these rubber sheets. The Garbage bin in the Maternity ward was full and not emptied. Hot water provided for the patients was very little and only in the mornings. The inpatients said that clean drinking water was not available at the centre and hence they preferred to bring water from their homes.

When we had a look at the registers we found something interesting. On certain days (4-5 in a month) a large number of outpatients had come to the Maternity Home whereas on other days the number dwindled to a handful. The Staff nurse with whom we interacted had no explanation for this surprising phenomenon. We were left wondering whether it could be because of the availability of the doctor only on those days for outpatient services.

### Service Charges

According to the staff present the following were the services that were charged,

- Lab Tests Rs. 10/-
- MTPs Rs. 100/- ( these are the actual amount fixed by the corporation)

All other services were offered free of charge.

However on enquiry among the inpatients one of them told us that they had to pay money for the delivery that was conducted there. Beyond this they were not willing to divulge any information as to how much they had to pay.

### Access the center by the people

While visit the center on 16<sup>th</sup> August the following details were collected.

From 9/08/2004 to 13/08/2004 the following number of people access different services;

OPD services

-81



No. of ANC patients	-78
No. of In patients	-18
No. of deliveries	-16 (The baby delivered with highest weight is 4.4 Kgs on 9 <sup>th</sup> August 2004)
No. of referrals	- 03
NO. of MTP services	- 03
No. of IUD services	- 08
NO. of TO services	-2

Apart from the above services immunization services were also given.

### **This is being filed after a visit to the Community**

While visiting the maternity home the question as to why only a minimum number of people were using this maternity home arose. This was in spite of the services being provided free. Neither the doctor nor any of the other staff of this maternity home had an answer for this question. The only answer the doctor had was that the patients were not staying in the home for more than a day after delivery. Hence, beds were always vacant. This points to the fact that the patients are very poor and even after delivering a child, they couldn't take rest in the hospital. They had to go back to earn money for their daily living. So, obviously poor people should show much interest in making use of the services, but the picture is just opposite.

To know this on 13<sup>th</sup> July 2004 Mr.S.D.Rajendiran, member board of visitors of Bangalore Mahanagara Palike health centers and community health cell team and Ameerkhan.K. Fellow in community health cell were visited Jayaraj Nagar, which is besides the maternity home. Four women ( Ms.D, Ms.I, Ms.S, Ms.Sa) were selected randomly and interviewed, Some of the comments collected from them are,

- A pregnant women says positively that she is going regularly for Ante Natal Check up, she is getting folic acid tablets and checking at free of cost, but she is receiving treatment for maximum of two minutes, where as the pregnant women has to get blood test, urine test every month, detailed advice from the doctor about nutrition, anemia, sexual relationship with husband, bleeding and other problems are missing.
- The other woman who delivered a male baby one year ago at Indira nagar hospital is not using the home for her child immunization but all the other women are accessing the facility of immunization from maternity home.

- Most of the women said most of the time they have to buy medicine and disposable needles from the medical shop. There is a strong feeling among them that the staff are not showing even a small amount of concern.
- One lady got a slap from the staff nurse at the time of delivery, when she was crying due to the labor pain.
- A woman who stayed for two weeks in the home for delivery and tubectomy was given one bed sheet for the whole period of her stay. This has happened even though there is a dhobi appointed especially for this home.

### User Fee in the Maternity Home

This information has been collected from the women who were interviewed. The amount they paid for accessing the services in the home are as follows,

Services	Amount Paid by the Patients (In Rs.)	Government Fixed charge (In Rs.)
1. Male child delivery	500	Nil
2. Female child delivery	300 to 400	Nil
3. MTP	400	100
4. Tubectomy	400	Nil
5. Blood test	20	10
6. Urine test	20	10
7. Polio drops	2	Nil
8. Any Injection (If the patient doesn't carry any disposable needles)	5	Nil

Apart from these while the patients are discharged from the maternity home they have to pay to each hospital staff about 25 to 30 rupees.

### Suggestions for Improvement (Staff's view)

On being asked if there if they had any suggestions to offer for improving the service at the Maternity Home, the staff who interacted with us said that availability of more medicines (antibiotics), and equipment (Warmer), a contract dhobi (as the government appointed dhobi was not doing the work properly). Availability of rubber sheets and repairing the leakages would help them to serve the people better.



### Visitor's observation and suggestions

After many interactions with the Dr. Shoba, we felt that she is keen to improve the quality of the services provided in this home. The opinion has been further strengthened at that time of second visit to the maternity home on 9<sup>th</sup> August 2004. The water filters are cleaned and filled with water. Bed sheets are washed and dried under the sunlight and home is maintained as dirty free environment.

People who are on duty are not available. Vacant posts need to be filled up. It looks like an abandoned hose and three dogs were making the OPD department their resting place. It seems that the people coming to this place are coming there only when they have no other alternatives.

Tough the Maternity Home has a very big infrastructure: the number of patients making use of it is very low. It could be because of the patients are provide only a room and a trained birth attendant. There is no facility for a caesarian delivery. The patients also have to pay for a delivery in spite of the services being free (We arrived to this conclusion after met the community). On the whole they don't seem to be getting many benefits and hence they prefer to pay and make use of private nursing homes. The Lady Medical Officer seems to be unavailable and probably it could be one of the reasons why the poor people are staying away.

The Maternity Home we visited was an example of the extent to which the Government Health Sector could do for the marginalized as well as its failure to rise up to the situation. With the infrastructure and facilities available at this centre they could very well cater to the needs of the poor women from the surrounding slums. It had/has the potential to develop into a centre for women run by the Government. Instead of providing infrastructure, I feel the need is a change in the attitude of the service providers. be it the doctor, staff nurse or anyone who works here. Unless the staff have the right motivation things will continue to be the same. The tap that needs to be turned off is the corruption and mindset that is present among some of the Government employees that they are Lords and Masters and others have to pay respect and adoration to them. Unless they have a sea change in their minds and hearts and decided to serve the people nothing much can be done. We may provide any number of material resources but the condition will continue to be the same.

### Actions to be taken

1. Create awareness among people about the services of the maternity home.
2. A Monitoring system by the people themselves should be created.
3. Each centre should have a governing body comprising of the local people that includes the corporators, ward member and leaders of various people's organization working in that area.
4. The Corporation should rank the maternity and medical centers and arrangement should be made to give awards for the people who render good service to boost their morale.
5. According to the people the staff should immediately stop of getting unofficial money for deliveries.



## Campaign and Struggle Against Acid Attacks on Women (CSAAAW)

No. LF 17 6, BDA Flat, Opp. MICO layout Police Station, B.T.M. Layout, Bangalore – 560 078.

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*"This ear is burnt completely. I can hear in only one ear now. Even this eye is partially burnt. I can't see very clearly. My eyelids were also completely burnt. They were replanted four times with skin from elsewhere. My lips were also burnt and I had to have several operations to get it reconstructed. The skin around my neck had also tightened, with my head being pulled to one side. Another four operations to straighten my neck, but even now without this belt, the skin pulls my head to one side. When that happens, the skin around my lips and lower eyelids are also pulled downwards. That is why I have to wear this collar all the time."*

*-Shanthi M.G., Mysore District, Karnataka*

Following 14 years of sustained domestic violence, Shanthi was attacked by her husband in 2001 with concentrated sulphuric acid at her residence in Periyapatna Taluk, Mysore District, Karnataka. Immediately following the attack, Shanthi was taken to the taluk level government hospital in Periyapatna and shifted from there after the medical staff at the hospital admitted to their inability to treat Shanthi. She was taken to the K.R. Govt. Hospital in Mysore where she remained for the next 19 days.

*"They did not give me any first aid, just wiped my face, my eyes were fully red and my face was burnt black. They gave me IV fluids for the next nineteen days. They didn't do anything else. They didn't dress it or apply any ointment. Yes, this was K.R. Govt. Hospital."*

Mother of two children, 32-year-old Shanthi today is struggling to live by herself and bring her two children up. Her problems both physical and psychological have been compounded by acute lack of medical attention immediately following her attack. Several doctors have confirmed that not receiving appropriate immediate medical attention has in fact worsened her condition. Growing medical costs and lack of adequate facilities required for functional plastic surgery in public health institutions has meant that Shanthi today struggles to live. Shanthi, however considers herself lucky. Four other acid attack survivors across Karnataka, all of them women, have in fact succumbed to their injuries.

The initial fact finding reports from Campaign and Struggle Against Acid Attacks on Women (CSAAAW), a coalition comprising several organisations, academicians, lawyers, journalists, women's rights activists, reveal that there are 35 women who have been attacked by acid in the past ten years across Karnataka. CSAAAW activists categorically maintain that this number is only an indicator, there are / were many others who have been silenced by society and are unwilling to come out in the open with the horrifying facial distortions.

CSAAAW is committed to action on two fronts – seeking legal and socio-economic justice for the survivors and more importantly to fight for prevention of such attacks on women. "Acid attacks is only a more violent extension of the existing crimes on women like rape, dowry harassment, sexual harassment by the patriarchal society.

### Testimony of MR's mother

Ms MR aged 14 years, daughter of Mr. M from Koramangala slum, Bangalore -560 042 went to Dr. Sumangala Hiremath of Vibhava Clinic (270, 5<sup>th</sup> Main, Ambedkar Nagar Koramangala III stage Bangalore- 560 042) with complaints of vomiting and diarrhoea on 1<sup>st</sup> June 2004 at around 5.00 pm. MR's mother was interviewed by S.J.Chander of Community Health Cell on 4.8.2004 at about 3.00 pm and on 12<sup>th</sup> August 2004 around the same time.

MR's was busy the whole day washing clothes and cleaning the house. At about 3.45 pm she complained of stomach pain and had diarrhoea. The stool was like water and the quantity was about 2 liters. After 15 minutes she vomited. She complained to her mother that all that she had eaten in the morning (chithranna) was vomited. After vomiting she complained of pain all over her body (she explained the pain as pulling)

At 5 pm her mother took her to Vaibhav Clinic. The mother said that though she did not have good report about the doctor at Vaibhav Clinic, she chose to go to her because as she noticed as she was passing by that the clinic was empty. She was not sure if the other clinic near by would be free. As soon as MR was taken to the clinic the doctor, without examining MR, started her on IV fluids. Four bottles of IV fluids were given before 9.00 pm and five injections were given through the IV fluid bottles. The doctor promised that the girl would be all right.

In the meantime MR's mother called up the father who is a daily wage earner at city market and informed him that their daughter was very ill and asked him to bring some money immediately. The father arrived at about 5.30 pm with Rs. 500 which he borrowed from his employer. He sent his wife home and stayed with his daughter in the clinic. At about 9.00 pm when it was time for the doctor to close the clinic, the doctor demanded Rs.500 be paid to her for consultation and medicines. He replied that he did not have that much money and said he would pay Rs.300. She did not agree and scolded him. She insisted that he pay Rs. 500. The father had to pay all the money that he had borrowed and took the daughter home on his shoulder.

The mother said that, as soon as her daughter was brought home, she made the bed in the room (the only small room the house has). Before the bed could be made she was asked to stand for few minutes, while standing she again passed watery stools. *"Seeing this I shouted what is this even after getting the treatment from the doctor and paying so much money she is having diarrhoea"*. Her husband told her to be quiet.



While sending MR home, the doctor told them to give 4 tablets at 1.00 am and another dose at 3.00 am. She also told them to give her hot coffee and keep her warm. As she could not eat anything, they continued give her glucose water, but she continued having watery stools. The mother made a sanitary pad of cloths and put it on her. She kept checking if the pad was wet. Every time it was wet she cleaned and changed then she does not know how many times she had watery stools. At 1.00 am four tablets were given, MR with difficulty opened the mouth and swallowed the tablets. The mother sat next to her observing the daughter. She found her daughter restless, not sleeping. At about 3.00 am they gave the second dose of tablets. This time she took the tablet with difficulty. She appeared very tired to the mother. The mother noticed that few minutes after taking the tablets, her body movements almost stopped and she appeared to be in deep sleep. She poured little glucose water but the daughter did not drink. *"I thought the tablets were working and she is sleeping. I was checking at her nostrils if she was breathing"*. At 5.00 am when she tried calling her daughter by name she did not respond. The mother said she held a candle in one hand and held her daughter in her arms and started praying, asking Mother Mary to spare her life. Her daughter's body became chill and she stopped responding. Her husband told her that their daughter is no more. As soon as she heard this she fainted. She recouped after few minutes. By the time she gained consciousness it was about 5.30 am. The father took his daughter in an auto to isolation hospital in Indirinagar. She said the staff at the hospital checked and said *"She had died half an hour ago. Why have you brought her here?"*

The mother said *"The doctor could have told us that she would not be able to manage my daughter. We would have gone to another doctor, or she should have guided us to another hospital or doctor"* The mother said the lady doctor's husband is also a doctor and he was also with her when her daughter was treated. **In front of the clinic where the address is mentioned there is a board carrying the following information "Vaibhav Clinic" Dr. Sumangala Hiremath, clinic timing. No degree of the doctor was mentioned on the board.**

**Denial of health care:** Incompetent and negligent care; 'doctor' not qualified to practice allopathic medicine.

Not informing patient and guardian/relative of the condition of the patient.

**Consequences:** Death of the patient; which may have been avoidable with proper care.



### Case Study of Mrs. S

Mrs. S. 23 years old was admitted to Jagjeevanram Nagar Maternity Home in October 2003 for delivery. There was no doctor on call and she was attended by the attendants and duty nurses. Two pain killers were given they had to be bought from outside for Rs.120/-. Later when she developed severe labour pain, the night duty nurses were called. But they were asleep and refused to attend to Mrs. S. The baby was delivered with the help of the attendants. The baby slipped from the delivery table and fell in the bucket at the foot of the table. The baby died. To add further misery, her husband had suffered an accident during the wife's pregnancy and it has been confirmed that he will not be able to produce any more children.

The deficiencies were:

- a. Lack of attention.
- b. Gross negligence on the part of the nurses and attendants
- c. No medical care on time
- d. Doctor not informed
- e. Patient had to purchase medicines from outside.

This resulted in

- a. The baby's death
- b. Mental trauma to the mother due to loss of the child.
- c. Financial loss
- d. Trauma suffered by family as they are unable to have another child.

## Testimony of Mrs. G

Smt. G, aged 58 years residing in Anandapuram slum was being treated in Kidwai Memorial Institute of Oncology for treatment of cancer of the esophagus. She went there five days in a week for the past three months. The last visit that she made to KMIO was on 19<sup>th</sup> July 2004.

Initially she paid Rs. 50 for the registration. After that, for every visit she had to pay Rs.10 as a bribe to send her chart to the treatment room. Failing to pay Rs.10 would lead her to waiting for long hours. Many days, in order to avoid paying Rs.10, she had brought the chart back home and took the chart directly to the treatment room the next day. For IV drugs she had paid Rs.400 and administering charges for the person who administered them was Rs 110.

Every time when she went for radiation therapy, the nurse told her to find herself an empty bed and lie down. " *Many days for putting Intra Venous line they allowed the trainee nurses, they could not do it properly, as a result I suffered with swollen hand (rattham kattipochu) veins with blood clot.*"

She said the doctor who gave her the radiation therapy, on seeing her wearing mangalsuthra (*thaali*) he was irritated and told her " *It is only a traditional symbol, Remove it, Do you know the disease you got is a dying disease, Why do you need all these ornaments.*"

The person who gave the radiation demanded Rs.100. He shared the amount with the other staff who were with him. The next time when she went she did not have money so she offered to give him the sarees tied to the statue of mother Mary. The staff took two such sarees from her.

She said the person who did the X-Ray too did not talk to her with respect. He asked her to buy her powder for Rs.90 from a private medical store. She had to pay Rs. 20 for the auto for transportation to get the powder. The powder is given orally before taking the X-Ray. When she brought the powder, and consumed it she was asked to go. The X-ray technician

demanded money. She gave him Rs.10. She said she saw using the powder that she brought for other patients and saw him taking Rs.100 from them. During the last stages of her treatment she said she was given radiation without a shield being put around the unaffected area. *" I felt the burning so severe and I had boils all around the area"*

She had to get her blood test done twice in two weeks. She paid Rs.275 for the blood test. The next time the blood test was asked she did not have the money. The doctor told her to get it done from any hospital. Since her husband was an ex army man, she went to the army hospital and got it done. The doctor at the army hospital had given her a prescription but the person at the drug store did not give her the drugs. She said she went for about 25 days for radiation. The doctor would come at 12.15 p.m. and go away at 1.00 p.m. The doctor came back later some time after 4.00 pm *" Some times I had to wait from 9.00 am to 4.30 p.m. to meet the doctor."*

She said the total amount that she spent during the past three months would be about Rs. 25,000, which includes money for medicines, bribes, and travel costs. *" In spite of the fact that I was introduced to KMIO by an organization known to them and I am a social worker I had to go through so much of sufferings, How about people who do not know anything".* She said she liked the doctor, Dr. Govind Babu, who treated her well. There was an attender who told her not to pay money to any body for anything.

**Denial of health care:** Bribery, Demand of Payment, when it should have been free.

Disrespect; Psychological trauma.

Incompetent/negligent care

**Consequences:** excessive expenditure; loss of time, waiting the doctor



**Case Study of Sonnenahalli PHC, Vivekanagar, Bangalore**

Population: 22,000

1. Male Multipurpose worker is not available.
2. Disposable Delivery kit is not available.
3. No specific date and time of the visiting Doctor.
4. No prior intimation regarding doctor's visit to residents of the locality.
5. Traditional / trained dais do not get any co-operation from ANM while conducting home delivery.
6. There is no supply of disposable delivery kits to the TBA (trained birth attendant) by the PHC
7. Emergency obstetric care is not available round the clock.
8. No ANM or trained dais accompany the women in labour while shifting them the from PHC to other referral hospital for further treatment.
9. Facility of blood smear examination is not available to confirm Malaria.

**Survey form:** VHAK, Co-op Aid Trust

## User Fees and Denial Of Healthcare

### Introduction

The ingestion of alcoholic beverages for their so-called "enjoyable" effects is a very common phenomenon especially among youngsters. Later on, it leads to chronic abuse of alcohol. An enormous amount of damage can be attributed directly to alcohol abuse. It results in the ruin of the physical, social and mental health of individuals and families, besides eating into the family income of the drinkers. Alcohol also contributes to other problems; an estimated 25% to 40% of hospital patients have problems caused by, or recovery delayed by alcohol abuse (Maltzman 2000).

Alcoholism is a chronic progressive illness, which manifests itself as a behaviour disorder. It is characterized by repeated and excessive drinking of alcohol beverages. If not treated in time, an alcoholic can die of medical complications like gastro intestinal, liver, pancreas, central nervous system and cardiovascular system problems, accidents and even to suicide. The treatment consists of detoxification, counselling after care and rehabilitation.

### Case Study

Das (name changed to conceal his identity) was denied access to de-addiction treatment at National Institute of Mental Health and Neuro Sciences, Bangalore.

Das is a 54 years old male, who currently resides in a registered Sudhamanagar slum (close to Hindustan Aeronauticals Limited, Bangalore). As the result of numerous years of excessive drinking, he has severe physical, social and economic problems. Das is a construction mason whose job, seasonal. Now, a days he works for the sake of fulfilling his alcohol needs. He frequently falls sick and eats at the most once a day. He starts drinking soon after he wakes up. Around 5 a.m., he walks directly to the alcohol retailers and consumes one quarter i.e., 180 ml of brandy or whisky (Rs 28) to help his hangover. If there is no problem in the working place, he consumes another quarter at noon and repeats this in the evening and at night. He earns Rs.150/- per day and spends all the money on alcohol. If he has no money he tries his best to get it from his wife, who is the breadwinner of the family she earns money doing domestic work. His wife and children are psychologically affected. His wife says that she finds it difficult to provide one meal a day for the family. Their only 14 year old son stopped going to school due to poverty. Social stigma makes them keep away from the community and their relatives. Now Das feels helpless, isolated by the community and has no plans for the future.



## Patient History

Das was the youngest child of eight children in a small farmer family in Mugaur, Villupuram district, TamilNadu. At the age of six, he was sent to Bangalore to live with his elder brother, who was doing plumbing work. His brother consumed alcohol each day in the evening. Sometimes he asked Das to get alcohol beverage from the shop. On Sundays, his brother used to drink toddy and offered toddy to Das a few times, saying that it was "good for health".

Thus he started to taste alcohol and whenever he went to the retail shop to get alcohol beverage for his brother, his thinking was "Why shouldn't I drink as well?" Day by day this urge was increasing with him and finally one evening he got courage, enough to by consuming 90 ml of Brandy. He felt good and thrilled. Slowly he started to drink twice in a week and it increased to a daily evening basis. At this stage his family became alert and arranged a marriage for him as a solution to this problem. After the marriage for two years he did not consume alcohol. When his wife was sent to her parent's place for the delivery of the first baby, he started to drink again. As a result, he was forced to move out from his brother's home. This was a very sorrowful matter to him and he started consuming alcohol even more (from morning to evening, i.e. morning 180 ml (quarter) afternoon one quarter and the same in the night). The heavy consumption continued through the following years.

Then, one day his teenage daughter disappeared; she ran away with a boy who lived in the nearby slum. It made him miserable and he started 'binge drinking'. (Psychologically daughters long for their father's love and affection. When they do not get this affection and love, they try to get it from others of the opposite sex. It happened to Das's daughter as well. At the age of 16, she eloped with the teenage boy.) Today, Das's health condition is very poor and he cannot live without alcohol. Delaying consumption also creates heavy withdrawal symptoms in him, which is an advanced or chronic stage of alcoholism.

When the social workers tried to motivate him to quit drinking, he never accepted that alcohol consumption was a problem. But at the sessions of the Alcohol Anonymous members sharing, he finally did accept that his drinking is a mistake and a problem, and he was willing to get treated.

## Denial of Health Care

Das went to NIMHANS on 17.5.03 to get the treatment. Since Das was a chronic alcoholic with severe withdrawal symptoms, he needed admission for treatment of his physical and psychological dependency. But he was denied the inpatient treatment, reason given being "no beds" in the de-addiction ward. A prescription for medicine was given to him. He was asked to come next week for inpatient treatment. When he went to NIMHANS the following week he was asked to deposit Rs.2,000/- for the



treatment. The World Bank's prescription of 'user fee method' was introduced at NIMHANS from this financial year. The policy of NIMHANS was that the patients submitting BPL (Below Poverty Line) card would get the treatment with a deposit of Rs.250/- and all others including the urban poor (migrants people) not holding BPL cards should pay for treatment, with a deposit of Rs.2000/-. Das could not deposit Rs.2000/- for the treatment. Since he did not have ration card even though he was living in one of the Bangalore slums and could not provide a BPL (yellow) card, health care was denied to him. Das is now suffering from fits due to his alcoholism, not being able to receive the treatment due to the 'user fee' method set in motion at Government Hospitals. He is miserable and sick. There is no health program or scheme to deal with this important and widespread public health problem. His wife is the main earner working as a domestic help in three houses. They have 3 children.

**Conclusion:** The urban population in the country especially slum dwellers, is very large. Alcoholism among them is also very significant. As a result of inward migration urban slums spring up without any infrastructure. Most of the slum dwellers do not have a BPL card. So, in the scenario of 'user fee' pay system in the Government hospital, **most of the slum dwellers are denied health care even though they have all the rights to get it**. Because Das could not pay, he returned home frustrated that he had gone to the hospital but **denied treatment**. He says that he has given up hope of getting treatment and is prepared to die.

## CASE PRESENTATION ON MENTAL HEALTH

## Issues:

1. Centralized Mental Health Care Eg. NIMHANS -KIMHS  
This does not help the poor especially the rural poor, as they don't have access to these facilities. The problem becomes even worse in the case of OPD patients as they are not able to come every month on the fixed day due to money and non availability of the care giver hence they miss their treatment get back to their previous state and lose trust in the medical profession
2. Stigma and Discrimination  
People are chained and locked in hospitals and care homes in all the 21 districts where Basic Needs operates.
3. Lack of Awareness about Mental Illness  
No public education or awareness programme even though the prevalence is around 10-15%
4. Lack of training for Medical Professionals  
Non-identification at an early stage leads to chronic illness and disability.
5. Non availability of trained personnel  
In Koppal district there is not a single qualified Govt. psychiatrist where many cases have been identified by Basic Needs
6. Non Availability of drugs  
  
In Karnataka there have been instances of doctors not indenting drugs for treatment of psychiatric patients. Recently there was a case of psychiatric drugs lying at the Central Stores getting expired without being supplied by the Govt. of Karnataka
7. Ignorance among Medical Professionals  
Another important issue is that the very curriculum for MBBS has the bare minimum on mental health. Plus interns are giving only 15 days of posting in a mental health facility and this is optional.
8. Physical & Sexual Abuse
9. Denial of Property rights

## A BRIEF NOTE ABOUT THE ORGANISATION

### Background

Basic Needs India was conceived of in 1999. Groundwork began in 2000 and the organization was registered as a Trust in March, 2001.

### Vision

Basic Needs seeks to satisfy the essential needs of all people with mental illness in India and to ensure that their basic rights are respected and fulfilled

### Coverage

Basic Needs works with partner organizations in parts of rural Tamil Nadu, Karnataka, Andhra Pradesh, Jharkhand and Bihar. They have started working in two districts of Kerala

### Methodology

1. Community Mental Health
2. Capacity Building
3. Sustainable Livelihoods
4. Research and Advocacy

(details of the above four are available in their booklet)

### Partner Organisations

1. NIMHANS Bangalore
2. KIMH Dharwar
3. Shristi Madurai
4. IMH Chennai

### Psychiatrists working with Basic Needs

#### Karnataka

- |                      |  |
|----------------------|--|
| 1. Dr. Kishore Kumar | NIMHANS                                |
| 2. Malli Patil       | Raichur Dist Hospital                  |
| 3. Dr. Ajay Kumar    | Koppal Distirct (Private Practitioner) |
| 4. Dr. Karur         | Medical Superintendent KIMH Dharwar    |

#### Tamil Nadu

- |                     |                                     |
|---------------------|-------------------------------------|
| 1. Dr. Anbarasu     | 'Banyan'                            |
| 2. Dr. Elangovan    | Thanjavur District Hospital         |
| 3. Dr. Radha Sekhar | Private Practitioner                |
| 4. SCARF            | (Schizophrenic Research Foundation) |

#### Andhra Pradesh

- |                     |                                 |
|---------------------|---------------------------------|
| 1. Dr. Vijaya Kumar | Anantpur (Private Practitioner) |
| 2. Mastan Valli     | District Hospital Anantpur      |



**Denial of Health Care in the PHCs of Hungund Taluk, Bagalkot District of the  
Karnataka state.**

Nature of problem-Denial of treatment:

- 1) Inaccessibility of PHC
- 2) Infectious diseases not treated
- 3) Immunization coverage incomplete

Type of Denial:

- 1) Treatment not given
- 2) Vaccinations not given due to inaccessibility of PHC.

Consequences:

- 1) Death
- 2) Financial Loss
- 3) Spread of chronic diseases like TB. children not vaccinated

Severity of the denial:

- 1) Serious

What is needed:

- 1) Re-structuring & re-distribution of their PHC
- 2) Upgrading the PHC staff.

An appeal to the NHRC by two villagers and their signatures. This will be submitted at the time of hearing.

**Denial of Health Care**

(Inaccessibility)

Denial of health care can occur in various forms. Denial of health care occurring in Hunagund taluka of Bagalkot district causes great inconvenience to the thousands of people and prevents them from getting the most necessary medical care. This is being brought to the kind attention of NHRC.

Kindly refer to the the attached map of Hunagunda taluka. There are four PHC'S at a distance of 3 k.m. from one another.

PHC HAVARAGI  
PHC MAROL  
PHC DHANNUR  
PHC TANGADAGI

- Villages of HAVARAGI PHC are 40-50kms away from HAVARAGI, but very near (2-10kms) to KARADI.
- Villages of KARADI PHC are 25-30kms away from KARADI.
- Villages of MAROL PHC are 30-40kms away from MAROL, but very near (2-10kms) to HUNAGUNDA General Hospital.
- Villages of DHANNUR PHC are 25-30kms away from DHANNUR, but nearer to AMINGADA.
- Villages are far away from PHC they belong to but nearer to other PHC'S.

This causes great inconvenience for people to go and get medical care from their PHC'S. They have to spend 30-50 rupees per person per visit on bus fare to attend to their PHC'S. It takes almost a full day for a person to come and go back to their village.

Meanwhile there are other PHC'S nearer to the PHC they belong to. People are often refused medical care on the grounds that they belong to other PHC'S.

People in the locality have tried various methods to convince the authorities to include them under nearest PHC'S.

Eg: 1) Hemavadagi:

Population – 687

PHC – HAVARAGI.

Distance from PHC – 45 kms.

Nearest PHC – KARADI.

Distance from the nearest PHC – 3kms.

2) Palathi:

Population – 600

PHC – HAVARAGI

Distance from PHC – 50kms.

Nearest PHC – KARADI

Distance form the nearest PHC – 2kms.

3) Amaravadi:

Population –

PHC – MAROL

Distance from PHC – 30kms.

Nearest PHC – HUNAGUND

Distance form the nearest PHC – 2kms.

4) Islampur:

Population – 693

PHC – HAVARAGI

Distance from PHC – 55kms.

Nearest PHC – KARADI

Distance form the nearest PHC – 10kms.

Therefore there is a need for reorganizing and redistributing PHC and their villages otherwise this leads to denial of health care.

### DENIAL OF HEALTH CARE

(Infectious Diseases untreated)

- 1) Name of the patient – Rajappa Amarappa Walikar,  
Age – 45 years  
Village – Amarawadagi.

He was suffering from pulmonary TB for 1 year. He was not able to come to the HAVARAGI PHC which is 50kms away, because of financial difficulties and geographical inaccessibility. People from these villages are denied treatment at KARADA (8kms away) Hence he couldn't get the treatment and ultimately he died. Many others are also facing same kind of problems since many years.

Because of long standing untreated illness like this many such communicable diseases are transmitted in communities.

- 2) Name of the patient – Amarayya .C. Math  
Age – 55 years.  
Village – Lavalasar.  
PHC – HAVARAGI.

He was diagnosed as having Pulmonary TB at district TB hospital, Bijapur. He was asked to go to the nearest PHC for treatment. He was unaware that to which PHC his village belongs to. One and half months passed before the treatment for TB was started.

- 3) Name of the patient – Chandravva  
Age – 60 years.  
Village – Palathi.  
PHC – HAVARAGI.

Having pulmonary TB since one and half years, she is not able to go to the PHC and get the treatment because of financial difficulty and geographical inaccessibility.

#### DENIAL OF HEALTH CARE (Immunization incomplete)

As the villages are far away (40-55 kms) from PHC'S, people are not coming to PHC for vaccinating their children and also there is inadequacy of health staff, hence majority of the children are not getting fully immunized. This amounts to denial of health care to the children.

Eg: 1) Dasabal Village:

Children born after 2000 : 44  
Children completely immunized : 4  
Percentage of immunization : 9 %

2) Amaravadagi:

Children born after 2000 : 79  
Children completely immunized : 14  
Percentage of immunization : 17.7%



## Kerala Health Profile

Indicator	Kerala	India	Source
Area (Sq. km)	38863	3166285	<sup>1</sup> Census 2001
Population	31841374	1026443540	Census 2001
Households	6595206	191963935	Census 2001
Sex Ratio			
General	1058	933	Census 2001
Child (0-6 yrs)	960	927	Census 2001
Growth Rate %			
Decadal (1991-2001)	9.4	21.3	Census 2001
Natural Growth Rate 2001	10.6	17.0	<sup>2</sup> SRS 2002
Life expectancy (years)			
Total	72.4		<sup>3</sup> Ker Eco 2003
Females	75.8		Ker Eco 2003
Males	69.3		Ker Eco 2003
Effective Literacy rates %			
Total	90.9	64.8	Census 2001
Females	87.7	53.6	Census 2001
Males	94.2	75.2	Census 2001
Birth Rate - 2001	17.2	25.4	SRS 2002
Death Rate - 2001	6.6	8.4	SRS 2002
Infant Mortality Rate -2001	11.0	66.0	SRS 2002
Maternal Mortality Rate 1998	.80	4.07	<sup>4</sup> SRS 2000
0-5 Mortality Rate	18.8	94.9	<sup>5</sup> NFHS-2
1-4 Mortality Rate	2.6	29.3	NFHS-2
Neonatal Mortality Rate	13.8	43.4	NFHS-2
Perinatal Mortality Rate	2.5	24.2	NFHS-2
Suicides per 1 lakh population per year	31.0	11.0	Econ Rev-03
People above 70 yrs of age %	4.95		Econ Rev-03
Childhood Malnutrition < 3 yrs %			NFHS-2
Weight for Age < -3 SD	4.7	18.0	NFHS-2
Weight for Age < -2 SD	26.9	47.0	NFHS-2
Height for Age < -3 SD	7.3	23.0	NFHS-2
Height for Age < -2 SD	21.9	45.5	NFHS-2
Weight for Height < -3 SD	0.7	2.8	NFHS-2
Weight for Height < -2 SD	11.1	15.5	NFHS-2

<sup>1</sup> Census of India 2001, Final Population Totals, India, State and Districts, Directorate of Census Operations, Kerala (2004)

<sup>2</sup> Sample Registration System Bulletin October-2002; Vol 36 no. 2; Registrar General, Govt of India

<sup>3</sup> Kerala Economy 2003; Department of Economics and Statistics, Kerala

<sup>4</sup> Sample Registration System April 2000; Vol 33, No. 1; Registrar General, Govt of India

<sup>5</sup> International Institute for Population Sciences (IIPS) and ORC Macro 2001; National Family Health Survey (NFHS-2), India 1998-99; Kerala, Mumbai IIPS.

Indicator	Kerala	India	Source
Anaemia 6-35 mths g <sup>th</sup> of Hb			NFHS-2
Total (< 11)	43.9	74.3	NFHS-2
Mild (> 10 < 11)	24.4	22.9	NFHS-2
Moderate (> 7 < 10)	18.9	45.9	NFHS-2
Severe (< 7)	0.5	5.4	NFHS-2
Married Women %			NFHS-2
Received ANC (% of mothers)	98.9	65.3	NFHS-2
Institutional deliveries	93.0	34.0	NFHS-2
Average Height in cm	152.6	151.2	NFHS-2
Height < 145 cm	8.8	13.2	NFHS-2
Nutritional status			
Average BMI	22.0	20.3	NFHS-2
Underweight (BMI < 18.5)%	18.7	35.8	NFHS-2
Overweight (BMI >25<30)%	20.6	10.6	NFHS-2
Obese (BMI >30)%	3.8	2.2	NFHS-2
Anemia (g% of Hb)			
Total (< 11)	22.7	51.8	NFHS-2
Mild (> 10 < 11)	19.5	35.0	NFHS-2
Moderate (> 7 < 10)	2.7	14.8	NFHS-2
Severe (< 7)	0.5	1.9	NFHS-2
BPL families (%)			
Total			
Rural	9.38	27.09	<sup>6</sup> NSSO 55 <sup>th</sup>
Urban	20.27	23.62	NSSO 55 <sup>th</sup>
ICDS units 2003	163	5652	

Infrastructure in Govt	Number	Percentage	Source
Total			
Institutions	2712	100	Econ Rev-03
Beds	50805	100	Econ Rev-03
Inpatients	1935696	100	Econ Rev-03
Outpatients	80940260	100	Econ Rev-03
Beds per 1 lakh population	160		Econ Rev-03
Allopathy			
Institutions	1310	48.3	Econ Rev-03
Beds	46224	91.0	Econ Rev-03
Inpatients	1842642	95.2	Econ Rev-03
Outpatients	39054674	48.3	Econ Rev-03

<sup>6</sup> National Sample Survey Organisation, 55<sup>th</sup> round (1999-2000)



Infrastructure in Govt	Number	Percentage	Source
Beds per 1 lakh population	145		Econ Rev-03
Ayurveda			
Institutions	845	31.2	Econ Rev-03
Beds	3411	6.7	Econ Rev-03
Inpatients	68450	3.5	Econ Rev-03
Outpatients	17976627	22.2	Econ Rev-03
Beds per 1 lakh population	10.6		Econ Rev-03
Homeopathy			
Institutions	557	20.5	Econ Rev-03
Beds	1170	2.3	Econ Rev-03
Inpatients	24604	1.3	Econ Rev-03
Outpatients	23908959	29.5	Econ Rev-03
Beds per 1 lakh population	4		Econ Rev-03
Allopathic Institutions	Number	Percentage	Econ Rev-03
Under DHS	1299		Econ Rev-03
Beds	37646	31.7	Econ Rev-03
Primary Health Centres	5060	13.4	Econ Rev-03
Comm. Health Centre	4726	12.6	Econ Rev-03
Hospitals	22636	60.1	Econ Rev-03
Other institutions	5224	13.9	Econ Rev-03
Personnel			
Total Doctors	3032		
Administrative position		1.7	Econ Rev-03
PHC doctors		29.0	Econ Rev-03
Secondary healthcare		69.3	Econ Rev-03
Specialists		58.0	Econ Rev-03
Dentists	60		Econ Rev-03
Senior Nurses	1416		Econ Rev-03
Junior Nurses	6165		Econ Rev-03
Lady Health Inspectors	872		Econ Rev-03
Pharmacists	1589		Econ Rev-03
JPHN	5272		Econ Rev-03
JHI	3017		Econ Rev-03
HI	811		Econ Rev-03
Primary Health Centres	933	72.0	Econ Rev-03
Community Health Centres	115	9.0	Econ Rev-03
Hospitals	130	10.0	Econ Rev-03
Dispensaries and others	121	9.0	Econ Rev-03
Subcentres	5094		Econ Rev-03
Medical colleges institutions	11		Econ Rev-03
Beds	8578	7.2	Econ Rev-03



Infrastructure in Govt	Number	Percentage	Source
Co-operative Hospitals	69		Econ Rev-03
Beds	3306	2.8	Econ Rev-03
E.S.I Hospitals	12		Econ Rev-03
Beds	1113	0.9	Econ Rev-03
Regional Cancer Centre	1		Econ Rev-03
Beds	320	0.3	Econ Rev-03
Sree Chitra Institute of Medical Science and Technology	1		Econ Rev-03
Beds	217	0.2	Econ Rev-03
Private Sector	4288		Econ Rev-03
Beds	67517	56.9	Econ Rev-03
Total	5681		Econ Rev-03
Beds	118697	100.0	Econ Rev-03

#### Health Personnel (Jan 2001)

Registered Doctors			
Allopathy	29656		<sup>7</sup> Cyber journal
Ayurveda	7356		Cyber journal
Homeopathy	6704		Cyber journal
Siddha	135		Cyber journal
Unani	5		Cyber journal
Dental	3776		Cyber journal
Nurses	60760		Cyber journal
ANM/ JPHN	12907		Cyber journal
Dental Mechanics	245		Cyber journal
Dental Hygienists	242		Cyber journal

Immunization coverage %	2001-02	2002-03	
BCG	103.8	103.0	Econ Rev-03
Measles	86.2	90.6	Econ Rev-03
DPT	93.1	95.8	Econ Rev-03
Polio	92.8	95.3	Econ Rev-03
TT of Preg. Women	89.9	86.1	Econ Rev-03
TT for 5 year olds	93.9	89.2	Econ Rev-03
TT for 10 year olds	97.6	98.1	Econ Rev-03
TT for 16 year olds	96.5	95.0	Econ Rev-03

Public spending (% of GDP)	1980-81	1998-99	
Health	2.02	0.95	<sup>8</sup> NHDR-2001
Education	5.22	3.25	NHDR-2001
Development Index	1981	1991	

<sup>7</sup> [www.cyberjournal.org.in](http://www.cyberjournal.org.in)

<sup>8</sup> National Human Development Report 2001; Planning Commission, Government of India, March 2002

Public spending (% of GDP)	1980-81	1998-99	Source
Human Development Index	0.50	0.59	NHDR-2001
Human Poverty Index	32.1	19.93	NHDR-2001
Gender Disparity Index	0.87	0.82	NHDR-2001
<hr/>			
Prevalence of Diseases of Public Health Importance (per 1000)	2002	2003	
Leprosy	0.71	0.66	Econ Rev-03
Filaria	1.02	1.28	Econ Rev-03
Tuberculosis	1.2	0.70	Econ Rev-03
Acute Diarrheal diseases	17.63	16.96	Econ Rev-03
Pneumonia	0.66	0.60	Econ Rev-03
Enteric fever	0.23	0.26	Econ Rev-03
Measles	0.10	0.07	Econ Rev-03
Respiratory Infection	216.62	221.42	Econ Rev-03
Outbreaks in 2003	Number affected	Deaths	
Dengue	3332	66	Econ Rev-03
Leptospirosis	1343	96	Econ Rev-03
Diarrhoea including 39 cholera cases	463094	13	Econ Rev-03
HIV / AIDS (total till 2003)	1219	411	Econ Rev-03



**ELOOR CASE STUDY: GREENPEACE HEALTH STUDY REPORT IN AUG 2003****Testimonies:**

Name: P

Address: Eloor South.

As told by herself. It was in 1961 that her parents returned to their ancestral home in Eloor from Bombay. She was a student of class 1 then. The only factory in the area was FACT. She had no health problems whatsoever when she came here. It was their father's death that had brought them to Eloor where they had an own house and some property to call their own. When she was in class 8 there was a chlorine leak from the TCC factory. Recollecting memories of that day, she says she remembers running to school and falling faint in the school corridors. The school authorities admitted her in JNM hospital and she regained consciousness three days later. Her health woes have started ever since then. She gets breathing difficulty and bouts of unconsciousness whenever the fumes are very strong. Chronic Cough has been with her ever since then. She spends around 400 rupees every month on barely keeping away from the major bouts of breathlessness and cough. None of the doctors have conclusively told her that her health will see a fine day. Her husband too suffers from breathlessness.

Talking of her surroundings, she still can remember the number of domestic animals that were seen in and around Eloor in those days. She does not believe that the local community has benefited from all the factories. A few that got jobs carried on in their jobs and hence traditional livelihoods have totally been wiped out. The factories and the pollution have also led to a serious water shortage. The ground well in their house no longer can be used for the quality of water it has. But she cannot use the water supplied by the authorities for its chlorine content. So she manages with the well water available.

Factories have led to varied problems not to mention the spate of health complaints it has caused to the people living here. She wonders how she can inch forward her difficult life.

**Testimony of Parent about affected Children:**

Name of Child: IJT

Age: 2 years

Address: Eloor

As told by the father: It was in 1965 that the family settled down in Eloor. The wife's maternal home is in the district of Alleppey. They had a baby boy by tubular pregnancy the delivery of which was by caesarean section. The baby, IJT was diagnosed as 40% mentally retarded. Two years old now, he still has difficulty in walking. There are occasional attacks of fits in between. Doctors in Amrita Hospital, Cochin are treating the baby. He has speech difficulties as well. The medicines being administered are Norma Brain and Digital 2.5mg.

Others in the family do complain of severe headaches and bouts of breathing difficulty. They have already spent around 2 lakhs on the child's treatment. Though Physiotherapy was also advised they have discontinued the same due to its high costs.



The child's aunty, S has been in Eloor for the past six months. She is pregnant now and ever since she has been here she has acute headaches and breathing problems. Previously a resident of Cherthallai locality, S admits that she has never ever had such health complaints. Living in the vicinity of the Leather factory and inhaling the ammonia fumes has led to a major deterioration of their health, the family avers.

### **Response of the health care system in Eloor:**

There is routine pollution in Eloor due to release of smokes by chemical and pesticides industry. The response of the health care services has been very poor. The people have been going through the brunt of callous attitude of the system. There is one PHC with poor infrastructure in the area according to Jose, resident of Eloor. The PHC doesn't have sufficient medicine. The PHC sends the patients to the DHC as there is no facility for admitting the patient. There is no regular surveillance system. People mostly get medicines from private medical shop.

Since Eloor is an industrial belt, known for chemical contamination in the area the non-availability of essential drugs is cause of concern for 30,000 people living in the area.

Response in the emergency situation like gas leaks and accidents is even worse.

## **I. EXECUTIVE SUMMARY**

### An Introduction to Eloor:

Eloor is a river island on the river Periyar around 17 kms from its mouth at the Arabian Sea near the city of Cochin. It occupies an area of 11.21 square kilometres. Eloor supports the largest industrial belt in Kerala with over 247 chemical industries. The industries make a range of chemicals- petrochemical products, pesticides, rare-earth elements, rubber processing chemicals, fertilizers, zinc/chrome products and leather products. Most of these industries are over 50 years old and employ the most polluting of technologies. The industries take large amounts of fresh-water from the River Periyar and in turn discharge concentrated effluent with very little treatment. This leads to the large-scale devastation of aquatic life in the river and the farmlands in the region. There are 35 illegal pipes spewing effluent into the river directly from the industry.<sup>1</sup> Air emissions range from acid mist to sulphur dioxide, Hydrogen Sulphide, Ammonia and Chlorine gas.<sup>2</sup> There are close to 40,000 people living and working on the island, 29,064 of whom are part of the village community not employed by the industries. The rest are employees and stay in the company quarters. The Woman to Man ratio is 1000:1054.<sup>3</sup>

<sup>1</sup> From a joint assessment done by the Periyar Malinckarana Virudha Samithi and the Kerala State Pollution Control Board.

<sup>2</sup> There are many unidentified chemicals that are in the plumes of the industries of the area. The Pollution Control Board has not comprehensively monitored these.

<sup>3</sup> 14,144 women and 14,920 men. Most people are employed in the services industry--serving the government or private industry. Many run local businesses. Traditional occupations including fishing and farming have been entirely wiped out by polluting industry. There is a section of people that are migrant and are involved in illegal sand-mining from the bed of the river. A small population on the island is unemployed.

### The Background to the Community Health Assessment:

Despite the fact that the pollution of the River Periyar and the land has been established unequivocally there has been little action by regulatory authorities.<sup>4</sup> It seemed to us at the beginning of the research like there needs to be stronger arguments and actions from the community that backs up the new research. We decided to back our existing research on contamination by the local pesticide industry, Hindustan Insecticides Ltd and Merchem Ltd.<sup>5</sup> Meanwhile a resident of Eloor was appointed by Greenpeace as the Riverkeeper for the Periyar to monitor water quality of the river and alert local government, regulatory authorities and the pollution control boards of the need to take immediate action to stop pollution.<sup>6</sup>

The fact that the Community Health Problems of Eloor were quite apparent and that a similar reality was observed across the country along the 24 hotspots identified by Greenpeace India prompted us to go for a health assessment that shall establish *prima facie* the problem.<sup>7</sup> Greenpeace initiated an alliance with Occupational Health and Safety Cell-Mumbai, which has prior experience in the matter of Epidemiological Research. The broad framework of OHSC taking the lead with Medical Verifications of the primary data collected using a questionnaire research was arrived at jointly, with Greenpeace taking the primary role in the field based research and the survey. The Ethical Guidelines developed by the National Committee for Ethics in Social Science Research in Health (NCESSRH)<sup>8</sup>

The Proposed Research Question in the first round of discussions was: "What is the prevalence of Chronic Respiratory Illness and Cancer in the affected community around Eloor Industrial Estate?" This evolved into the more broad and exploratory research question later as we interacted with the advisory board: "What are the Health Problems faced by the resident community of Eloor Industrial Estate, due to increased pollution of the air and water by chemical industries?" The meetings with the advisory board also discussed and thrashed out issues like scientific biases, sampling sizes/ratios, training module for interviewers, ethics and statistical analysis.

The Findings: The one simple and basic finding is that we observed is that without exception, all body systems are adversely affected in Eloor as opposed to Pindimana. This shows that the cocktail of poisons in the air and water of Eloor as opposed to Pindimana is exerting synergistic effects on the local population and these effects seem to be unpredictable especially across particular age groups.

<sup>4</sup> The local pollution control board has been entirely ineffective in 'controlling pollution' if not preventing it. Therefore the local community agitations have more often focused on the pollution control board to initiate immediate action against polluting bodies. Refer the Kerala Pollution Control Board Website for developments: <http://www.kspcb.nic.in>

<sup>5</sup> After the Greenpeace Sampling mission of 1999 when it was established that a large amount of polluting chemicals have been released by certain specific industries (Hindustan Insecticides Ltd, Merchem Ltd), the local community took direct action against the polluting agencies by damming the polluting stream-Kuzhikkandam Thodu. The companies have ever since been forced to enter into a dialogue with the panchayat and local people to come up with a plan to clean up the mess along the stream. They have failed to come up with a safe protocol for doing so. Their current plan involves dredging the sludge and dumping it in a nearby wetland permanently destroying the water table. There is currently a court injunction on any such action.

<sup>6</sup> He has also addressed the people of Cochin city with the dangers of using the polluted river water for drinking purposes.

<sup>7</sup> The local people have been complaining of large-scale health problems on the island. These include respiratory disorders, cancers, congenital problems like mentally/ physically challenged children, chronic depression and reproductive problems.

<sup>8</sup> Ethical Guidelines for Social Science Research in Health: By National Committee for Ethics in Social Science Research in Health (NCESSRH).

[www.cehat.org/publications/ethical1.html](http://www.cehat.org/publications/ethical1.html)

Also see, Notes on Qualitative Research and Ethics of Research On Disaster and Complex Political Emergencies by Fatima Alvarez-Castillo, Professor, University of the Philippines Manila, Email: [fatima.castillo@up.edu.ph](mailto:fatima.castillo@up.edu.ph)



The Conclusion: Immediate punitive action need to be initiated by the Government on the companies that are criminally violating the right to Life of Communities and workers in the Industrial Estate and around. Remedial action which includes, life-long medical rehabilitation, compensation and clean-up of contaminated sites must be taken up by the polluting companies. Zero Discharge on the Periyar must ensure that the people of Cochin are not poisoned

## II. MAIN RESEARCH AND POLICY FINDINGS:

Contrary to the expectations based on the initial literature survey on increases in particular types of diseases due to air and water pollution; this health assessment has discovered that there is a general increase in all types of systemic diseases across Eloor (target village) when compared to Pindimana (reference village). Broadly one can say that the cocktail of poisons in the air and water of Eloor affects all body-systems adversely. Potentially the immune system seems to be affected too.<sup>9</sup> Increased prevalence and incidence of diseases and symptoms at Eloor have been observed from the database of health information of the community and workers at Eloor and Pindimana generated by the Field Investigation based on an exploratory format questionnaire.<sup>10</sup>

A Stratified Random Sample of the Eloor<sup>11</sup> (target) population when compared with those at Pindimana<sup>12</sup> (reference) shows a significant increased disease incidence in many body systems. The key systems that are affected are the Neoplasm<sup>13</sup> (2.5 times odds), Blood & blood forming organs<sup>14</sup> (2.1 times odds), Endocrine, nutritional and metabolic system<sup>15</sup> (1.17 times odds), Mental and behavioural<sup>16</sup> (3.03 times odds), The Nervous system<sup>17</sup> (1.59 times odds), The eye & adnexa<sup>18</sup> (1.21 times odds), The Ear & mastoid process<sup>19</sup> (1.49 times odds), The Circulatory system<sup>20</sup> (1.59 times odds), The Respiratory system<sup>21</sup> (1.29 times odds), The Digestive system<sup>22</sup> (1.69 times odds), Skin & subcutaneous tissue<sup>23</sup> (1.69 times odds), the Musculo-skeletal system & connective tissue<sup>24</sup> (1.17 times odds), the Genitourinary system<sup>25</sup> (1.09 times odds), Congenital malformations, deformations & chromosomal<sup>26</sup> (2.63 times odds), Injury, poisoning & certain other consequences of external causes<sup>27</sup> (2.65 times odds),

<sup>9</sup> Despite the fact that Pindimana, the reference village, was going through an epidemic of Leptospirosis and Dengue Fever, the rate of occurrence of infectious diseases under Category-1 of the ICD(International Classification of Diseases) in Eloor Section A and Eloor Section B, two target areas within Eloor(which was not facing an epidemic) was slightly more than the rate at the reference! This clearly shows that there is an ongoing live epidemic in Eloor which is not being perceived as one that requires attention as it is on all the time.

<sup>10</sup> Please see Appendix 1 for details.

<sup>11</sup> Sampling Ratio was 1:4

<sup>12</sup> Sampling Ratio was 1:7

<sup>13</sup> Chapter-2 of the International Classification of Diseases, the ICD, Version-10,

<http://www.wellcool.demon.co.uk/ltmhi/PBarkerICD10.htm>

<sup>14</sup> *ibid* Chapter-3

<sup>15</sup> *ibid* Chapter-4

<sup>16</sup> *ibid* Chapter-5

<sup>17</sup> *ibid* Chapter-6

<sup>18</sup> *ibid* Chapter-7

<sup>19</sup> *ibid* Chapter-8

<sup>20</sup> *ibid* Chapter-9

<sup>21</sup> *ibid* Chapter-10

<sup>22</sup> *ibid* Chapter-11

<sup>23</sup> *ibid* Chapter-12

<sup>24</sup> *ibid* Chapter-13

<sup>25</sup> *ibid* Chapter-14

<sup>26</sup> *ibid* Chapter-17

<sup>27</sup> *ibid* Chapter-19



External causes of morbidity & mortality<sup>28</sup> (1.36 times odds). All systemic classification was based on the International Classification of Diseases-10 (ICD-10).

One of the body systems worst hit seemed to be the nervous system when combined with the mental and behavioral effects (odds- 1.59:1 & 3.03:1). Congenital malformations, deformations and chromosomal aberrations follow (odds- 2.63:1). Accidental injury and poisonings are leading causes of mortality (Odds- 2.65:1). Diseases affecting the Neoplasms (2.5:1) and Blood and blood forming organs (2.1:1) are significantly greater in Eloor.

Clinically confirmed<sup>29</sup> Cancer Incidence is greater in Eloor in a statistically significant rate. When 13 cases of incidence were reported in the Eloor set, only one was reported in the sampling set at Pindimana. The combined odds ratio across Eloor and Pindimana is (2.85:1). This is alarming to say the least.

Medical Verifications were performed using the lung function tests (Spirometry) on a random sample of the reference and target populations. These confirmed high rates of actual incidence.<sup>30</sup>

It is clear that the nature of illness spreads across practically all body systems in an almost unpredictable manner. This is clearly due to the fact that it is a cocktail of chemicals (a few score heavy metals, a few hundred organic chemicals) and that are in the air and water of Eloor. There is very little medical research globally that accounts for synergistic effects of synthetic chemicals in human beings. The evidence that one finds at Eloor clearly shows that the synergistic effects of these chemicals are more devastating than expected.<sup>31</sup>

<sup>28</sup> *ibid* Chapter-20

<sup>29</sup> Clinical Confirmations were obtained by follow-up house visits with a team of doctors from the Occupational Health and Safety Centre- Mumbai using Spirometry for Respiratory Illness (Chapter-10, ICD-10) and examinations of medical records (Chapter-10, ICD-10) for ascertaining Cancer Incidence.

<sup>30</sup> For Eloor the figure was 10- severely affected under FEV1 or FVC or both below 60% of the predicted values, the expected values in healthy persons. 7 are moderately affected and 9 showed that their values for lung function are just below the 80% of predicted values. Totally 26 out of 45 tested for lung function are affected *ie* 57.8% confirmed respiratory illness rates. Lung function test could be administered to 43 persons. Three persons were obviously affected and could not perform the test. Eight had reported respiratory problems but did not want to go through the lung function test. Four persons were in good health with no problems so tests were not administered. Totally 28 persons interviewed (and tested or only checked) have respiratory system affected.

<sup>31</sup> See [www.ourstolenfuture.org/NewScience/synergy/synergy.htm](http://www.ourstolenfuture.org/NewScience/synergy/synergy.htm)

Also <http://www.health.state.mn.us/divs/eh/groundwater/hrlmix.html> for some new action on groundwater contamination and synergistic effects.

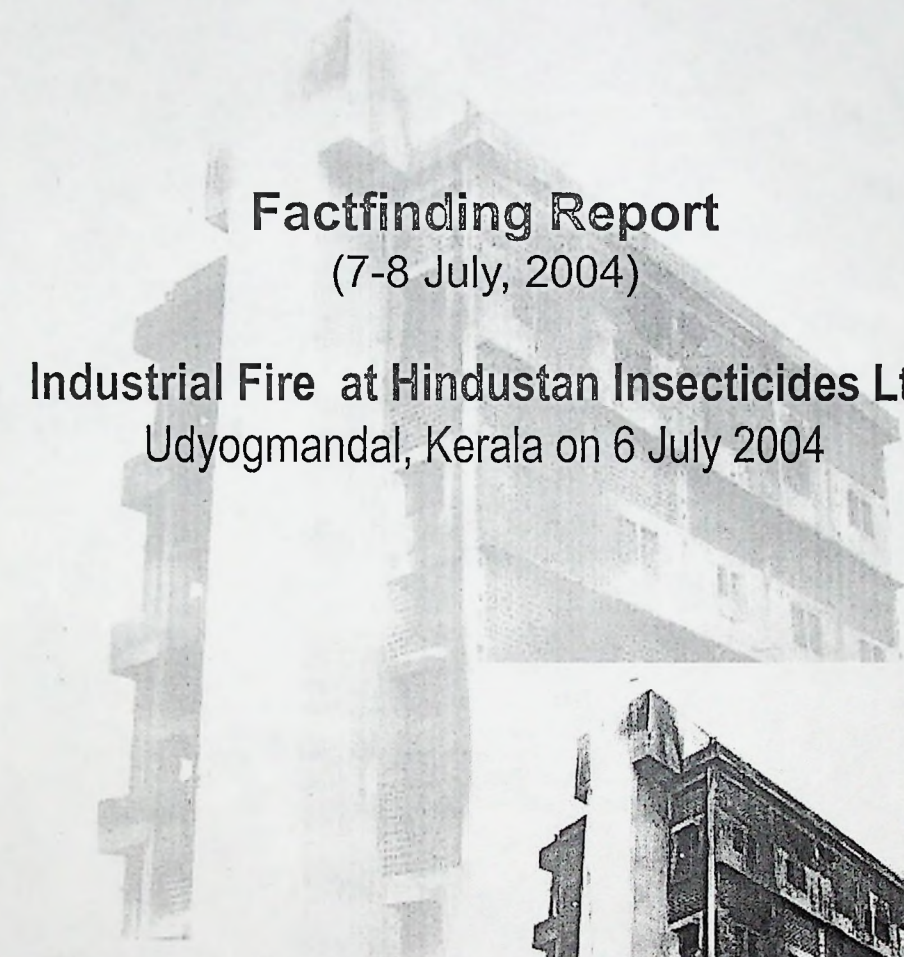
Also [http://www.nmenv.state.nm.us/agb/projects/Corrales/DOH\\_Synergistic\\_Effects.pdf](http://www.nmenv.state.nm.us/agb/projects/Corrales/DOH_Synergistic_Effects.pdf)

**How prepared are the public health services to respond to chemical exposure and disasters/ accidents.**

Observations from the HIL Endosulfan plant fire Eloor, Kochi, Kerala.

**(Annexure contains detailed Fact finding report)**





# Factfinding Report

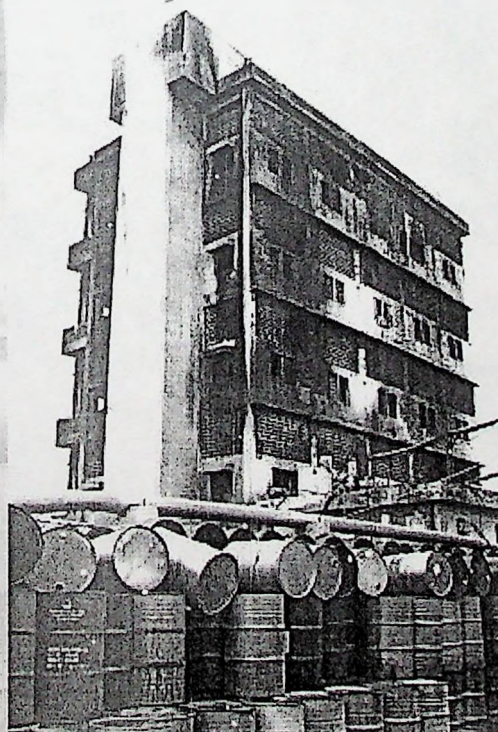
(7-8 July, 2004)

## Industrial Fire at Hindustan Insecticides Ltd Udyogmandal, Kerala on 6 July 2004

### Team Members

Nityanand Jayaraman, *The Other Media*  
Shibu K. Nair, *Thanal*  
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Monitoring (The Other Media)*  
R. Sridhar, *Thanal*  
Dr. R. Sukanya, *Public Health Specialist*

July 2004





*"At 2.30 a.m. on 6 July, 2004, Thanal received a desperate call from V.V. Purushan, an Eloor resident and member of the Periyar Malineekarana Virudha Samiti (PMVS), a community environmental group. He said HIL's endosulfan plant is on fire, and people are running away and that many are stranded at Eloor Ferry, unable to cross the river. "What do we do?" he asked.*

*We called up officials from regulatory authorities who had no clear idea on how to react to the crisis either. Legally mandated disaster prevention and anticipatory emergency response mechanisms were clearly not in place. The fire was treated as a regular fire, rather than a major incident involving toxic chemicals and a potentially explosive situation.*

*Eloor residents are already besieged by pollution problems, and live in constant fear of a catastrophic incident. Despite repeated demands by residents for disclosure of factory-specific emergency plans, no such information has been made available. Such requests have been ignored by regulatory authorities or projected as anti-worker and anti-development by factory management.*

*Thiruvananthapuram-based Thanal and New Delhi-based The Other Media constituted a fact-finding team to enquire into the incidents leading up to and following the industrial fire at Hindustan Insecticides' Ltd. The factfinding report enclosed here contains lessons for preventing and responding to chemical industrial disasters in the future.*

*Sincerely,  
The Fact Finding Team*

**Thanal**

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## Introduction

On 6 July, 2004, a little after 2 a.m., residents living downwind of the Hindustan Insecticides Ltd (HIL) pesticide factory in Eloor, Kerala, were alerted to a fire in the factory's endosulphan plant. Based on varying accounts, the fire raged for between three and four hours and gutted most of the five-storey endosulphan plant. Twelve fire tenders, including units from Fertilisers And Chemicals Travancore (FACT), the Indian Navy, the State Fire Department and Kochin Refineries, were deployed and the fire was brought under control using large amounts of water.

A westerly breeze carried the thick grey smoke plume over at least 250 dwelling units in Pallipuramchal and all the way across the river to the Varapuzha panchayat. Smoky conditions prevailed in Varapuzha as late as 7 a.m., well after the fire was put out.

Neither HIL nor the district authorities initiated any off-site emergency response procedures. HIL also had no onsite emergency response, and fire control did not begin until the FACT fire tender arrived at 2.35 a.m. As will be outlined in the report below, Hindustan Insecticides Ltd is guilty of negligence on several counts. The Eloor Police has, however, registered a simple case of "fire occurrence." No action has been initiated against the company for negligence.

The Eloor industrial area hosts about 250 industries, of which more than a dozen, including Hindustan Insecticides Limited, are large chemical factories.

The authorities – particularly, the Kerala State Pollution Control Board and the Factories and Boilers Inspectorate — have sought to treat community demands for information about the hazardous chemicals and processes as unnecessary interference rather than legitimate concerns. Repeated requests for information on emergency preparedness, and for the building of a bridge across the River Periyar at the Eloor ferry point to escape the island during emergencies have fallen on deaf ears.

The absence of emergency response procedures, the casual attitude of the district authorities and the industry, and the lack of appreciation of the magnitude of the incident and what it embodies is a shocking reminder that no lessons have been learnt from the 1984 Union Carbide disaster in Bhopal.

Twenty years after the world's worst industrial disaster, communities and workers continue to operate in complete ignorance when it comes to the hazardous substances stored and processes deployed in their neighborhoods. Throughout India, if more communities are not being wiped out by chemical disasters, that is not because of the legally mandated precautions or policing by regulatory authorities, but by sheer chance, favourable wind conditions and the communities' good fortune.



## The Factory

Hindustan Insecticides Ltd is a public sector undertaking fully owned by the Government of India and it operates four plants at Eloor, Udyogmandal, Kerala. The plants produce:

Pesticide	Capacity
DDT Technical	1344 tpa
DDT (Formulation)	2688 tpa
Endosulfan Technical	1600 tpa
Endosulfan 35 EC	1910 kilolitres/year
Dicofol (Technical)	150 tpa
Dicofol EC	600 kilolitres/year
Mancozeb (Technical)	1000 tpa
Mancozeb (Formulation)	1800 tpa

HIL is the sole producer of DDT in the country, and has cited DDT's criticality to the National Malaria Program to secure temporary postponement of DDT phaseout from the United Nations under the Stockholm Convention. HIL manufactures DDT at its plants in Udyogmandal and Raigad district, Maharashtra. The DDT plant at Udyogmandal was inaugurated in 1957.

## General State of the Factory

The factory is generally poorly maintained. The condition of the effluent treatment plants and the incinerator are appalling. The incinerator is little more than a furnace. Oily liquids are stored in open sumps at two separate locations near the incinerator. At least one was identified as furnace oil for the incinerator.

Chlorinated wastes, among other things, are burnt in the incinerator. Ashes are reportedly stored in drums onsite. The exhaust is carried through a pipe from the incinerator house to the endosulfan plant about 20 metres away, and then runs along the wall of the five storey building to the chimney stack.

According to proponents of incineration, dioxin formation can be minimised, among other means, by quenching the exhaust gas rapidly to below 250 degree Celsius to reduce the time the exhaust gases spend in the optimum temperature window for dioxin formation. Viewed even from the unsatisfactory approach to dealing with the deadliest chemical known to science, the HIL incinerator's exhaust pipe and smokestack are virtual dioxin factories. The poor upkeep of the area surrounding the incinerator does little to inspire confidence in the technology or its proponents' faith in theoretical conditions.

The factfinding team observed sludge dumped in a three-walled structure without a roof near a wastewater lagoon. Empty chemical drums and sacks lie strewn around near the incinerator site. Open, rotting drums of tarry wastes were found carelessly dumped on the roadside in at least one location.

## The Fire

In its press release dated 6 July, 2004, Hindustan Insecticides Ltd states that "At about 2.45 a.m. on 6.7.04, a fire was noticed by the workers on the 2<sup>nd</sup> floor of the plant building."<sup>1</sup> However, reports by local residents, the police and people involved in firefighting contradict HIL's assertion. They peg the time of start of fire at around 2 a.m.

Eloor police station sub-inspector Abdul Rahim says he received information about the fire at 2.44 a.m, by which time the fire had already reached the 5<sup>th</sup> floor.<sup>2</sup> Mr. O.T. Verghese, plant safety manager at FACT, says he received word of the fire around 2.30 a.m.<sup>3</sup>

Based on extensive interviews with residents living around the HIL factory, the Fact Finding Team was able to ascertain the following facts about the drift of the smoke plume, and the reaction of residents.

The smoke plume was not very wide and blew across in a west-southwesterly direction across the river Periyar. The smoke was felt by people resident in a triangular area flanked by the two Eloor ferry roads, which joined at the ferry terminal due west of HIL. This area is a wetland with houses located in clusters on the dry stretches,

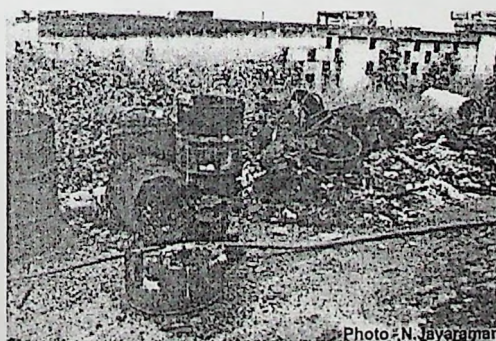


Photo: N. Jayaraman

-Disasters aside, HIL's poor housekeeping poses an ongoing source of pollution to the general environment.







Photo - N. Jayaraman

"Empty chemical drums and sacks are strewn around near the furnace oil tank fueling the incinerator."

or along the two main roads and along the *Kuzhikandam thodu*. The *Thodu* is a natural stream that now carries the combined toxic effluents from FACT, HIL and Merchem factories to the River Periyar.

In 1990, a large-scale toluene spill into the *Thodu* caused a fire in the stream that left several people living adjacent to the stream with serious health effects. The toluene spill was reportedly from Hindustan Insecticides Ltd.

Residents recall that on July 6, 2004, the smoke left the factory at a height, blew westwards and downwards for between 500-750 metres before settling down in the residential area of Pallipuramchal. Residents of this area were either awakened by the siren or by their neighbours. Some of them—approximately, one in three houses visited by the Team — in four streets in the Pallipuramchal area and alongside the *Kuzhikandam thodu* were not aware of the incident, and had slept through the fire with all doors and windows closed.

Some men went to the HIL plant to verify the details of the fire accident and were uncertain as to whether people should evacuate immediately.

Many families with children decided to flee the area and crossed the river to the Varapuzha Panchayat by ferry. Residents at the farthest point (ferry point) had not heard the siren or felt the smoke. Between 100-200 people may have crossed over in three ferry trips, before the ferry stopped making the river crossing. The first ferry trip was made between 2.45 a.m. and 3 a.m. By the time they had crossed over, the smoke plume too had crossed the river, and people could smell and feel the smoke on the other side.



Fact finding report

Families who fled to the ferry invariably had relatives across the river. The elderly and families with no relatives across the river did not leave their houses.

The ferry point was in the direction (west-south-west) in which the smoke from the blazing factory was blowing. Most didn't feel safe to go against the smoke (which would have meant running towards the Factory).

A few families cut across the breadth of the plume to reach the safety of their relatives' houses. Most families started returning home by sunrise when the fire was put out.

Residents in the houses (50-100m) nearest to the factory could see the smoke blowing above their houses and didn't leave. Some said they did not feel any major effects of the smoke. However, the same households also reported soot deposits on vegetation and inside the houses.

## Endosulfan Production

*The fact-finding team was permitted to tour the facility and take pictures on 8 July, 2004, despite the lack of prior appointment. HIL's deputy production manager Vincent D. Paul, escorted the team around the facility and the scene of fire, and was knowledgeable, open and helpful in explaining the production process and filling in the details of the incident.*

For every ton of Endosulfan technical that is manufactured, raw material in the following approximate quantities is used:

Raw Material	Quantity Required (Theoretically) in tons/ton of Endosulfan tech	Quantity Charged in tons (1.5 x required quantity)
Hexa Chloro Cyclo Pentadiene (HCCP)	0.78	1.17
Butane diol	0.25	0.375
Thionyl Chloride	0.34	0.5
Toluene	0.1	0.15

Source: Vincent D. Paul, Dy Production Manager, Endosulfan plant, HIL, Udyogmandal.

Toluene, a petroleum derivative, is used as the medium for the reactions. Going by the consumption figures, it appears that for every ton of endosulfan produced, approximately 1 ton of waste is generated.

All reactions are carried out in two reactors each for Het diol, endosulfan and for recovery of mother liquor. Roughly 1.7 tonnes of endosulfan technical is produced per batch.

Endosulfan is manufactured through a two-stage reaction.

**Stage 1: HCCP + Butene Diol = Het Diol (Intermediate)**

**Stage 2: Het Diol + Thionyl Chloride = Endosulfan**

As and when endosulfan is manufactured, it is piped out to a unit outside the production building for further processing. Similarly, only the raw material required for the current batch production is brought into the production unit from the storage units housed in separate buildings.

## How the Fire Started

While we were unable to ascertain the source of combustion, HIL Deputy Production Manager Paul's account provides some insight into what fueled the fire and the course of events leading up to and in the immediate aftermath of the fire.

*"At the time, the second step reaction was ongoing. The reaction for het diol [Stage 1] was completed in one reactor, and crystallisation was going on. In the other reactor, there was butene diol. Both the endosulfan reactors were engaged. At 2 a.m., a worker on the second floor noticed a leakage from the [toluene] vapour lines. He reported the matter, and the supervisor came there to assess the leakage. Such leakages come up from time to time. Suddenly, the fire started and began spreading. About 20 people were working at that time, and they all ran away."*

Eloor Sub-inspector Rahim likened the Toluene release to the pressure release system in a pressure cooker, indicating that the spill within the plant may have been substantial and at high pressure. The FACT plant safety manager, who was the first to send a fire tender to HIL, also corroborates Rahim's account. "Toluene was falling on the floor in a spray," said FACT's Verghese.

It is not known whether safety systems to shut down the flow of toluene in the event of a leak existed. If they did, it is not known whether and when they acted.

Residents living along the fenceline of the factory said the fire started with a series of loud splattering noises. One woman described it as the sound of "water falling on stone;" another person likened it to firecrackers; yet another said it sounded like someone was hammering metal.

The final explosion was accompanied by fire and thick dark smoke that smelled like burnt tyres. Residents living as far away as 300 and 500 metres from HIL reported seeing the flames. As the smoke quickly changed to a narrow plume of thick grayish cloud, the "burnt-tyre" smell was replaced by a cocktail of pungent odours of chemicals, identified by many people as the smell of sulphur. According to one resident, the sulphur smell persisted on her skin for hours after she had fled the smoke plume. Many residents said the smel was a more intense version of the familiar odours characteristic of the industrial estate.

## Putting Out the Fire

It appears that FACT was the only agency contacted by HIL for first response. According to Verghese, the FACT fire tender left for HIL by 2.30 a.m. and reached HIL by 2.35 a.m. The tender can carry up to 4000 litres of water, and also has two separate compartments carrying foam and carbon dioxide for special emergencies.

In recounting the day's events, Verghese identified a major safety lapse on the part of HIL: "We lost time because HIL's hydrant system had failed. There was no current [electricity] coming, and they had no standby for the hydrant. So we had to make three trips back to FACT to refill the tank until HIL was able to get the hydrant pump to work. . . At FACT, the fire hydrant works on a diesel set and is not dependent on electricity."

By 3 a.m., the sub-inspector of police Abdul Rahim had reached the site. Simultaneously, male residents from Eloor had also gathered at the factory gate to get more details about the disaster and the expected response. Many of them had sent their children and women in the family away on foot to relatives' houses or other safe zones.

Eloor resident and member of the community environmental group Periyar Malineekara Virudha Samiti V.V. Purushan was among the crowd at the gates of HIL. He says:





*"No information was provided by the company. People who ran did so without knowing if they were running into danger or away from it. The siren was weird – rather than the continuous siren like an ambulance, the siren from HIL would start, stop, then start again after a few minutes. People were confused.*

*"Many people woke up because of the siren, then smelled the smoke and ran. Others, nearly 250 people, were gathered outside the factory gate. We didn't know what had happened.*

*"We wanted to talk to the management. Somebody came and said 'We're busy trying to put off the fire. We don't have time to talk to you now.' Later, the police came from inside and told us there was nothing to worry about, that five fire engines were working inside and more are on their way. By 4 a.m., a fire official came and told us that the fire was under control, but smoke will continue.*

*"What was alarming is that the HIL security – not CISF, but private – did not have the telephone numbers of any of the fire tenders. The other fire tenders [other than FACT] were called only after the police arrived."*

According to HIL, the fire was "totally extinguished by about 5.30 a.m."<sup>5</sup>

The absence of an onsite and offsite emergency plan at HIL is evident from the fact that fireworkers battled the fire without any knowledge about the burning chemicals or the precautions that need to be taken. According to a rough estimate by Verghese, at least 40 fireworkers were engaged in combating the fire. None worked with breathing or other safety equipment.

The statement by Verghese of FACT is revealing: *"When we went in, our priority was to battle the fire. We just treated it as a regular fire and battled it. Fireworkers were stationed all around the unit, and they were drenched in water and soot. Only next day, we knew that there were toxic chemicals. Most of us just wore our kerchiefs to cover our noses. HCCP's toxicity increases when it comes in contact with water. But nothing happened to us. I was there for three hours. Nothing happened to me. However, next day when I went there, I couldn't stay there. There was too much toxicity. . . There was a huge flame. Some chemicals may have been released."*



Fact finding report

Fact Finding Team members were invited to inspect the inside of the 5-storey Endosulfan building on 8 July, 2004. However, the team declined the offer because only helmets and no gas masks were provided. At the time of the team's visit, the floor of the Endosulfan unit seemed damp, with fumes rising from the ground. The pungent smell was intense even from outside the plant.

Two out of three team members reported immediate symptoms – throat irritation and headache – that persisted for at least 3 days. One of the members reported spells of dizziness that continued for more than a week. HIL's casual attitude to the deadly chemicals it handles is a serious cause for concern because it may have exposed others who came to inspect the site.

Some HIL staff say that the toxicity of chemicals is highly exaggerated, and that their experience doesn't bear out popular fears. According to Paul, "Workers handle sacks of technical grade endosulfan with bare hands. They're fine. I myself have been working here since 1984. Nothing has happened to me, my wife or children."

## The Company's Response

In a frightening reminder of Union Carbide's response in the immediate aftermath of the Bhopal disaster, HIL company spokespersons misinformed the community to allay fears rather than share accurate information and appropriate response to avoid or minimize poisoning of residents.

According to Purushan, initial reports at the factory gate by company staff underplayed the seriousness of the fire and the toxic nature of the smoke cloud:

*"They first said that it was only some rubber sheets that burnt down. Then they said it is only toluene that was burnt in the fire, and that toluene when burnt will release only carbon dioxide and steam."*

On 8 July, 2004, the Fact-finding Team interviewed HIL senior management including Sivadasa Shenoy, GM, and Dy GMs Venugopal Pillai and K.K. Joseph. Questioned two days after the disaster, the company spokespersons continued to downplay the magnitude of the fire and its impacts on community and the environment. However, neither the company nor the regulatory authorities had conducted any scientific assessment to support their casual response.



Specifically, HIL stated that:

- a) there was no endosulfan in the plant at the time of the fire;
- b) the raw material HCCP is non-flammable.

However, no mention was made of the toxic thermal degradation products such as phosgene that is released when HCCP is heated, or reactive products such as sulphur dioxide and hydrogen chloride that are released violently when thionyl chloride comes in contact with water. Neither does the concern about long-term contamination by dioxins and furans feature in the list of concerns of the company or the regulators.

When asked about the symptoms of poisoning reported among the people living downwind (west) of the HIL facility, HIL's deputy general manager was very remarkably vague:

*"We've not been told by the medical authorities about any problems. Probably, one girl was admitted in a nearby hospital. The district administration took initiative and brought two teams of doctors and examined many people. If there is anything, we'll do whatever has to be done. We're a PSU. Government is party. Our response will be more favorable than private sector."*

However, as is clarified in the sections on health, interviews among the exposed community in Eloor has thrown up substantial evidence of the prevalence of immediate and persistent symptoms among individuals.

### Emergency Plans

Section 41B of the Factories Act requires the occupier of a factory to prepare an onsite emergency plan, and to disclose to workers and general public living in the vicinity the safety measures to be taken in case of an accident.

Rule 15 of the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989, mandates the provision of a detailed off-site emergency response plan by the occupier of a hazardous facility to members of the public.

When questioned about disaster management plans and on-site and off-site management plans, HIL GM Shenoy was confused and his response was incomprehensible. "The disaster management plan, the coordinator is the district collector. We don't have anything to do with that. That is for the whole district. It should be there on the website. . . Offsite plans is a new development."

The Factfinding Team was unable to establish whether on-site and off-site emergency response plans exist, or if the management is even aware of this requirement.

### In-House Safety Team

HIL has no fire tender. The closest firefighting force is in FACT across the road. However, FACT's Verghese observes that it is imperative for companies to have their own trained safety and firefighting units for immediate response until assistance arrives.

"I don't know about the firefighting unit at HIL," he said. "They probably have something, but how good I don't know."

It appears that no trained HIL staff were involved either in initial or subsequent firefighting. However, this is an issue that needs to be verified:

1. How many trained safety personnel were present in the plant at the time of the fire?
2. How did the company's emergency team (if such a team existed) respond to fire until the fire tenders arrived?

### Environmental Contamination

The potential for short- and long-term environmental contamination from the incident is very real. Besides the air-borne deposit of persistent pollutants at least along the path of the plume, the mode of firefighting and the lack of containment procedures after the fire was put out also means that water bodies and wetlands in the area, including the River Periyar, may have received substantial loads of toxic runoff from the factory site. Given the persistence of these chemicals and their ability to travel through the food



*Sacks of material labelled endosulfan were found lying in a pool of water adjacent to the burnt-down endosulfan unit two days after the fire.*



chain, it can be safely assumed that the contamination will spread from the originally deposited areas and will, over time, travel far from the source.

### Water-borne Contaminants

Initial remediation efforts should involve preventing migration of contaminated rainfall runoff and contaminated leachate from the debris. The former can be done by digging rainfall runoff interception ditches around the site, and the latter by removing and/or covering the fire debris.

The Fact Finding Team documented abysmal conditions inside the factory, both in respect of the site of fire and the general state of the HIL factory. On 8 July, the team found many sacks of material labeled "Endosulfan Tech" lying in a pool of water alongside the burnt down endosulfan unit. (See photos)

Many residents raise milch cattle, chicken and ducks on the island. Many residents live alongside the *Kuzhikandam Thodu* that can be expected to drain the contaminated run-off from the factory.

In 1999, Greenpeace surveyed and sampled the *Thodu*. It found 111 chemicals. Thirty-nine of these were hazardous organochlorine compounds, including DDT and its metabolites, endosulphan and its metabolites, and their respective degradation products.

### Air-borne contaminants

Residents in the immediate vicinity said their houses and nearby trees were dusted with soot from the factory. It may be recalled that after the World Trade Centre burnt down, many houses in Manhattan, New York, had to be wiped clean to eliminate health hazards to residents from the soot-, ash- and dust-borne contaminants.

Dr. Mark Chernaik, staff scientist at ELAW-US, places issues of immediate, short- and long-term contamination in perspective:

*"Probably a lot more burned during the fire, such as chemical solvents and building materials, than just endosulfan and HCCP. So, the fire would also pose a short-term risk through exposure to excess ambient air levels of particulate matter (especially if the fire is still smoldering) and a long-term risk through exposure to high levels of persistent organic pollutants (such as dioxins) in the soil. These should be monitored as well."*



Fact finding report

The Kerala State Pollution Control Board is reported to have taken air samples on 6 or 7 July, 2004. However, no details are known as to where the samples were taken from, and what they were analysed for. According to Dr. Chernaik, given the presence of the highly toxic air pollutant phosgene, near-term ambient air quality should be monitored for phosgene using detection tubes.

### Health Effects in the Community

A sub-group of the Fact Finding Team led by public health researcher and physician Dr. R. Sukanya visited the affected area within Eloor on 7-8 July, 2004, to:

- Map the area under the toxic plume, and roughly estimate the number of dwelling units within that area;
- Document the symptoms manifested after exposure to the toxic fumes;
- Document the adequacy of medical relief provided to the community.

### The Poisons

HIL manufactures several chlorinated pesticides including DDT. The fire consumed or affected material in the endosulfan unit including HCCP, butene diol, thionyl chloride, toluene and endosulfan. From this, it can be inferred that at least the above mentioned chemical pollutants of concern were released.

Name of Pollutant	Persistent in Environment	Symptoms	Target Organs
Phosgene	No	Eye irritation; dry burning throat; vomit; cough; foamy sputum; dyspnea; chest pain; cyanosis	Eyes; skin; respiratory system
Sulphur Dioxide	No	Eye, nose, throat irritation; rhinitis; choking; cough; reflex bronchoconstriction	Eyes; skin; Respiratory system
Hydrogen Chloride	No	Nose, throat, larynx irritation; cough; choking; dermatitis	Eyes; skin; respiratory system
HCCP	No	Eye, skin, mucous membrane irritation; in animals, kidney damage and liver cancer	Eyes; skin; kidneys; respiratory system
Endosulfan	Yes	Skin irritation; nausea; confusion; agitation; flushing; dry mouth; tremor; convulsions	Skin; Central Nervous system; liver; kidneys; reproductive system
Thionyl Chloride	No	Eye, skin, mucous membrane irritation; eye, skin burns	Eyes; skin; respiratory system

Source: Pocket Guide to Chemical Hazards. US Department of Health and Human Services. February 2004

Besides the chemicals in the table above, the most significant long-term threats probably come from the emission of polyaromatic hydrocarbons (PAHs), dioxins and furans. The latter are two categories of compounds comprising some of the most toxic chemicals known to science. Dioxins and furans are inevitable byproducts of combustion involving chlorinated material. These chemicals are



persistent, bioaccumulative and are capable of exerting transgenerational effects. They are known human carcinogens, and their effects target virtually every system in the human body.

PAHs are usually grouped as short-chain PAHs and long-chain PAHs. The former, including chemicals such as naphthalene, are acutely toxic especially in the aquatic medium. Long-chain PAHs include many chemicals that are known carcinogens. PAHs are common emissions associated with fires.

### ***The Symptoms***

The Fact Finding Team interviewed residents (ages ranging from 18 to 60) in 15 houses in the area reportedly covered by the smoke plume. Households that did not flee the scene kept their children indoors, with sheets covering them, and buckets of water nearby. Some people covered their faces with wet towels.

Men and women who came out to check the fire and/or remained outdoors reported a "feeling of suffocation" down the throat that was persistent even two days after the incident. This was associated with difficulty in breathing and cough. All these symptoms were exacerbated among the elderly and those with chronic respiratory problems. All interviewed residents reported a burning sensation as if someone were "rubbing chilli powder in the throat and eyes." Many complained of a chest discomfort as "something irritating," "chest pain," "burning sensation in the chest" and 'weight over the chest'.

Nausea and vomiting were commonly reported symptoms. Young adults and the elderly complained of a feeling of fullness of the stomach associated with nausea and vomiting. Persistent headache was also frequently reported.

All residents reported having experienced similar problems, and that the nearby chemical industries emit different types of smoke every night. On July 6, the smoke was thick, the visibility was poor, and the breathing problems, feeling of suffocation and burning of eyes were more severe and persistent. Unlike the symptoms associated with routine pollution, residents said that the intense feeling of burning sensation down the throat was new. This symptom was persistent among many residents even two days after the fire.

At least one 16-year old girl was admitted to the hospital reportedly after she suffered convulsions. However, the Fact Finding Team could not meet her or her family to ascertain the facts and course of events after the fire leading to the patient's hospitalisation. Neither could the Team meet any of the HIL workers or the firefighters who were exposed to the toxic gases to assess if there were any health problems among them.

The acute respiratory and gastrointestinal symptoms reported by people may have been caused by particulate matter or any of the toxic gases from the fire. Headache is a prominent symptom due to the effect on the Central Nervous System.

### **Medical Relief**

A medical team of doctors from the District Medical Office conducted a camp that began in the forenoon of July 6. They provided basic primary symptomatic care for problems reported by people. Around 200 people attended the camp. The few outpatient slips examined by the Team had no mention of any diagnosis or advice of follow-up to the patients. The medical team had been informed that there were 'patients with burns' and had come prepared with huge quantities of dressing material.

The Fact Finding Team visited the Primary Health Centre and met the doctor, who said she was not in Eloor on the day of the incident; she was working in the District Office on July 6. The doctor had not received any feedback from the Medical team and also said that she had not noticed any unusual health problems in the subsequent days. Many people were taking symptomatic medical treatment from the private practitioners for the persistent symptoms of throat burning, difficulty in breathing and nausea.

No attempt was made to address the problem as a case of chemical poisoning, or to assess the need for long-term health monitoring and care. Neither was the area under the toxic plume identified to get a sense of the number of affected people. In the absence of such mapping, any future plans to assess long-term health effects related to the fire incident, would be difficult to implement. It is evident that the medical care accessible to the people is incomplete and inadequate.





The chemicals that are likely to have been released are known to cause a range of sub clinical enzyme changes to overt organ damage of the respiratory (pneumonitis, bronchiolitis), gastrointestinal (elevated liver enzymes to full blown jaundice), genitourinary (proteinuria, oliguria, severe metabolic acidosis to kidney failure) and central nervous systems (headache, convulsions, coma). Contact with the chemicals on the skin could cause dermatitis and skin burns. Absorption by contact with the eyes could also cause optic neuritis. Any damage to the organs could have been detected only by a complete clinical examination and appropriate laboratory investigations.

Some of the chemicals are known carcinogens. The types of delayed health effects due to acute exposure of many of these chemicals are not known. New evidence implicates that "endosulfan exposure may delay sexual maturity and interfere with hormone synthesis in male children"<sup>6</sup>.

The fact-finding team has only documented the reported morbidity of the people. The extent of organ injury and the consequences on the health status of the people exposed is not known. There is a grave need for long-term health monitoring and disease surveillance to identify and address the health problems of people exposed to the toxic chemicals.

## Conclusion

The HIL fire raises as many questions about the negligence of the company as it does about the complicity, complacency and, ultimately, the total failure of regulatory authorities such as the District Administration, the Pollution Control Board, the Factories Inspectorate and the Controller of Explosives. In enquiring into this incident, investigation into the failures of these departments would be critical to preventing such disasters from recurring.

The response of the District Administration and regulatory authorities in dealing with medical emergency caused by the fire was ad hoc and uninformed. This indicates that the administration is totally unprepared in terms of medical response in the event of such emergencies. It is also clear that the medical professionals who led the health camp on 6th July had little or no understanding of the special needs of victims of chemical poisoning.



Government departments have done nothing to win public trust. Moreover, they have treated community concerns with contempt and viewed the public as adversaries. It is imperative that in Elloor, any attempts to address the public interest concerns raised by the HIL incident in particular and industrial safety and environmental quality in general has to involve community representatives, environmental groups, workers representatives and labour organizations. Leaving matters in the hands of committees comprising the industry and Government have proven disastrous.

Workers, particularly in factories such as HIL, are fearful of losing their jobs either as a result of closure due to environmental reasons, or as a result of privatisation. The threat of job loss prevents them from fighting for improvement of the environment in their place of work. Worker health and safety concerns at the workplace are closely linked to the health and safety of the community. However, the insecurity faced by today's workers prevent them from fulfilling their responsibilities beyond their own workplace, and often pits them against community residents concerned about the pollution caused and hazards posed by the factories. Corporations take advantage of this divide to go about business-as-usual. To change corporate behaviour, therefore, this confrontation between communities and workers, both of whom are victims of pollution, needs to end.

## Recommendations

1. Hindustan Insecticides Ltd and its senior executives should be criminally charged with negligence for having failed to take adequate steps to prevent the fire that injured a yet-to-be-determined number of people and polluted the environment.
2. Criminal action must be taken against the Occupier and Manager under Section 92 of the Factories Act for violating the provisions of the Factories Act.
3. The Central Government should conduct a formal enquiry into the "causes of the accident" and should coopt one or more persons possessing legal or special knowledge as assessors in such enquiry. The Centre can order such enquiries under Section 9-A of the Explosives Act, or section 41-A of the Factories Act.
4. The District Administration, along with relevant authorities and community groups, should establish a system for long-term health monitoring, disease surveillance and treatment of people in the impact zone of the HIL smoke plume. Firefighters, police personnel and HIL staff exposed to the fire should undergo a complete medical examination, monitored on a long-term basis and provided with specialised health care. The company should be directed to compensate at those affected, whether directly or indirectly, by the fire.
5. The Kerala Pollution Control Board should submit a report prepared at HIL's cost, on pollution containment measures, and short-term and long-term environmental monitoring plans deployed by it in response to the HIL fire. (See footnote for more details)<sup>6</sup>
6. The Factories Inspectorate must be asked to submit a report on steps taken by it to assess the adequacy of safety systems in HIL.
7. The District Administration should explain why it failed in preparing people for an appropriate response in the event of such emergencies, and what steps it is taking to avoid a repeat of such haphazard response in the event of future emergencies.
8. Companies that do not have or do not disclose onsite and offsite emergency plans to workers and members of public should be ordered to do so within a set time frame or shut down after presenting a plan for rehabilitating its workers.
9. Infrastructure for mass evacuation from Eloor Island to the mainland at crucial points in Eloor should be set up for use in the very LIKELY event of an industrial disaster.
10. The District Administration should prepare a comprehensive disaster response plan to react to such disasters. The plan should include components dealing with mass evacuation, disaster containment, emergency environmental response, emergency medical response, and short- and long-term medical and environmental monitoring and rehabilitation. Suitable experts should be consulted for the development of each of these components, and the plan should involve significant participation from workers, community residents and community groups.
11. Given the high levels of existing pollution in Eloor, and the incremental burden added by ongoing pollution and incidents such as the HIL fire, the KPCB should develop a comprehensive environmental remediation plan for Eloor and the River Periyar. The development and execution of the plan should be led by workers and residents and be paid for by all Eloor industries each contributing in proportion to their pollution output.





#### End Notes

<sup>1</sup> Press statement 06 July, 2004, Hindustan Insecticides Ltd, Udyogmandal, Eloor, Kerala.

<sup>2</sup> Interview at Eloor Police Station with Sub-inspector Abdul Rahim. 10.30 a.m. 08 July, 2004.

<sup>3</sup> Interview at FACT with Plant Safety Manager O.T. Verghese. 3.30 a.m. 08 July, 2004

<sup>4</sup> Interview at HIL Endosulfan unit with Vincent D. Paul, Deputy Production Manager, Hindustan Insecticides Ltd. 12 noon. 08 July, 2004

<sup>5</sup> Press statement 06 July, 2004, Hindustan Insecticides Ltd, Udyogmandal, Eloor, Kerala.

<sup>6</sup>(Environ Health Perspect 111:1958-1962 (2003).)

<sup>7</sup> The following resources may be helpful for developing long-term environmental monitoring programs.

"Environmental Follow-up of Industrial Accidents." A report prepared by The Institute of Terrestrial Ecology, October 1997. United Kingdom Department of the Environment, Transport and the Regions.

<http://www.fraw.org.uk/library/004/indaccid/followup.html>

[www.fullsense.com/Products/BD9000/9500/GasDetectorTube%5CshortTermGasDetectionTubesP\\_Z.htm](http://www.fullsense.com/Products/BD9000/9500/GasDetectorTube%5CshortTermGasDetectionTubesP_Z.htm)

If local officials would like to liaise with international experts about responding to industrial fires involving pesticides, they may want to contact the following offices:

a) United Nations Environment Programme

Awareness and Preparedness for Emergencies at the Local Level (APELL) Programme

Branch Head: Fritz BALKAU

e-mail: [fritz.balkaul@unep.fr](mailto:fritz.balkaul@unep.fr)

Consultant: Ruth Zugman Do COUTTO

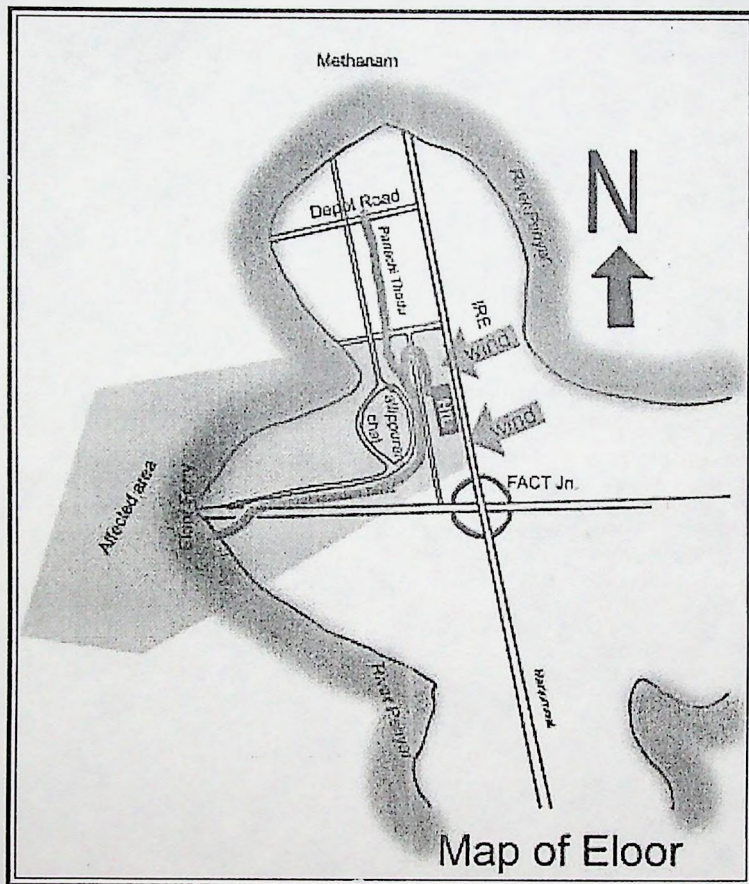
e-mail: [ruth.coutto@unep.fr](mailto:ruth.coutto@unep.fr)

b) OECD Environment EHS contact

[ehscont@oecd.org](mailto:ehscont@oecd.org)

Fax: +33 (0)1 45 24 16 75







**ENDOSULFAN POISONING DUE TO COMMUNITY EXPOSURE -  
FAILURES IN RESPONDING TO THE HEALTH PROBLEMS AND  
PROVIDING PUBLIC  
HEALTH CARE AND SERVICE.**

The incidence of the endosulfan poisoning at the Kasargod villages in Kerala is exposing many limitations, negligence, failures, lack of accountability, responsibility, casual and careless attitude of officials, lack of information and knowledge, system failure, lack of systems, buy outs, etc.

The attempt in this presentation is to look at the failure in the public health sector.

# Safeguarding children from pesticide exposure

Lessons from the Endosulfan tragedy  
in India

Dr Sukanya R, Sridhar R

Thanal Conservation Action & Information Network

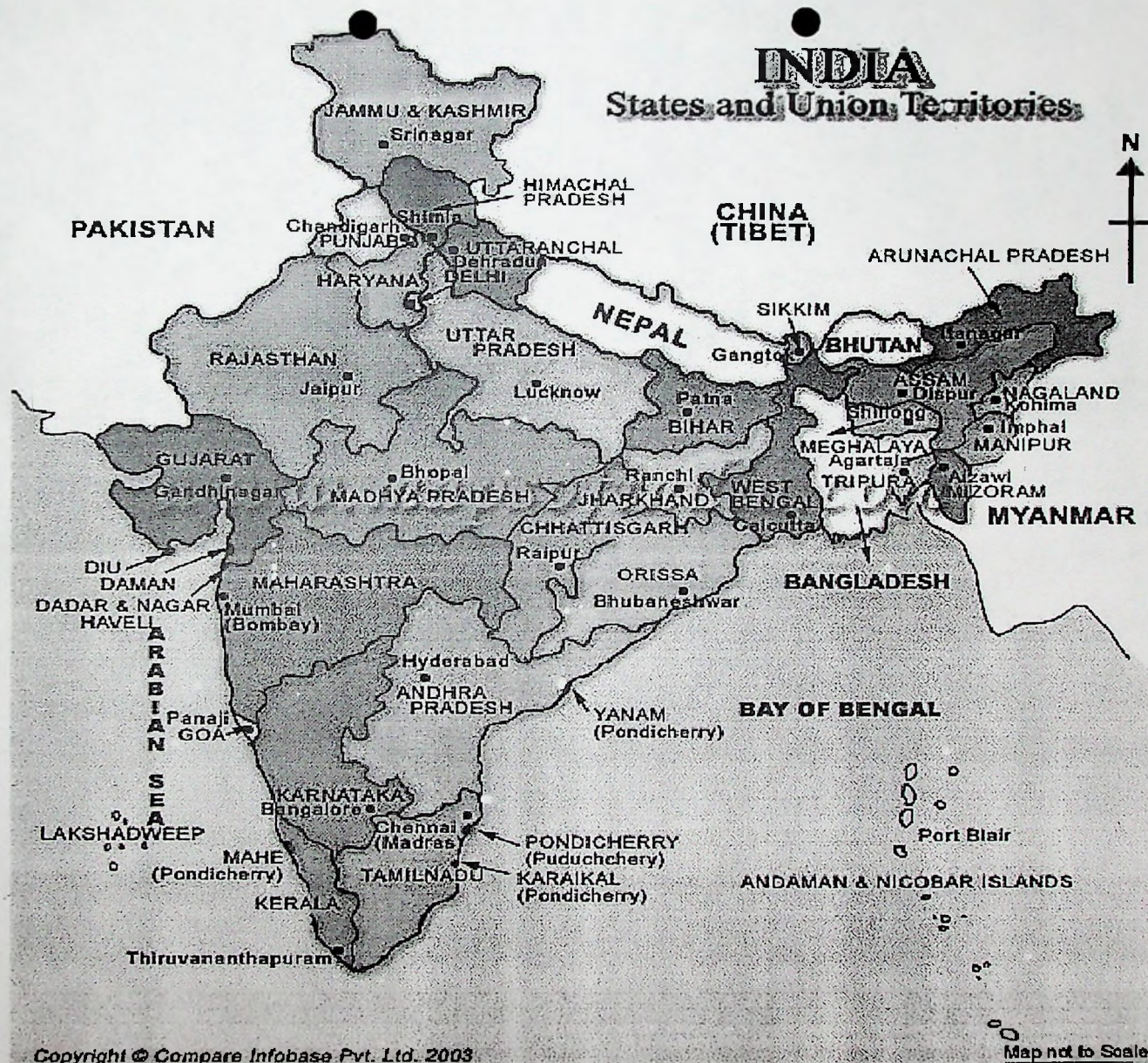
3<sup>rd</sup> ICCHE 2004, London



# Objectives

- Review the incident of Endosulfan spraying and vulnerability of children to pesticide exposure in Kasaragod district, Kerala in India.
- Review the environmental protection system in India to safeguard people's health from pesticide exposure in terms of
  - A. Legal and constitutional provisions,
  - B. The implementation and monitoring mechanisms of pesticide use in agriculture .
- Review the policy implications for safeguarding children's right to healthy living.







# Picture of cashew plantations





Conclude on two important findings:

### **1. Long term exposure to Endosulfan**

Exposure is continuous and long term. Residues of Endosulfan were found in the water, soil samples ( more than the MRL) taken 10 months after the last aerial spray in Dec 2000.

Favourable watershed characteristics for endosulfan to persist in soil and water.

### **2. Excess morbidity among the people**

Case studies

Department of health study

National Institute of Occupational Health



# Epidemiologic evidence

An epidemiological study was conducted by the NIOH to explore the effect of Endosulfan on the growth and development of school children (10-19).

*Study group:* School children residing in the Endosulfan sprayed areas

*Comparison groups:* School children from an area 25 km north of the sprayed plantations; similar socio-economic background. This area also grew cashew but did not have any streams or aerial spraying.

## Investigations by

1. Media
2. Environmental organisations -THANAL and Centre for Science and Environment
3. Kerala Sasthra Sahithya Parishad
4. Kerala Agricultural University
5. Plantation Corporation of Kerala
6. Government of Kerala –Achuthan committee
7. National Institute of Occupational Health
8. Pesticide Action Network-Asia Pacific (PANAP)
9. Department of Health, Kerala
10. Central Committee-Dubey committee



# The incident – Endosulfan spraying

- Aerial spraying of Endosulfan, was done in cashew plantations spread over 4500 hectares around 15 villages in the northern part of Kasaragod district in the state of Kerala since 1976.
- The cashew plantations belong to the state owned public sector company – Plantation Corporation of Kerala (PCK).

- Since 1979, the local community have noticed health effects in the animals and also among the people.
- Significant neurological impairment among people aged <20 years.
- School children – physical and mental development affected (School Annual meeting 2000)
- The first ban on aerial spraying – sought by an affected mother.
- People's movements against spraying and ban on use of endosulfan.



# Methodology of the study

1. Estimation of mean weight, height, skin fold thickness and body mass index of the two groups
2. Assess reproductive development by
  - a. Sexual Maturity Rating (SMR) using the Marshall and Tanner's classification
  - b. Estimation of serum levels of Testosterone, LH and FSH.
3. Assess the neurobehavioral development by reported learning ability by teacher and objectively by a screening test (Draw a Man) for IQ
4. Estimate the prevalence of congenital abnormalities by clinical examination by Paediatrician.

Relationship of environmental endosulfan exposure  
and reproductive development in male children and  
adolescents (10-19)

EHP 111 (16); (Dec 2003) 1958-1962

Parameters	Control (n=90)	Study (n=117)
Age (years)	13.10 $\pm$ 2.12	12.80 $\pm$ 2.07
Height (cm)	141 $\pm$ 10.60	139 $\pm$ 13.30
Weight (kg)	30.70 $\pm$ 7.44	29.50 $\pm$ 8.93
Body Mass Index	15.30 $\pm$ 1.98	15.00 $\pm$ 2.11
Skin- fold thickness	7.31 $\pm$ 2.15	7.40 $\pm$ 2.28



# Sexual maturity of male school children

EHP 111 (16);(Dec 2003) 1958-1962

Multiple regression analysis :

SMR score, Age, Aerial exposure

Testosterone levels, age, aerial exposure

SMR score for pubic hair, testicular and penis development  
**lower** for study group for the same age .

Serum Testosterone levels of the study group were  
statistically **lower** than the control group for the same age.

# Endosulfan levels in blood

EHP 111 (16);(Dec 2003) 1958-1962

Serum endosulfan detected in 78% samples in study group as compared to 29% of control group.

Mean levels of Total endosulfan in study group is  $7.47 \pm 1.19$  as compared to control children  $1.37 \pm 0.40$  (  $p < 0.001$  ).



# Conclusion

1. Endosulfan is a known testicular toxin in animal studies
2. Children have been exposed –  
PRENATALLY -mothers of affected children who are residents in the sprayed areas.  
ENVIRONMENTALLY – water, playing in soil and inhalation during the spraying
3. Endosulfan exposure may delay sexual maturity and interfere with hormone synthesis in male children.
4. Biological plausibility is evident. No other causal factor identified.

Limitations : Small sample size

# The incident – Endosulfan spraying and the ban

- Due to media and public pressure, the State brought in a ban on endosulfan in August 2001
- Under pressure from industry, the State removed the ban in February 2002, finding excuse from the loopholes of the Insecticide Act.
- The High Court heard petitions from varied Environmental groups and ordered a temporary ban on Endosulfan in State of Kerala in December 2002.



# Review of the Environmental Protection System

- **Constitutional Provisions – Right to Life, Right to healthy environment**
- **Environmental laws – Air Act, Water Act, the Environmental Protection Act, Public Liability Insurance Act.**
- **The Insecticide Act, 1968**

# The Insecticide Act, 1968

## **1. Regulates**

registration, licensing, manufacture, transport and storage of pesticides.

No stipulations on use of pesticide

- who can buy or procure and use.
- Inadequate rules on the preventive and safety mechanism for any pesticide use.
- No monitoring mechanisms for pesticide use.
- No precautions to prevent exposure of people indirectly exposed.

## **2. Rules on aerial spraying**



# Violation of the Act !!

- The regulations were completely violated in Kasaragod (Achuthan Committee, 2001).
- Spraying had occurred at heights which aided wind drift and settling of the endosulfan chemical on soil surfaces.
- Adequate notice to the community before spraying was sparingly followed.
- Protection of water bodies was difficult to implement.
- The Insecticides Act and the Rules failed in protecting the people from exposure.

# Failure to Protect Public health

- In 1991 and 1999 government committees to review the continued use of pesticides [Banerjee 1991, R B Singh 1999, Interministerial committee 1999] have recommended the use of endosulfan in the country with a condition that it not be used near any water bodies. This part of the order was never implemented in any part of India.
- The Central Insecticide Board which reviews aerial spraying had not extended its recommendation to aerial spraying after 1993, but aerial spraying continued in the PCK plantation.



# The Environmental and other laws

- These Acts deal with industrial pollution than pesticide exposure in agri-business settings.
- Pollution from agri-business settings is not covered specifically under any law in the country.
- Even case laws do not exist to invoke these Acts for a pesticide exposure issue.
- Most of these laws are not preventive or precautionary in nature and enables justice through a weak regulatory mechanism of “penalties and restraints”.

# Constitutional Provisions

- Article 21 – Right to Life – “No person shall be deprived of his life or personal liberty except according to procedure established by law”.
- Article 32, 51(g), - Public Interest Litigation – These articles empowered a very useful tool in the country for the public to seek justice by increasing the accessibility of the judicial system.
- The Indian Judiciary has time and again resorted to invoking the fundamental rights to provide justice in environmental issues.



# The Endosulfan Ban

- The Local Court used the provisions in the civil law to protect the public property from poisoning by pesticides – stopped aerial spraying of pesticides.
- The High Court creatively used the “Precautionary Principle” and banned the sale and use of endosulfan in the State.
- Article 21 invoked inspite of lack of specific provisions in the Insecticides Act.
- Remarkable judgment clearly upholding the need to stop potential harm to public health over the need to profit through sale and use of endosulfan.

# Endosulfan –viewpoint of agricultural science and industry

1.Ban – Loss to the Industry.In India endosulfan is used in cotton,cashew,tea and vegetable cultivation.

2.Agriculture scientists propagated endosulfan as a ‘Safe chemical’ –effective against pests,less persistent and not known to cause health effects.

3.Department of Agriculture recommends the use of endosulfan and also subsidises its sale to farmers.



# The wrong prevails...dangerously

- Central Government – Failed to extend the ban to the whole of India or even start the process of the phasing out this persistent chemical
- The State Government - is ineffective in implementing the ban and sale of the chemical continues.
- The Central Government committee headed by an Agricultural expert, rejected all evidence on the health effects and causal link to endosulfan.

# The wrong prevails...dangerously

The Committee .....

- Allows the continued use of endosulfan in all crops (in India a major porportion of endosulfan is used in cotton cultivation)
- Suggests that the Plant Protection Division (under the Agriculture Department ) conduct a health study in the future !!

*(Clear case of Interests of the industry and bias of the agricultural scientists against the need to protect human health and environment from harm)*



# Children in the vulnerable world of pesticides...

- The Pesticide Regulation agencies refuse to recognize the availability of new scientific evidence regarding children's vulnerability – blatantly so because it challenges the very premise of “safe use of pesticides” propagated by agriculture scientists.
- Lack of Policy and laws– on Environmental issues of pesticide use, exposure, contamination and safeguarding human beings.
- Safeguarding Children from EXPOSURE to pesticides is not addressed in any policy or legislation.

# Children in the vulnerable world of pesticides

The Endosulfan case-study showed that

- Specific epidemiologic evidence of endosulfan affecting the reproductive development of children.
- Children are the most affected by the use of endosulfan.
- The Safeguarding mechanisms did not address public health and did not protect children from exposure.
- The Safeguarding mechanisms do not recognize enhanced vulnerability of children in pesticide exposure impacts.



# **The most important lesson from this tragedy**

Communities are led to believe that safe use of pesticides is possible and that accidents and poisoning incidents are an issue of regulation.

The scientific tools of MRL, ADI, LD50 have been developed to regulate the health impacts.

The different settings of exposure and health impacts of children show that the science and policy have not effectively addressed ground realities.

# Children's vulnerabilities

1. Children are involved in family based activities, like agriculture.
2. Child labour in agri-business settings
3. Living environment and activities of adults
4. Susceptibilities – Behaviour, Physical size, Metabolism, Intranatal exposure
5. Lack of political commitment to understand environmental threats and protect the environment for the future children.



## Community action for Pesticide Elimination ( CAPE)

Documentation and expose the different ways by which communities especially children are exposed.

Community monitoring of pesticide-related health effects.

Communicate the issue of pesticides and their impact on human health.

Develop strategies to eliminate the use of pesticides in house and in agriculture.

Reveal the interests of different stakeholders –industry and agriculture departments to the public.

To influence policy changes to eliminate the use of pesticides.

Thank You



## TESTIMONY ON USE OF IRRATIONAL DRUGS

At present, many drugs which do not find a place in any standard text book of medicine or pharmacology are prescribed to patients under considerations other than scientific indications. This increases the cost and many a time prove to be hazardous to health. Anti oxidants, tonics, irrational combinations of drugs are prescribed and used. The recent controversy where gynaecologists prescribed Letrozole for infertility is another, eg. Letrozole is an anti cancer drug and its label carries the warning : To be prescribed only by an oncologist. The MIMS also carries a list of drugs prescribed in India which are either irrational or not recognized by the Drugs Controller General Of India. A study conducted by SCTIMST, Trivandrum has found 66% of prescriptions to be irrational. Since SCTIMST is a national institute of repute, this has to be given due importance. Another study recently released by Dr. Indira of Medical College, Trivandrum Clinical Epidemiology Unit has brought out the irrational use of antibiotics in respiratory infection in children.

INDIAN MEDICAL COUNCIL REGULATIONS 2002 (NOTIFIED ON 11-3-2002  
PUBLISHED IN GAZETTE OF INDIA DATED 6 APRIL 2002 1.5 says

Every physician should as far as possible prescribe drugs with generic names and ensure that there is a rational prescription and use of drugs.

**Denial of Health Care:** Irrational use of drugs

**Consequences:** Impairment of health

**Recommendations:**

**The Medical Council India (MCI) must be directed to implement this statutory regulation in letter and spirit and institute a Prescription Audit..**

**The Drugs Controller General India must publish the list of drugs approved by him for use in India with indications.**

**The MCI shall direct all doctors to prescribe only those drugs which are given in standard text books and approved by DCG till a National Formulary is accepted..**

**MCI must publish a National Drug Formulary or accept the already available ones  
Eg: IMA Drug Formulary, CHAI-CMAI Formulary.**

**All prescriptions should be from within this Formulary. This must be made mandatory.**

## NEGLIGENCE IN PESTICIDE USE AND ABUSE - RESULTING EXPOSURE TO COMMUNITY & ENVIRONMENT

### **Need for preparedness to avert disasters and provide relief for victims.**

There were several cases of poisoning in cashew factories in Trivandrum last year; 1500 women workers were hospitalized. The response was limited to just first aid and acute poisoning mitigation.

Over 100 students were hospitalized in Wynad resulting from the pesticide use by a farmer in the compound next to the school. The timely intervention of the District Collector saved the lives of 8 serious exposure cases.

Exposure and access to pesticides in the plantation areas of Idukki makes it the district with highest suicide rates in the state. The district also reported the rise in cancer patients resulting from pesticide use.

Denial of health care: Absence of regulation in the purchase and use of pesticides.

Consequences: Ill health of the people.

Recommendations: Regulations of the production, sale and use of pesticides.



## **LACK OF A FORUM WHERE PATIENTS CAN LODGE COMPLAINTS REGARDING TREATMENT**

There is no effective forum where patients can lodge complaints regarding treatment (consumer forum is only for compensation) eg: unnecessary drugs, unindicated drugs or other treatment, unnecessary costly investigations ,deviations from accepted treatment protocols etc. eg; Caesarean Sections are in the range of about 30% though the accepted range is only 10%.

As patients are not capable of assessing the scientific validity of the treatment meted out to them, expert panels need to be constituted under each medical council to address this issue.

**Denial of Health Care:** Absence of forum to lodge complaints of mismanagement and malpractice, other than the courts of law or the consumer redressal forums.

**Consequences:** Issues of general nature of mismanagement in health care are not heard or taken care of.

**Recommendation:** Have expert panels under each Medical Council (State), who will listen these complaints and ensure that proper action is taken.

## ANDHRA PRADESH

### ASSESSMENT OF INFRASTRUCTURE IN PUBLIC HEALTH INSTITUTIONS

Infrastructure creates the basis for growth. It will play a critical role in achieving the vision for Andhra Pradesh. Every objective, whether it is developing the growth engines, improving the education and health services or augmenting the services in villages and cities can be achieved only if the necessary infrastructure is created (Vision 2020). Given this mandate, all the development related efforts should contribute in translating the vision into a reality. This is pertinent to health sector because it occupies a pivotal position in the developmental process. Hence, Health System Reforms should be recognised as significant "processes" in which structural and organisational changes would be taking place with the expressed intention of achieving health care objectives.

In India, the establishment of Primary Health Centres (PHCs) in each Community Development Block was launched on October 2, 1952. Since then health service organization and infrastructure have undergone extreme changes. As per the population norm, a subcentre health facility should be provided for every 5000 population in plain area and 3000 population in hilly/tribal areas. The corresponding population for PHC is 30,000 & 20,000 respectively. Similar population norm for CHC indicates a total of 120,000 & 80,000 for plain and hilly/tribal areas in that order. Providing service in the area of public health sanitation, hospitals & dispensaries are the responsibilities of the state governments as per constitution. However, population control and family planning are concurrent subjects. Further, the quality and quantity of health personnel and infrastructure facilities are furnished by state governments. Thus the success of this programme depends on many factors. Currently the Ministry of Health and Family Welfare (MoHFW), Govt. of India is implementing the RCH programme in the country.

The current RCH programme is implemented mainly through primary health care approach. Infrastructure assessment and its utilisation provides an opportunity to understand the supply and demand dimensions of the programme in the state.

**Status:** At present, the state has a large health care infrastructure in the form of public health institutions mostly created in the post-independence era. There are



about 11,000 Subcentres and 1400 PHCs at the primary level. About 230 health facilities are functioning at the secondary tier to support the primary level. Atleast 40 hospitals are providing tertiary care.

**Table - 1: Existing Infrastructure in A.P.**

		Number
i)	<b>Under Commissionerate of Family Welfare</b> Subcentre	10,568
ii)	<b>Under Directorate of Health:</b> PHCs	1,386
	CHCs	47
	Govt. Hospitals	67
	Govt. Dispensaries	104
	Mobile Medical Unit	45
	Project Hospitals/Dispensaries	24
iii)	<b>Under APVVP</b> District Hospitals	21
	Area Hospitals	56
	MCH Hospitals	7
	Paediatric and CD	3
	CHCs	117
	Civil Dispensaries	24
iv)	<b>Under Directorate of Medical Education</b> Teaching Hospitals	31
	Rural Health Centres	6
v)	<b>Under University of Health Sciences</b> Medical Institutions	5
vi)	<b>Autonomous Institutions</b> NIMS, SVIMS, Cancer Hospital	3

*(DFID, Impact & Expenditure review; Health sector; draft final report; March 2001; p18)*

The existing infrastructure can be compared with the planned activities of Government of India, in this aspect. Government of India has envisaged the

requirement of Health Infrastructure in A.P. for the year 2002 in the following pattern:

**Table - 2: Requirement of Infrastructure as per GOI**

	Subcentre			PHCs			CHCs		
	R*	P	S	R	P	S	R	P	S
AP	11207	10568	639	1868	1636	232	467	238	229
India	155455	137271	22927	25907	22975	4323	6479	2935	3553

(\$) Infrastructure required in 2002 as per projected population and in position as on 30-06-1999. (Bulletin on Rural Health Statistics in India, Issued by Rural Health Division, Directorate of Health Services, Dept. of Family Welfare, MOHFW, GOI, June, 2000, table 18, p 40).

\*R: Required; P: Position; S: Shortfall

In a similar way, Health Systems Resource Centre of DFID, has estimated a shortfall of about 1300 Subcentres, 500 PHCs and 250 CHCs in the state. Further, it has highlighted that only 85 PHCs and 15 CHCs were established during ninth plan period out of proposed 300 New PHCs and 60 CHCs.

**Table - 3: Current Infrastructure and Norms – DFID**

Facility	Norms	Current	Required	Shortfall*
Subcentres	1/5000 (PI)	10568 ?	11885	1317
	1/3000 (Trb)			
PHCs	1/30000 (pl)	1386**	1889	503
	1/20000 (Trb)			
Govt. Hosp. No norms	144	—	—	
Proj. Hosp. No norms	6	—	—	
CHCs	1/100000	218	472	254

\* as per norms and 1991 population figures

\*\* includes Upgraded PHCs 53  
Old PHCs 391  
MPHCs 439



New PHCs	380
Subsidiary HCs	55
Govt. Disp.PHCs	20
LF Disp.PHCs	48

However, with a rural population of 55,223,944 (72.92%) in A.P. as per Census 2001 and calculating the requirement with the set norms for health care institutions, it can be estimated that approximately 11044 subcentres; 1840 PHCs and 552 CHCs may be required. Thus, a shortfall of atleast 476 subcentres, 472 PHCs and 332 CHCs may be worked out.

Access to health facility is crucial in terms of health seeking behaviour. National Family Health Survey (NFHS -2; 1998-99) reported that median distance from a nearest PHC in the state is 5.4 Kms. while about three-fourths of the rural population have access to a subcentre within a distance of 5 Kms. The survey also reported that 48 percent of rural women live in a village with either a PHC or a sub-centre. ?

**Table - 4: Distance from Nearest Health Facility**

Distance	SC	PHC	Either SC or PHC	Hosp.	Disp/	Any Health facility
Within Village	46.3	14.1	48.3	15.4	45.4	64.2
<5 Km	29.6	32.4	31.8	28.9	21.6	23.9
5-9Km	14.5	32.4	12.8	23.6	15.4	7.8
10+Km	9.6	31.1	7.1	32.0	17.6	4.1
Median Distance	-	5.4	-	5.8	1.3	-

(NFHS-2;t 2.13;p31)

**Table - 5: Percentage of rural residents living in villages that have selected facilities and services, A.P.**

Primary Health Centre	14.6
Sub-centre	45.7
Hospital	15.7
Dispensary/clinic	47.1 ✓
Private doctor	60.8 ✓
Visiting doctor	57.3 ✓
Village health guide	43.7 ✓
TBA	72.7 ✓
Mobile health unit	31.2
STD	16.6
Medical shop/Pharmacy	39.7
Cable connection	88.4 ✓

(NFHS-2;t2.14,p32)

laboratory facilities; about one-third are having a labour room; and less than 10 percent are having a telephone.

**Table - 8: Percent of PHC having following infrastructure**

Facility	Percent
Water (continuous supply)	52.3
Electricity	96.3
Labour Room	40.6
Laboratory	55.8
Telephone	8.6
Vehicle (functional)	30.5

*(Facility Survey 1999, under RCH;ASCI, April 2000, Vol 1 & 2)*

A study in AP, conducted by Institute of Health System (Structure and Dynamics of the Primary Health Sector) identified that auxiliary services like telephone facilities and Ambulance services are available in 6 and 26 percent of PHCs respectively. However, under APERP and local area programmes, the situation must have improved in the last 2 years. For example 1200 external telephone lines are expected to be made available under APERP (Action plan document for 2001-2002, item No. 32, Rs. 3,600 million, procurement through direct contracting); and Generators to 315 PHCs (item 29, 5 KVA Generators).

Similar facilities at CHCs and FRUs show a better status. But, one in 4-5 of these institutions are not having continuous water supply and less than one-third of them are having functional vehicle. About two-thirds of FRUs and one-half of CHCs are having separate aseptic labour room and an adequately equipped laboratory facility.



IHS study, 2000 noted that Mean floor space in PHC is 2,198 square feet while the mean land area is 3,543 square yards. These figures indicate by and large adequacy of the health institutions in term of space and floor area for the present and near future requirements.

In order to strengthen the secondary level health care system, the Government of Andhra Pradesh, has developed infrastructure facilities through AP First Referral Health System (APFRSH) project.

**Table - 6: Position after upgradation of hospitals**

Category	Before project		After project	
	No. of Hls.	No.of beds	No. of Hls.	No.of beds
District H	17	4354	23	5800
Area H	11	1085	51	4980
CHCs	113	3981	120	5130
Speciality H	06	540	10	824
Civil dispens	25	00	24	00
<b>Total</b>	<b>172</b>	<b>9960</b>	<b>228</b>	<b>16734</b>

*(APVVP; Departmental manual, VVP 115; DRMCRHRDIAP, p 76)*

The year 2002 being the end of the project period, it is encouraging to observe that very high proportion of hospitals have already been commissioned under APVVP.

#### **AP Economic Restructuring Project (Health Component):**

- i) Construction of 627 PHCs with compound walls: Out of 627 PHCs 601 are completed.
- ii) No. of compound wall to old PHCs 561 Nos.: Out of 561 PHCs 553 are completed.

Facility Survey (1999) under RCH project, evaluated the infrastructure facilities available in the state. A total of 622 PHCs spread in 12 districts were surveyed. About one-half of the PHCs are having continuous water supply and

Information available regarding RCH related supplies and equipment kits both at PHC and secondary tier reveals that there are apparent gaps even at these levels.

**Table - 12: Percent of PHCs having supplies and equipment.**

I.	Supplies	Percent (N=622)
	Kit G (IUD insertion)	31.6
	Kit I (Labour room)	44.9
	Em O C drug kit	6.2
	Mounted lamp 200w bulb	9.26
	Oral pills	62.1
	Measles vaccine	84.3
	IFA tablets (large)	25.3
	ORS packets	63.8
II.	<b>Equipment (at least one functioning)</b>	
	Deep freezer	89.0
	Vaccine carrier	97.0
	BP apparatus	84.3
	Autoclave	78.8
	MTP suction aspirator	14.7
	Labour room equipment	73.4

(Facility Survey 1999 under RCH; ASCI, April 2000, Vol 1 & 2)

**Table - 13: Supply and equipment at Secondary level institutions**

I. Supply	(Per cent)		
	FRU	CHC	DH
Tubal rings	2.1	4.5	0.0
Std. surgical kit (all 6 kits)	27.1	37.2	25.0
Em O C Drug kit	11.9	37.2	16.6
RTI/STI Lab kit	2.1	12.4	16.6
New born care equipment kit	15.2	19.1	16.6
Labour room kit	35.8	37.6	33.3
<b>II. Operation Theatre equipment</b>			
Boyles apparatus	36.9	46.1	100
Oxygen cylinder	43.4	47.2	100



Shadowless lamp	88.0	77.5	91.6
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(Facility survey 1999 under RCH; ASCI April 2000, Vol 1 & 2)

IHS study 2000, revealed that family planning, AN care and Immunization services are available in atleast 85% of Primary Health Centre in the state. But, availability of intramural diagnostic services are observed in only 10 percent of PHCs. Information on the availability of supplies of medicines, contraceptives and equipment at subcentre also indicate shortages. The shortages are mostly for antibiotics or cotrimoxazole and equipment like weighing scales. Stock outs for one month or more are frequent in tribal areas.

**Table – 14: Percent of Sub center reporting supplies and equipment**

		Percent (N=58)
<b>1</b>	<b>Medicines</b>	
	IFA tablets (large)	72.2
	ORS packets	81.0
	Vitamin A syrup	75.4
	Antibiotics or cotrimoxazole	41.1
	Antimalaria drugs	41.6
	Paracetamol	72.9
	Deworming medicine	68.4
	DDK	28.7
<b>2</b>	<b>Contraceptives</b>	
	OCP	73.9
	Condoms	11.4
	IUD	48.7
<b>3</b>	<b>Working equipment</b>	
	Infant Weighing scale	62.4
	Adult weighing scales	66.2

	Syringes	98.5
	Steam sterilizer	90.2
	BP apparatus	59.9

(CARE, INHP, Final Evaluation, AP, 2001, IIHFW)

**Table – 15: Subcentres Reporting Stock Outs on Medicines/Contraceptives**

Medicines/Contraceptives	Available	Stock out 1 month or more	
		Rural	Tribal
IFA Large	72.2	52.8	90.9
IFA Small	80.6	52.8	81.8
ORS packets	81.0	50.0	100.0
Vitamin A solution	75.4	50.0	90.9
Antibiotics (Cotrimoxazole)	41.1	72.7	90.9
Anti Malaria drugs (Chloroquine)	41.6	75.0	63.6
Paracetamol	72.9	63.6	90.1
Deworming Medicine (Mebendazole)	68.4	47.7	63.6
Oral Contraceptives	73.9	43.2	72.7
Condoms	11.4	71.8	90.9
IUDs	48.7	52.3	81.8
DD Kits	28.7	75.0	100.0
UIP	76.6	32.8	63.6

T67 (8.2.3) CARE INHP QS. AP 2001

#### **Drug and equipment procurement for public health institutions in A.P.:**

**Centralised Drug procurement and supply:** In September 1998, a centralised drug procurement was formed in APH MIDC. The drug wing operates its own warehouses in 22 districts of the state with Executive Engineer as administrative head supported by pharmacists. The budgets to the individual hospitals are allocated by their respective Heads of Department i.e., DME, Director of Health and Commissioner of APVVP. The hospitals heads in turn utilise the budget to purchase drugs, surgical items and medical consumable. This budget is distributed between APH MIDC, individuals hospitals and DMHOs on the lines of general procurement, emergency procurement and procurement as per requirement changes. Out of 100 percent budget 2 percent is given to APH MIDC towards supervision charges. From the balance, APVVP keeps 90 percent with corporation for procurement of drugs and allots 10 percent to individual hospitals. DME keeps 80 percent with APH MIDC and the balance 20 per cent is allotted to



the hospitals under control. Director of Health keeps 80 percent with corporation but the remaining 20 percent is equally allotted between individual hospitals and DMHO i.e., 10 percent each. Drugs are distributed to user institutions as per the allocations made by the Heads of the respective departments. Institutions draw drugs on a quarterly basis budget through a passbook system. The user and the warehouse maintain identical copies of the passbook.

PHCs are permitted to obtain drugs from the approved list of 33 drugs; while secondary level hospitals from 103 drug-list and for tertiary care institutions from 171 drug list. At PHC level the drug are grouped under antibiotics, IV fluids and general drugs.

Drugs under national health programmes are not supplied through the Central Drug Stores. By and large PHCs are eligible for drugs worth Rs.1.2 lakh annually. Lifting of drugs from District Drug Stores is done once in a quarter.

Drugs are provided to APVVP hospitals from three different sources. First, Rs.2000 is allocated per bed per quarter under centralized drug procurement system. The second source of drugs is from the emergency provision of Rs.100 per bed provided every month directly to the hospital. The third source is from the DCHS store where drugs are procured under project are stored and supplied. In addition to the above, separate allocation are made for procurement of ARV and ASV.

Only recently, the corporation is involved in procurement of equipment and consumables also. From February 2002, this organisation is procuring MCI identified deficiency equipment.

In A.P. under Sukha Parivaram scheme of Social Marketing programme 12,000 condom vending machines are obtained.

Urban Health Centres also obtain drugs once in 6 months from the 33 drug list after centralised procurement. But the drugs are supplied through the office of DMHO. In addition, "Emergency funds" to a maximum of Rs. 10,000 per year will be released to each UHC for providing treatment and drugs for emergency cases of maternal and infant care at FRU/private clinic. A maximum of RS. 750 can be incurred for each beneficiary. For each UHC 34 items of drugs and 13 items of furniture are supplied.

**Equipment and Drugs for PHCs from APERP:**

16 items of furniture and equipment like microscopes, centrifuge Hb metre, Haemocytometre, ESR stand etc. for 668 PHCs are part of the goods procurement for the year 2001-2002.

135 items for 315 Round-The-Clock PHCs consisting mainly clinical equipment and consumables like syringes, face masks, bed linen sets etc. are in the process of finalisation. For 1336 PHCs mechanical needle cutters (3 per each PHC) and white cotton bedsheets (10 each for PHC) are also figured in the goods to be procured in the action plan. Epidemic drugs valued Rs. 6,775 millions (as when required) are ear marked by APERP.



## B. UTILISATION OF INFRASTRUCTURE:

In A.P., only one out of five persons who fall sick utilise the health facilities in the public sector, while majority of them seek services from the private sector. NGOs and others play a very insignificant role.

**Table - 16: Percentage distribution of households by main source of health care, when household members get sick, according to residence**

Source	Residence		
	Urban	Rural	Total
Public Medical Sector	15.3	14.6	14.8
NGO or Trust	0.8	0.6	0.6
Private Medical Sector	81.2	81.9	81.7
Other Source	2.7	2.9	2.8

(NFHS-2, table 9.1; p 200)

However, the assessment of services by the users in public sector seems to be encouraging. Other factors may be dominating in expressing such a favourable opinion.

**Table - 17: Quality of care during the most recent visit to Health Facility (Public sector)**

Indicator	Urban	Rural	Total
1. % who received the service they went for	98.4	98.0	98.1
2. Median waiting time	29.7	29.5	29.6
3. % who rated facility not clean	6.7	2.6	3.6

(NFHS-2, t9.51, p 206)

However, Public sector health facilities play a major role in providing immunization and family planning services. It is alarming to observe that in

conditions like reproductive health problems, more than two-thirds of women do not approach either the public and private sector.



**Table - 18: Source of childhood vaccinations by residence (per cent)**

Source	Urban	Rural	Total
Public Medical Sector	59	80	74.4
NGO or Trust	1	1	0.9
Private Medical Sector	38	18	22.9
Other Sources	2	2	1.8

(NFHS -2; f 6.5;p 134)

**Table - 19: Sources of family planning among current users of modern contraceptive methods - Percent distribution**

Source	Urban	Rural	Total
Public medical sector	64.9	83.4	78.5
NGO or Trust	1.1	0.6	0.7
Private medical sector	29.8	15.4	19.2
Other source	3.6	0.7	1.5
Don't know	0.7	0.0	0.2

(NFHS-2;f5.2, p97)

**Table - 20: Treatment of Reproductive Health Problems**

*(Among women with RH problem, the percentage who sought advice or treatment from specific providers by residence.)*

Provider	Urban	Rural	Total
Public medical sector	6.1	7.1	6.8
NGO worker	0.2	0.2	0.2
Private medical sector	36.0	30.1	31.5
Other	0.4	0.7	0.6

NONE	58.3	64.0	62.6
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(NFHS-2, t 8.13, p 186)

RCH programme encourages deliveries under proper hygienic conditions under the supervision of trained health professionals. Every second birth takes place in health facilities. But utilisation of public health facilities is one-quarter of the private sector in institutional deliveries.

**Table - 21: Per cent of Place of delivery**

Public institutions	13
NGO/Trust hospital	2
Private Institutions	35
Own home	25
Parents' home	24
Other	1

(NFHS-2; figure 8.4; p 185)

Even out of institutional deliveries, urban women utilise this type of service two times than of rural women.

**Table - 22: Per cent distribution of Institutional deliveries by residence**

	Urban	Rural
<b>Institutional :</b>		
Public health facility	18.6	10.5
NGO/Trust	3.6	1.7
Private	56.4	29.8
<b>Home deliveries:</b>		
Own home	12.4	29.8
Parent's home	8.7	29.0
Other	0.3	1.1



During the last two years, GOAP has launched an innovative "SUKHIBHAVA", improvement of institutional delivery services scheme to assist the rural pregnant women who are below the poverty line. This scheme will enable them to access the service of hospitals for conducting of deliveries which helps in reducing the maternal mortality in the state and also in long run helps in positive attitudinal shift in health seeking behaviour of the poor, rural women.

Similarly "AAROGYA RAKSHA", a health insurance scheme aiming at strengthening the confidence of poor and illiterate in their ability to get health care for their children. It also seeks to remove any fears in their minds about any risk to survival of their children.

Like wise, JANANI programme was initiated to ensure micro-level planning and implementation with the participation of local resources towards universal immunization of eligible in the state. The impact of these schemes is yet to be documented.

Diarrhoeal disease contribute for almost one-fourth of under five mortality in the state. Usage of ORT including ORS remains to be the main stay in preventing deaths due dehydration and electrolyte imbalance. In spite of limited ORS usage, public sector is the major source of ORS packets in such situations.

**Table - 23: Source of ORS packets among children under age 3 who were treated with a solution from ORS packets for diarrhoea**

Source	Per cent
Public Medical Sector	43.3
Private Medical Sector	30.9
Other Source	25.7

*(NFHS-2;t 6.14; page142)*

Terminal method of contraception is the most popular family planning method in the state. About 95 % of acceptors are women. However, the role of public and private sectors in motivating the users of contraceptives is very limited.

**Table - 24: Motivator of current users of modern contraceptive methods**

	Urban	Rural	Total
Public health sector	12.2	25.8	22.2
Private sector	4.3	2.4	2.9
NGO	0.0	0.1	0.1
Other	29.1	25.2	26.3
NO ONE	54.4	46.4	48.5

(NFHS-2;t9.7,p208)

Facility survey 1999, also provides useful information on the utilisation of RCH services in the public health care institutions.

RCH programme envisages provision of pregnancy related services; first trimester abortion services; and management of RTI/STI through syndromic approach in addition to family planning services . At PHC level 97 per cent of institutions are providing sterilisation services. In only 42 percent of PHCs deliveries are conducted. About one-third are utilised for RTI/STI problems. Only 1.5% of PHCs are conducting MTP services.

**Table - 25: Utilisation of services at PHCs (during the last three months)**

	Deliveries	MTP	RTI/STI	ARM	Sterilizations
a. Percent conducting	42.2	1.5	34.2	18.5	97.5
b. Average No. conducted	27.0	4.8	70.9	99.2	113.2

(Facility survey1999 under RCH; ASCI April 2000)

Similar utilisation at secondary level institutions does not reveal any changes in the pattern. The proportion of deliveries to total admissions (Delivery Rate) in APVVP hospitals remain constant at 0.12% over the last several years.

**Table – 26: Delivery Rate in APVVP Hospitals**



Year	No. of Deliveries Conducted	Delivery Rate
1996	59,710	0.12
1997	65,996	0.13
1998	62,578	0.11
1999	68,570	0.12
2000	90,019	0.13
2001	94,690	0.12

*(O/o. APVVP – MIS Division)*

Infrastructure will be put to optimum utilisation only when supply of drugs and consumables etc. are regular; adequate and functioning equipment is available and the staff are in position and trained. Taking into consideration these critical indicators, assessment of health facilities in the state revealed a situation of inadequacy. None of the facility shows presence of 100% critical inputs, even presence of 60% critical inputs is noticed in only one-fourths of the institutions.

**Table - 28: Percent of Health Facilities Adequately Equipped  
(having >60% Critical Inputs)**

	PHC	FRU	CHC
Infrastructure	31.6	84.8	63.4
Staff	50.4	24.9	33.3
Supply	16.3	8.7	11.1
Equipment	83.9	55.7	52.3
Training	21.3	—	—
All items	24.5	22.8	25.3

*(Facility survey 1999 under RCH; ASCI April 2000)*

### C. MAINTENANCE OF INFRASTRUCTURE

Maintenance of the available facilities is critical in enhancing the credibility of organisations. Data available identifies a need to improve the maintenance of the infrastructural inputs.

**Table - 29: Percent of PHCs with adequacy in maintenance of selected indicators**

1.	Regular building maintenance	14.46
2.	Fumigation done regularly in OT	67.20
3.	Fumigation done regularly in LR	65.54
4.	Dial thermometer is kept in ILR	42.24
5.	ILR with daily temp. is maintained	58.00
6.	Sufficiency of stocks	
	Nirodh	40.51
	OCP	51.26
	IUD	53.85
	DDK	37.00
	Measles vaccine	52.57
	IFA (large) tablet	15.91
	ORS packets	33.11

*(Facility survey 1999 under RCH; ASCI April 2000)*

**Equipment maintenance:** The state has different levels of equipment maintenance units with different capacities. There are 7 Health Equipment Repair Units (HERUs) under Director of Health. 4 Equipment Maintenance and Training Centres (EMTCs) are functioning exclusively for APVVP hospitals. In addition, one district mechanic besides private contractual arrangements are also made available at this level. Tertiary hospitals have its own maintenance capacity and contract out to private facilities. The equipment strength at PHC is around 20 items. Maintenance cost of equipment in hospitals is around 2-3 percent of the total value of the equipment.



APERP while supplying the equipment issued specific guidelines for acceptance and routine testing of medical electrical equipment. Project inputs are based on the PHC Needs Assessment Study carried out at the beginning. The requirements at the PHC level are considered under major, minor equipment; furniture, instrument kits and others.

**Table – 30: Arrangements for the maintenance of equipment**

	Facility	Existing maintenance and repair arrangements
1.	PHCs	* HERU
		* District mechanic
2.	Secondary level Hospitals	* Repairs by hospital staff
		* EMTCs
		* AMCs and contracting out on need basis
		* Warrants
3.	Tertiary level hospitals	* Repairs by hospital staff
		* HERU
		* AMCs and contracting out on need basis
		* Warranties

At PHCs and Hospitals under Directorate of Health guidelines are issued for Drawing and Disbursing Officers regarding responsibility of maintenance of Stock Registers including medicines, linen, equipment, annual verification of stocks, quarterly verification of costly articles like surgical instruments etc. (Under Subsidiary registers and records attached to the cash book Item 8 (c)). PHC Medical Officer is not empowered for condemnation procedures.

In APVVP institutions, as laid down under Art 135 of APFC vol 1, as the furniture and other equipment will stand distributed in the various wards, theatres and other departments of the hospitals, entries should be made, attested by the head of the organisation. Any addition or alteration in the list will be made only by him under his initials (H.S.O. 494). For condemnation of equipment, furniture etc. Further, through Pro. Rc. No. 90/HEM/89 procedures for condemnation are laid down. Rules for auction of unserviceable articles are laid down. in H.O.S. 402 to 425. These can be implemented through Condemnation committee.

**General Maintenance:** Advisory Committee set up in different levels of health care institutions monitor the general maintenance of the institutions.



G.O.Ms. No. 151, dt. 21-050-1998, item (x) provides provision for utilisation of hospital revenues for toilets maintenance, sanitation of the hospital wards etc.

In A.P. every third Saturday of the month is observed a clean and green day for all the government institutions for upkeeping the premises.

**Key observations on infrastructure during Field visits in policy review activities have are as follows:**

1. Some PHCs buildings are located away from the periphery of the villages which discourages people to utilise the services in late hours. Directions for the location of PHC and hospitals are not found on the main roads.
2. Amount paid towards house rent for subcentres will not provide required accommodation for ANM to function effectively.
3. Rarely one can find a PHC with plantations in the yard.
4. Atleast one to two rooms in each PHC are used as store rooms mostly for unserviceable goods like old sterilisers, broken furniture etc.
5. Most of the drugs meant for Subcentre from the quarterly budgets are being utilised at PHC only.
6. PHC kits have not reached districts in a few places.
7. At present, most of the PHCs do not have telephone facility.
8. Continuous water supply though very essential, many a times water for only limited hours is available in number of PHCs.
9. Drug budgets are strongly felt to be inadequate at both PHC and FRU level. In one district hospital a detailed assessment done recently on requirements of drugs from all the consuming units revealed a shortage of Rs.2 lakhs per quarter in comparison to the existing budgetary allocations.
10. Though essential drug list also mentions about the availability in adequate quantities and all the times, stipulated eligible number of drugs as per the list are not available in the drug stores. The shortages become grave during summer months.
11. Though PHC staff take the attestation of district authorities on drug indents, neither the officials keep a copy nor conversant with issues of drugs at the district stores.

12. District pharmacists at district stores are not exposed to any training during the last three years. The reports on drugs lifted by the Drug Inspector for quality control never reach drug stores.
13. PHC staff are totally ignorant of the mechanisms for verification when the quality of drug is suspected.
14. Significant compromises are noticed in Safe injection practices of health staff in the public health institutions. Boiling of disposable needles and syringes  
is not an infrequent site. Syringes and needles are used again and again without resterilisation.
15. Minimum Essential items for clinical examination (like a set of stethoscope, BP apparatus, thermometer, torch, weighing machine, height measuring scale, examination couch with screen and steps) are hardly noticed in any of the half-a - dozen PHCs visited.
16. Special health campaigns like Janmabhoomi etc. drain the meagre drug allocations from the health institutions because of change of decisions in reimbursements after the events.
17. Though government discourages prescription of drugs from outside, very often consumable are made to be purchased by the patients from outside. At FRU it becomes inevitable in items like urobags, ryle's tubes, infant feeding tubes. Sometimes drugs like mannitol and higher group antibiotics are prescribed outside. Even non-emergency items like hematinics are prescribed because of high demand from users.
18. At PHC, in addition to the centrally procured drugs, drugs and items are supplied under the following different subheads:
  - MCH programme
  - UIP programme
  - RCH programme
  - APER programme
  - School Health programme
  - Under Epidemics
  - JB drugs
  - FW programme
  - Emergency drugs/life saving drugs



#### General items (Subcentre wise)

Supplies under these heads are erratic. This leaves a room for confusion about the assessment of drug availability.

19. Most of the health units staff have expressed difficulties in maintenance of equipments. There are cases of ultrasonographic scan even if certified condemned no replacement is done for three years. Sophisticated instruments like endoscopy remain unutilised because of very high cost for repair. Boyle's apparatus being regularly used equipment are also never serviced during the last 5 years. Generators are another set of equipment which often need repairs.
20. Atleast in one CHC, equipment like sterilisers are kept in a corner without opening for long months.
21. In very few PHCs/CHC shadowless lamps are made to use as prescribed. They are simply hanged from a wire.
22. All the temperature charts of the coldchain equipment show fixed pattern of recordings over several months.
23. Diluents and other lab chemicals are also noticed in the cold chain equipments
24. Hb scale books (Tallquist) are frequently seen for supply to even subcentres. Urine exam in some places done with uristicks, otherwise no attempt is made for such analysis at PHCs.
25. Delivery tables with bricks and cement plastering are noticed.
26. In the health centers and hospitals height is measured against the marking made on the wall rather than with height measurement scale. Attempts to identify the center where facilities for complete available antenatal checkups (including Haemoglobin estimation, Urine examination for Albumin and Sugar, Height and weight measurements are accurately followed) were not successful.
27. No village other than subcentre headquarters is having facilities for proper storage and maintenance of required supplies for rendering RCH services.

#### SUGGESTED POLICY OPTIONS:

1. **Enhance the budget for renting subcentre accommodation.**
2. **Storage shelves at every village with required supplies and equipment to enable ANM to conduct outreach services.**

3. Use the principle of SIGNAGE by display boards on the main roads indicating the location of FRUs and RTCs. This helps in improving the visibility of the organisation.
4. Permit ANMs to give Intramuscular antibiotic injections.
5. Hiring private services for maintenance of building, water, sanitation, electricity, security at PHC level by contracting out. Necessary budgetary allocations may be identified as a part of regular expenditure.
6. Provide communication and transport facilities at every PHC particularly telephones and arrangements for ambulances in emergency situations.
7. Prepare and implement standard pattern of layout of usage of space in PHCs.
8. Establish a standard norm for equipment to be available at different levels of institutions and create annual appraisal systems for the adequacy. Create a cadre of Biomedical engineer for maintenance, using services on co-terminus basis for primary and secondary level organisations. Identify the list of essential items at every OP unit in the state so that thorough physical examination can be conducted.
9. Increase the essential drugs in the list from the existing number of 34 at PHC, 103 at FRU and 171 at tertiary care units to 54, 140 and 270 to meet the demands. Even budget should be enhanced by 75 per cent at all levels to meet the growing demands and costs. Create a second pass book system to monitor the drugs and other supplies reaching the health units from other sources through DMHO to enable streamlining supply and planning for coming years. Drug education and information activities should be initiated immediately to curb improper prescription practices in the light of drug resistance because of re-emerging infections. These steps will ensure safe, effective and prudent use of essential drugs.
10. A practice of noting provisional diagnosis even for O.P. cases at all health units (Eg. 150 disease list recommended by WHO) will facilitate furtherance of scientific prescription practices and appropriate usage of essential drugs and their dosages. Whenever



necessary standard therapeutic protocols should be developed for management of cases related to RCH services.

11. Mandatory safe injection practices should be ensured in all health units of the state. Awareness campaigns can also create an environment of demand in this regard. This does not mean encouraging disposable needles and syringes but focus on properly sterilised needles and syringes and injection techniques.
12. State should take up voluntary blood donation campaigns to the district and rural areas on priority basis which can save precious maternal deaths. Access to blood in rural areas can be strongly considered for public private mix ventures.

**Status in A.P.:**

Number of cases referred among high-risk pregnant women, newborns, ARIs, diarrhoeal diseases, VPDs and adverse events following immunization RTI/STI etc., find a place in the reports and records at SC and PHC under RCH Programme.

The GOAP through its Lr. No. 11077/Ci/96 and Lr. No. 11593/Ci/96, issued a referral manual on behalf of Dept. of Health, Medical and Family Welfare which states that patients may be referred from one level to the next for:

1. Clinical examination or specific examination
2. Consultation or expert advice
3. Intervention or patient care

The manual mentioned referral procedures using slips, referral register, transportation norms, counselling, referral network preference and back referral slip. Referral manual provides summary of recommended clinical services at primary/secondary/tertiary health care institutions. It includes

33 medical conditions (from convulsions to STDs)

9 surgical procedures (from I/D to gastrointestinal )

5 newborn/child conditions (LBW to severe diarrhoea)

11 obst/gyn conditions (complicated deliveries to malignancies).

Referral zoning of district hospitals to tertiary hospitals is done in the A.P.

The review of existing literature on referral system in A.P provides the following relevant information:

*Evaluation study on First Referral Health Systems in AP(1997) observed that in referral practices:*

Out of 66,937 OP cases treated on an average by each CHC, only 133 (0.20 per cent) cases are referred to District hospitals. while Private hospitals out of 10,335 cases 91 (0.88 per cent) only are referred to District Hospitals. This is certainly not an encouraging performance. However, percentage of specific cases referred to DHs is more. About 5 per cent of ARI cases, 3 per cent of delivery cases, 100 per cent of cancer cases and 57 per cent of DUB are referred to DHs by CHCs.

The linkage between PHC and CHC also appears to be weak. There is no information in the CHCs records as to how many OP cases are referred from the PHCs. However, informations on how many cases of some specific diseases are referred from PHCs is available. About 12 per cent of diarrhoea cases, 67 per cent of infertility cases and 100 per cent of cancer cases are referred from CHCs.

Out of 1,486, illness episodes (Non-hospitalisation cases) 945 (63.6 per cent) have reported to have consulted another doctor before consulting the FRUs.

The preference of the people at the first level as well as the secondary level consultation is clearly towards the private hospitals. While only 71 per cent of the OPs consulted private doctors at the primary level. The percentage increased to 78 per cent at secondary level. While 69 per cent shifted from one private hospital to another private hospital. 8 per cent shifted from government to private ones.

As regards the use of referral systems in the government hospitals, while 25 per cent approached government hospitals in their former visits, only 17 per cent visited them in the current visits. Only 16 per cent retained the referral status with the government hospitals.

Turn over of inpatients shows that while 70 per cent visited private hospitals earlier to the hospitalization. Those who have shifted from government to private are 15 per cent. In the government hospitals only 6 per cent have retained the referral status which means that only 6 per cent of the patients continued to go to government hospitals.

The study concluded that the linkages between sub-centre, PHC, CHC and DH are very weak or almost nonexistent. Even though the system of issuing referral slips at PHC level is in vogue, none seems to issue them nor they are accepted or given preferential treatment at FRU. The study recommended that



referral ship system should be revived and implemented according to agreed procedure (6).

#### **Facility Survey (1999) AP observed that**

The district hospitals (12) have conducted a total of 4,677 deliveries averaging 389 per DH in the previous three months of the survey. Out of the total of 612 complicated deliveries, 532 were direct admissions and only 80 were referred. Of the total 1063 Caesarean deliveries, directly admitted were 976 and 87 were referred.

At FRUs out of the total number of deliveries conducted 7843 ( in 92 FRUs) spread in 12 districts, out of 616 were complicated deliveries directly admitted and 91 were referred. The C-section deliveries directly admitted and referred are 252 and 112 respectively.

At CHCs, 16,176 deliveries are conducted during the three months preceding the survey in 63 centres spread in 12 districts, complicated deliveries directly admitted are 2385 (14.74 per cent) and referred are 256 (1.58 per cent). A total of 4591 C-sections are conducted and 31 are referred.

**Table - 31: Number of women received services for the three months preceding the date of survey in APVVP hospitals in 12 districts of AP (1998-99)**

Category	Total no. of deliveries			C-Section	
	Conducted	Admission	Direct Referred	Admission	Direct Referred
DH(12)	4,677	532	80	976	87
FRU	7,843	523	93	252	112
CHC	16,176	2,385	256	4,591	31
<b>Total</b>	<b>28,696</b>	<b>3,440</b>	<b>429</b>	<b>5,819</b>	<b>230</b>
	(11.9%)	(1.49%)	(20.27%)	(0.80 %)	

*(Facility Survey 1999 under RCH; ASCI, April 2000, Vol. 1 & 2)*

IHS study, 2000 on Referral linkage has noted that 72 per cent of PHCs received patients regularly referred by other providers. 98 per cent send patients to other hospitals. The departmental manual of APVVP in its future prospects and vision identifies improving the referral system by establishing proper linkage between primary, secondary and tertiary levels of health care system. The following ultimate benefits are expected:

1. Improved efficiency and effectiveness of health care services.
2. Optimum resource use, avoid duplications, reduced waste and over crowding on tertiary facilities.
3. Improved health status, specially of the poor by reduction in mortality, morbidity and disability.
4. First referral hospitals becoming more client-friendly and patients seeking timely care resulting in higher cure rates at lower costs.
5. Regulated patient flow and reduced cost of treatment by reduction in-patients flow to tertiary hospitals where treatment is more expensive.
6. Improved quality of treatment at a level where sustained linkages with private health care can be established



### Case study: Pesticide use in Warangal

Warangal in Andhra Pradesh is the second largest pesticide-consuming district in the state. Compared to other states like Punjab, pesticide use in this district is a relatively recent phenomenon and this is borne out by the number of years of exposure reported by the mothers of the children studied in the Greenpeace health study "Arrested Development." Warangal shot into national headlines with the large number of suicide deaths that cotton farmers in the area committed during the last decade.

Many deadly pesticides still continue to be used in India. Exposure to even low doses of pesticides is associated with a wide variety of health effects. Since regulations are not adhered to and monitored, not only public health and the environment pay the price but the livelihood of farmers is also jeopardized.

The health care scenario in Warangal is extremely poor. The RMP is able to provide only basic medical treatment like vaccinations, vitamin and mineral deficiencies and maternity advice.

The PHC has barely any facilities and so the farming community has no choice but to go to the private hospitals for treatment.

The practitioner of the PHC comes in for only about a few hours and leaves before 5 o'clock in the evening leaving the community with no medical facility available in case of emergencies.

During the pesticides spraying season the rate of acute poisonings increases drastically and lack of timely medical health often leaves farmers in extremely grave situations.

## ARRESTED DEVELOPMENT – An Executive Summary

In the cotton-growing season between April and December 2003, Greenpeace India studied the chronic effects of pesticides on the development of children growing up in cotton cultivating areas of six states of India. The results of this study, published in April 2004 as *Arrested Development*, reveal that exposure to small doses of pesticide during childhood years has severely impaired the analytical abilities, motor skills and the concentration and memory of children from farming communities. The 1648 children who participated in this study are representative of the population of India.

Most studies in the past have focused on pesticide residues in food and water, instead of which this study attempts to correlate the indiscriminate use of pesticides with the health of unsuspecting little children (4-5 years) and older ones (9-13 years); children who appear normal and happy but whose mental development lags far behind their counterparts in pesticide-free environments. The study focuses on children, as they are particularly vulnerable, given their physiology and behaviour patterns

A total of 899 children from six locations in the cotton-growing belts of the country, (which implies the intensive and high use of dangerous pesticides cocktails) were compared with 749 children of the same age, economic background and ethnicity in a different location (within the same state) where the pesticides usage was far less.

The researchers arrived at the data for this study through using a Rapid Assessment Tool. Through this tool, the children were asked to participate in a wide range of tests using a play approach, where the tools were individually and verbally administered to each child.

Widespread documentation on neurological effects of pesticides including effects on memory, judgment and intelligence as well as personality, moods and behaviour determined the kinds of tests administered.

The tests included the use of wooden blocks and jigsaw puzzles to measure mental abilities, ball catching and balance tests to test motor abilities and memory games to assess the level of concentration and memory.

The study found a remarkable difference between the abilities of the two groups of children, with more or less consistent trends across different locations in both the age groups. With all other possible confounders controlled for, the only significantly accountable reason for these disturbing findings is the children's exposure to pesticides.

The findings of Arrested Development make a strong case for the application of the Precautionary Principle. In the case of hazardous and toxic substances like pesticides, Precautionary Principle needs to be applied in their manufacture, distribution, marketing, storage and use. The current legislations, policies and practices in India do not adhere to this precautionary principle.

The report strengthens the evidence against pesticides and calls for a ban on all pesticides, starting with those banned in other countries. As cleaner, safer alternatives for farming have been well demonstrated by farmers in the country, the study is a wake up call to the government and a demand for them to provide greater support to organic farming in terms of resources, mechanisms for more research, extension and crop loan support and infrastructure.



## **HOSPITAL ENVIRONMENTS CONTROL OF INFECTIONS**

(K.A. NARASIMHAM, Vice-President, Human Rights Council, Elamanchili, Visakhapatnam – 530 122)

A hospital is place where good hospitality with no extra sufferings and infections is given to the patients. To achieve this, it is essential that the staff should be aware of infections acquired in the Hospital and its environment and must be in a position to control the infection to a maximum possible extent.

### **Hospital Environment & Planning of Ward:**

The wards as well as the special rooms should be designed in such a way to allow free entry of fresh air and sunlight as these naturally available sources cure many of the infections. The floors, walls and ceilings of the rooms including its surroundings should be easily washable, so that it provides no room for dust or moisture. The hospital should have an isolation ward or room for badly infected patients, this isolation can control cross infections. The bed should be laid in the centre of the room, to facilitate free approach of staff from all sides of the patient.

### **Control of Infection:**

Many patients admitted in the hospital are getting infected during their stay in the hospital. Such infections are called Nosocomial Infections. The causes of such infections are :

**ENDOGENOUS:** In which the causative organism comes from another part of the patients body. The causative factors are :

- Debilitated condition of the patient.
- Extremities of age (Paediatrics & Geriatrics)
- Compromising the person's immune system (by disease of following immune suppressive therapy).
- Breach of the individuals skin/mucous membrane barrier. (Severe burns, Surgical wounds, catheterization, intubation).
- Following Diagnostic and treatment procedures.
- Malignant disorders and Diabetes mellitus.
- Prolonged broad-spectrum antibiotic therapy.

**EXOGENOUS:** In which the causative organism comes from outside the body and acquired from another person or object. Also referred to as Cross-Infection or hospital acquired infection.

The causative factors are :

- Improper aseptic environment, equipments and instruments.
- Poor sterilization and disinfection techniques.
- Invasive monitoring and therapeutic procedures.
- Transmission of infection by staff.
- Consumption of infected food and water.
- Epidemics arising in the community and spreading to the hospital.

### **NOSOCOMIAL INFECTION:**

The Nosocomial Infection commonly occurring are :

- Urinary tract infections.
- Respiratory tract infections.
- Wounds/Burns
- Gastro-Enteritis/Dysentery
- Bacteraemia and Septicaemia.

### **ROUTES FOR TRANSMITTING EXOGENOUS INFECTIONS:**

- Air Borne: Dusty particles, droplet nuclei are common modes of transmitting respiratory infections and wound infections.
- Contact with cases or carriers especially applicable for wound infections.
- Through contaminated food, water etc., enteric infections.
- Instrumentation, usage of contaminated/un-sterile instruments cause wound infection, urinary tract and respiratory tract infections.

**PREVENTION OF HOSPITAL ACQUIRED INFECTIONS:**

1. The greatest single factor in the spread of nosocomial infections is the failure of health care workers to wash their hands often enough between patient contacts. It effectively prevents most of the cross-infections which tend to occur between patients.
2. Adequate disinfection of the environment and proper sterilization of instruments, and other materials is a necessity. The use of a large number of disinfectants especially without knowing the proper concentration should be discouraged. In situations when the use of disinfectant is indicated it is important to ensure that –
  - The choice of the disinfectant is appropriate.
  - The concentration used must be adequate.
  - The contact time should be enough.
3. Adhere strictly to aseptic techniques. These are :
  - A strict "NO TOUCH" technique while changing surgical dressings, insertion or removal of a drain, catheterization.
  - Use of properly sterilized material.
  - Periodical removal and reinsertion of sterilized catheters and drains.
  - Proper handling of catheters, suction tubings and other equipment.
4. Keep the contaminated instruments aside for disinfection, cleaning, repacking and re-sterilization. Infected materials should be discarded and incinerated wherever possible. Soiled infected linen should be washed separately using steam and sterilized. Sputum cups to be incinerated (If disposable) or disinfected and autoclaved. Bed pans and urinals to be washed and disinfected between uses.
5. Isolation ward facilities should be available for admitting patients with communicable diseases.
6. Indiscriminate and inappropriate use of antibiotics should be discouraged as this leads to spread of drug resistant strains of bacteria. The following are the main points in determining an antibiotic –
  - Use of antibiotics, only when clearly indicated.
  - Use of antibiotics in adequate dosage, for sufficient period of time.
7. Staff with infections should be discouraged from operating on a patient. Monitor all the personnel employed in high risk areas bacteriologically.
8. Control of movement and number of personnel mainly in theatre and also in the wards.

**INFECTION CONTROL COMMITTEE:**

The hospital infection control committee plays an important role in laying down policies for the control of Nosocomial Infections.

The members of the Committee are :

- Medical Superintendent
- Surgeon & Physician
- Operation theatre In-charge
- Nursing Superintendent
- Microbiologist

The committee formulates policies to be followed in relation to :

- General cleanliness.
- Maintenance of proper aseptic techniques.
- Disinfection procedures, including uses of chemicals disinfectants.
- Antibiotic use, control of indiscriminate use.
- Periodical immunization of personnel.
- Notifiable disease.

And the Committee will :

- Conduct periodical review of statistics on nosocomial infections.
- Supervise epidemiological investigations.
- Review Current Policies.
- Convey infection control information to hospital staff.

For achieving better control of infection, brushing up classes should be conducted to all health care workers periodically and by rotation. Thus we can achieve Vision 2020 without any extra investment.



**The state of the Public Health System in Patancheru and Jinnaram  
Mandals of Medak District, Andhra Pradesh**

Prepared by  
Abraham Thomas, BDS  
Staff, Community Health Cell, Bangalore

The preliminary study was done to understand the functioning of the Public health system in the Industrial Blocks of Medak District and to understand the relevance of the health system in light of the health report made by Greenpeace India. Patancheru and Jinnaram Mandals were covered in the study.

For this...

- The distribution of the Primary Health Centres (PHCs) and Rural health Centres (RHCs) in the area were examined
- The services rendered at the PHCs and RHCs were examined
- The functioning and efficacy of the sub centres were taken into consideration
- A preliminary tool evaluation of services rendered to women and children were evaluated thorough a screening for Vitamin A deficiency
- Observations were made on the availability of staff of the health centres – PHCs, RHCs and Sub centres

Add pic of bhanur PHC

## The investigators chief observations

The area is most certainly in chemical crisis with all water sources being polluted by a variety of cocktails of chemicals. The stench in the ground water and the colour speak clearly of the pollution without the aid of studies and reports. There are many children, women and men, both young and old having many health disorders affecting all body systems. There are children having arthritic pains, allergies, eczema, rashes and scabies. Many women whom we came across complained of severe skin allergies and rashes and reproductive disorders, which were chronic, and they had little money to approach private doctors for medical or surgical care. This certainly speaks of a lack of primary health care and lack of awareness among people of the neglect. There is big need for a change in tact of the health services in Patancheru to make healthcare available to those already under tremendous pressure from pollution, lack of livelihood opportunities, and the lack of clean air to breathe. Staff should be trained to report different cases of pollution related health risks and monitor the quality of life of the people in the Mandal by assessing the situation regularly with the necessary tools.

The whole of IDA Bollaram area of Jinnaram Mandal has a combined population (migrant population plus local population) of more than 30,000. The official figures of the PHC show it to be less than one fourth that figure. To add to it, there is no sub centre building or staff member posted in the IDA Bollaram area (the post remains vacant). The interior location of the Jinnaram Mandal PHC makes it inaccessible to the far-off sub-centre areas. On the brighter side, the Jinnaram Mandal PHC medical officer is residing at the PHC staff quarters and is one of the very rare doctors in the public health system to do so. He is available at the PHC on at least 350 days of the year, as some locals put it. He is one of the very rare Government Doctors who do so in Medak District.

The RHC at Patancheru is manned mainly by staff from the Osmania Government Hospital in the Hyderabad city and has no direct binding to share responsibility with the staff of the sub centres under the Bhanur primary health centre. **On enquiry, the RHC staff didn't have data on sub-centres fall under the purview of the Bhanur PHC.**

**If I was a doctor in the Public Health System, I should constantly build awareness among locals about the dangers of living with such toxic chemicals and also report these findings regularly to officials to act immediately, but this is not easy for a doctor in a system that does not give that kind of leverage for free thought and feedback. I think the staff and doctors in the Public Health system in all these areas need to be motivated to wake up the health system in the Industrial Areas and deliver now. First cover the backlog, and then keep the system crisp and sharp.**

The need of the hour is an apology from the Government to its little children for neglecting them and their healthy futures to such a great extent that they have permanent damage to eyesight, their psyche and to each cell in their body that has taken chemical insult that was preventable. I wish these children wouldn't have to feel guilty for being so helpless, really helpless.



## Greenpeace Health Study: Medak District, Patancheru/Jinnaram/Kohir Mandal

### Executive Summary:

Patancheru and the adjoining study areas are located on the North-Eastern part of Andhra Pradesh. It covers an area of 222 Sq. Kms in Medak district and is 40 km away from Hyderabad. It was predominantly an agricultural landmass located on the banks of river Manjira, a major tributary of River Godavari, but transformed into an industrial area as part of the governments' drive on industrialization. The Patancheru Industrial Estate was set up in 1975 as part of the government initiative to bring in more industries to the state of Andhra Pradesh. Over a period of 29 years, about 320 industries that are manufacturing pesticides, chemicals, pharmaceuticals and steel rolls have come up in this area. While arguments in favour of this expansion were and are being presented from an economic standpoint, like always no consideration was given to the possible environmental and public health impacts. Amongst communities located in the midst or periphery of vast Industrial Zones, there is a strong perception that pollution generating activities at these facilities result in a direct negative impact on the health of residents. Representatives of the communities at Patancheru Mandal, Medak District, have repeatedly voiced statements to this effect, but, citing absence of extensive hard data in existing records, no action has been taken by concerned authorities to investigate further.

From its inception to date, most of the Industries here, have not shared information regarding pollutants, their chronic and acute effects, to the local residents, the local authorities –the village Panchayat, workers and doctors, as envisaged by the Factories Act and rules under the EP act. The plan for 'disaster management and emergency preparedness' inclusive of information on products, storage of hazardous substances, effects and antidotes, again has not been made public (with a few exceptions), as it should be. The medical fraternity of the local area is not oriented or equipped for diagnosing and treating health problems due to environmental pollution. Despite the fact that the pollution at Medak district has been established by sampling missions and studies by various organizations in the past decade or so, there has been little action by the regulatory authorities.

In the light of the failure to address this issue and the fact that community health problems of Patancheru were quite apparent, Greenpeace decided to undertake an epidemiological health study that would prima facie establish the problem<sup>1</sup>. Greenpeace initiated an alliance with Occupational Health and Safety Centre (OHSC)– Mumbai and the Community Health Cell, who have prior experience in epidemiological research. The broad framework was of OHSC taking the lead with medical verifications of primary data collected using a questionnaire research was arrived at jointly, with Greenpeace taking the primary role in the field based research and survey.

The results of this study demonstrate that all body systems without exception are adversely affected in the Study areas as opposed to the control locations, a result of a cocktail of poisons in the water and air of the study villages, which has had considerable effects on the health and well being of the local population. The incidence of cancer and

<sup>1</sup> The local people at Medak have been complaining of large-scale health problems.

heart disorders is greater in the study group at statistically significant rates. For respiratory disorders such as asthma and bronchitis, the incidence is 4 times higher in the study group in comparison to the control group.

A stratified random sample of the study group (9 villages) when compared with those from the Control group (4 villages) shows a significant increased disease incidence in many body systems. These include

1. The presence of Diseases of skin and subcutaneous tissue in the study group is at least two times higher than the control group.
2. One in every eleven, in the study group is afflicted with Diseases of the musculoskeletal system and connective tissue.
3. Clinically confirmed cancer incidence and respiratory disorders are greater in the study group at a statistically significant rate. While 11 cases of incidence were reported in the study group, no such case was reported in the sampling set in the control group. The occurrence of Asthma and Bronchitis is 4 times higher in the study group.

This report, further, uses available and existing research to demonstrate: -

- The presence of a wide range of chemicals in the land, air and water in Medak.
- The ways in which the local community are being exposed to these toxins.
- The increased exposure has increased the potential for detrimental health impacts

The implications of these findings, amongst others, are serious. In brief, the study demonstrates that serious damage is being done to the health of the residents of Medak at current levels of Industrial activity, and this damage potentially correlates with location, a measure of exposure to Industrial activity-generated pollution. It is incumbent on State regulatory authorities responsible for the public health to investigate this matter, to further define the scope and severity of the problem, and initiate processes which will return the community to the state of health enjoyed by them prior to this reckless industrialization era and pressurize industries to follow all environmental and ethical norms and implement clean production and closed-loop systems in their production cycle. The evidence presented here contributes to a growing repository of research that reinforces the conclusion of this report that serious damage is afflicted upon the local community potentially through the pollution stemming out of reckless industrial activity and necessitates the need to ensure that Industrial estates of the nature of Patancheru, not be replicated elsewhere.

#### **Comments from the Visiting Team of Doctors:**

1. Incidence of cancer in the affected area is significantly higher than in the control area. The incidence of cancer was validated by senior surgeons from Mumbai. This is an underestimation because; we did not add the cancer incidences which was detected in hospitals and nursing homes and autopsy data. It was based on house to house survey with validation of pathology reports of all cancer detections in a year.



2. Lung function tests were affected significantly ( $p < 0.01$ ), both  $F_{ev1}$  and  $F_{vc}$  of the affected population as compared with the control group.
3. Environmental Asthma was validated in a few cases but due to logistic problems, could not be confirmed by Lung Function tests in a larger population.
4. Allergic Contact dermatitis, which was validated by doctors from Mumbai, was significantly more in the affected group.
5. The other medical conditions like mental health, gastrointestinal conditions etc... showed a pointer to a possible higher incidence in the affected population, but a medically validated comment cannot be made, at present, hence there is a need for a more elaborate and validated study preferably with the governmental health infrastructure.
6. Local medical facilities are very inadequate and people spend a sizable percent of their income on private, mostly irrational treatment. Only when it comes to the final advanced stages, they are shifted to a major hospital in big cities like Hyderabad.
7. It is urgently required to upgrade local government medical facilities and provide free medical treatment to people of the affected communities.

Dr Murlidhar V

Dr Ashwini

Dr Deepali

Dr Archana

Lokmanya Tilak Municipal college and general Hospital, Mumbai.

### Denial of Health Care:

Increased incidence and prevalence of diseases such as cancer, asthma and dermatitis as a result of pollution of the environment,

No effective control of pollution by the industries. Inadequate public health care facilities to deal with the health problems posed by the industrial pollution.

### Consequences:

Increased death and disease among the people living/working in the area.

Increased expenditure on health care by the people of the area.

## ALARMING PREVALENCE OF VITAMIN A DEFICIENCY AMONG CHILDREN IN CHEGUNTA MANDAL, ANDHRA PRADESH

Investigating Team : Sanghamitra  
Address : Chegunta Mandal, Medak District  
Andhra Pradesh 502 255

A detailed door-to door survey on the eye health status of people in the region is completed in Chegunta Mandal and is being conducted in Toopran, Ramayampet Mandal's of Medak District. Medak is one of the most backward districts of the Telengana region of Andhra Pradesh. A detailed eye health status of the area is being assessed for the first time in the entire region and the position investigated is dismal. The biggest service provider in the region is the Lion's Eye Care programme and the coverage is about 15 percent, and that too through organized mass camps. The rest of the services are unorganized and self financed. Knowledge about eye health and diseases in the region is poor. Most children in their teens suffer from poor evenings vision usually going undiagnosed or unnoticed. The below 7 children are the current sufferers of the failing supplementation programme of the Governmental Public Health System. In Chegunta Mandal alone there are more than 388 Children suffering from Vitamin A deficiency, Vitamin supplementation programme supported by UNICEF, has been underway in the region since over ten years.

According to past public health studies conducted in Andhra Pradesh the prevalence of Vitamin A deficiency is approximately 5-7 percent in Children..

(Kapil U. and Bhavna A., (2002), "Adverse effects of poor micronutrient status during childhood and adolescence", *Nutrition Reviews*, May, Vol.60, no. (5 pt 2), pp,S84-90). But little is documented in medical literature about this deficiency among children of our country, the very eyes of those who have to mould tomorrow.

Criteria for Vitamin deficiency: Bilot spots, wrinkling of sclera, and skin lesions.

Many individuals were unaware of the Vitamin A supplementation programmes even though they had children in the age groups (01-06 years age group).

- Total population covered (public interviewed) Adult Males 14,216 + Adult Females 14,284) + (Children Male (below 15 years) 6,362 Male + 6175 Female Children)
- Total population with eye problems – 7365
- Children suffering from vitamin deficiency (below 8 years) in Chegunta Mandal – 388
- This survey was done by 12 young individuals of the area aged between 20 and 24, with adequate training on basic eye care and primary detection of eye diseases. They were trained at LV Prasad Eye Institute, Hyderabad
- They have been receiving continuing education on eye care and eye related rehabilitative programmes
- According to the general survey, eye related diseases were going undetected and cases of vitamin. A deficiency were on the rise as a result of poor supplementation programmes by both the ANMs and the Anganwadi workers in the programmes.

**Denial of Health Care:** Poor Vitamin A supplementation, even though it is a National Programme.

**Consequences :** Poor Vision, including night blindness.



**HEALTHCARE FOR THE GUNDALA TRIBAL POPULATION COMES AT A COST  
--IF NOT IT DOES NOT REACH THEM**

**Date February 25<sup>th</sup> 2004**  
**Mandal—Gundala**  
**District—Khammam**

People's voices raised the issue of gross neglect of the Primary health Centres in Gundala Mandal of Khammam district. The people brought to the notice of the District Collector the state of the PHC functioning in a public hearing in February. This was reported in 'The Hindu' on 25 February 2004.

The public hearing was organized to ask for basic amenities for the people in the tribal villages of the Mandal.

**It highlighted the poor functioning of the PHCs**

1. No doctor in that area had served longer than a fortnight in that PHC.
2. PHCs functioned only once in a week, on Tuesdays, the market day.
3. The paramedical staffs were present on other days, and no deliveries are conducted there.
4. Private Medical practitioners demanded sums of Rs.6, 000/- to Rs.10, 000/- from women for normal deliveries. This had taken its toll on many of the people there. Most of them who were affected by this were those below the poverty line (BPL families). Borrowing paid off these sums from moneylenders. Many people's hard-earned money was going in for healthcare.

This case study is being further investigated to see if there was any change in the functioning of the PHC after the District Collector's reassurance. It would be extremely important to view this case as a continuing fight against the laxity in the Public health system, and not a case by itself. It needs to be viewed with a dimension of financial damages caused to people as a result of denial. Cases like this do not occur in isolation—Most PHC doctors live in nearby cities and often travel to and fro to their PHCs, some of them even cover up to 200 kilometres. This kind of travel wouldn't in anyway help the efficiency of the doctor or his services, but kill the energy to function normally.

**Gundala tribals seek basic amenities:**

Even after trying hard for many years to change the way in which the Government Health system works, the Gundala Tribal population still haven't seen any change in which the Doctors in the Public Health System Function.

The Gundala tribals in the forest areas of Khamman district of Andhra Pradesh have been silent sufferers of the agencies of health care and all costs involved. The doctors posted there have never stayed on beyond a fortnight. The PHC was built without conforming to the beliefs of the local people and as they put it, it was having "some defects in the vaasthu"

The women were charged anywhere between Rs.6,000/- and Rs.10,000/- for even routine deliveries in the private hospital. (All because the Primary Health Centres were open only once a week and otherwise managed by the paramedical staff).

Encl : News Report, The Hindu, 20 Feb 2004

Denial of Health Care : Absence of Government medical officer at the Primary Health Centre

Consequences : Avoidable Huge expenditure to be treated by the private practitioners.

Poor functioning of the Primary Health Centre



**Undetected and unreported cases of blindness among children belonging to  
scheduled castes (BPL, Below poverty line families)**

**Child—Sukanya**

**Daughter of Satayya**

**Age—5-6 years**

**Economic Status – Below Poverty Line**

**Scheduled Caste**

**Diagnosis:** Near total blindness due to childhood cataract

**Child—Banu (Brother of Sukanya)**

**Son of Satayya**

**Age—7-8 Years**

**Diagnosis:** Near complete blindness due to childhood cataract with the  
cataract affected lens in the left eye being dislodged.

**Prognosis(both):** Treatable cause of blindness—surgically with lens implants

**Available Government programmes—**National programme for control of blindness

These children have suffered from adverse effects on physical, social and psychological growth while trying to interact with other children with normal vision. Sukanya has a very different style of walking, because of her constant extra-cautious walk (steps) fearing a fall, a fall into a large open well near her house. This child has been denied the basic services for normal living.

Banu, Sukanya's brother, is also suffering from severe stress on his eyes because he cannot see anything but blurred images of objects, yet he attends school and finds it extremely difficult to find things, do his duties and cannot study.

To the others around and to the health department, Banu is a blind child with no hope. This is a lack of will to send this child to a specialist's facility in the District Hospital.

The primary health centre ophthalmic assistants in almost all areas are beginning to depend upon private hospitals for surgical treatment of cataract cases, solely depending upon the mass camps and occasional follow up.

This case study does not intend to personally attack a health worker or an ANM or an Ophthalmic Assistant in the area (Chegunta Mandal of Medak District), but looks at a paradigm shift of policy of the health department to look at basic indicators of health more seriously, stress on local decision making by the PHC Medical Officer and improve availability of the staff at actual duties. Effective reporting, quick response, and an effective monitoring mechanism should be in place soon.

Denial of health care:

These children have been **denied the Right to Sight** because of the failure of the Public Health System of having an effective surveillance system in place.

The reluctance of the staff to explore the whole simple world of **Primary Health Care needs is emphasized by such an occurrence.**

Failure of School health programmes

Consequences :

Blindness in the young children (siblings), avoidable by surgery with implants.  
Failure in Physical, Psychological and social development and well-being.

Needed :

Effective School health programmes, village awareness programmes, people contact programmes, and health campaigns should be made high priority. The department of health has to change tact to reach its vision 2020. It cannot be caught denying children their **Right To Sight**.



## Hysterectomies for Money Ovaries are not spared

Mrs. S is about 28 years and underwent a month's ordeal with lower abdominal pain and bleeding due to a uterine infection. She, like many others, did not go to the primary health centre, as they were unaware that treatment was available. Instead, she went to a private medical practitioner in the nearby town, Chegunta. She was advised an ultrasound of the lower abdomen. Two days later she underwent a hysterectomy at the local medical practitioner's clinic, which was performed by a visiting surgeon. Mrs. S took a loan of 8,000 rupees for the treatment cost and investigation and borrowed more money for medicines after she was discharged.

***Mrs. S, thinks that the doctor did the right thing by performing a hysterectomy. But the ultrasound diagnosed a normal study with absolutely normal uterus. The echo-texture of the uterus, dimensions and the position of the uterus conformed to a normal anatomical structure.***

**Q. But why was a hysterectomy done in a 28-year-old woman who had a medically treatable infection of the uterus?**

Mrs. S is one of many such women who are undergoing hysterectomies as a primary treatment for uterine infections. In Pothensettipalle, her village, there are 10 such women in the reproductive age group of 20 and 35 who have already undergone the procedure. The belief that hysterectomy is to take away a useless organ, and that it is a normal practice, is there among the women. Some of the women believe that its reproductive function is over with a tubectomy or ligation or the fallopian tubes. Many private practitioners not just in Medak District but also in the entire state of Andhra Pradesh, are exploiting this belief among the women, which has been ingrained in their minds by widespread practice of the procedure without warning women about the long-term implications of a total hysterectomy.

**Q. Why didn't she go to the PHC for treatment?**

She says that many in her village have been treated badly at the PHC in the past and therefore they prefer to consult private practitioners.

**Q. Was Mrs. S satisfied with the treatment given to her?**

Yes. She feels it was better that she underwent the surgery, except that she suffered financial loss. She feels the infection and pain came down only because of the procedure and could not have been done with medicines, which she took for a while by prescription of the local registered practitioners. But she definitely would have been happier if she had been rid of the infection with simple medicines.

**Q. Does this warrant a paradigm shift of the public health system to deal with a large social issue of rejection of the public health facilities?**

Yes. A people friendly and practical health department is necessary for people to come to avail ethical treatment at the PHCs and sub-centres. A clear and acceptable method of referral of more complicated cases to Area Hospitals and Community Health Centres should be practiced to change the existing failure of the treatment referral system.

**Enclosures:**

1. Report of the Ultrasound Examination
2. Prescriptions following surgery
3. Complaint on health service personnel in the sub-centre area not visiting the village in 2 years.

**Note:** Mrs. S was a signatory in the complaint in February 2004 to the Mandal and District Health Authorities and the District Collector that the ANM (Auxiliary Multipurpose Nurse)/ Male Health Assistant from their sub-centre had not visited their village in two years. Mrs. S feels that the ANMs could direct a lot of women with problems to Govt. facilities in the future for cheaper and ethical treatment. The report obtained by the PHC authorities regarding the complaint has been still not communicated with the SHG (Self Help Group members) and the NGO (Sanghamitra), who were signatory to the complaint.

**Denial of Health Care:**

- Unnecessary operation, removing the uterus, when the condition could have been tackled with simple medicines.
- No evidence of adequate information being given and informed consent.
- Lack of faith in the Public Health System.

**Consequences:** Removal of an organ, which was avoidable and unnecessary expenditure.

**Case Study Prepared by**

**Dr. Abraham Thomas**

**Community health Cell, Bangalore**

**At Sanghamitra, Chegunta Mandal, Medak District, Andhra Pradesh**



**Chegunta Mandal-  
Medak District, Andhra Pradesh  
Study by Sanghamitra on the Primary health Centres and their sub-centres**

In Chegunta Mandal like many other mandals of Medak District, the health staff do not visit small villages with population below 1000 for immunization because they would waste some amount of vaccine. This is the case of many small hamlets where knowledge of immunization is less and coverage is low. Complaints lead to further denial in terms of intimidation and denial. Attached are copies of the complaints to the District Medical and Health Officer and the District Collector, Medak.

Sanghamitra studied the health system in Chegunta and finds it disturbing with each new case of hysterectomy combined with appendisectomy, with each new case of Caesarean-section, and every new case of Vitamin A deficiency in the below 8 age group. In this direction, Sanghamitra studied the system in four areas

1. Functioning of the sub-centres and their resources
2. PHCs and their functioning, resources and supplies
3. Exploitative practices by private medical practitioners and surgeons
4. Denial of treatment or referral to Children suffering from curable blindness
5. Denial of Health to Children below 6 and 7 by denial of supplementation with adequate Vitamin A supplementation

**1. The sub-centres, a case of denial of health**

The 14 sub-centres in Chegunta Mandal of Medak District in Andhra Pradesh are distributed and organized totally failing to have the confidence of the people at large and the leaders of the region. The location of 5 sub-centres within the PHC premises throws to light the lost purpose of an outreach sub-centre. This is the case of many of the sub-centres in the region, clearly indicative of failure of the public health system. Structurally the system is failing the people as indicated by the extent of neglect of its infrastructure and outreach planning.

The subcentres do not have basic facilities such as a building, sign boards, time-table indicators, electricity, toilets, water, examination tables, BP Apparatus, Stethoscope, boilers, stoves, gas connections, sub centre kits, cupboards, and proper lighting. This is the condition of the observed subcentres in Chegunta, and is indicative of the rest of the district and the Andhra Pradesh State in general. Supervisory staff (Community Health Officers, health Supervisors, etc.) visiting these facilities does not effectively report these findings to higher authorities and indirectly deny village people the basic amenities.

The people in Chegunta Mandal are not aware that silently a public health system is failing them – Vitamin A deficiency is being seen in a large number of Children, DPT and MMR Vaccines are not being supplied to the PHCs regularly, some health and have still not a building or rented house for the sub-centres and the coverage of immunization is still below standard. Women turn to private practitioners for routine gynaecologic disorders and are treated often surgically instead of primary medical treatment. This is not an isolated occurrence but regular. Normal deliveries are not

common anymore, like in most places. Caesarian-sections are common and regular. If the public health system begins to act now, people will utilize the services far more than the existing usage.

Regular clinics for women and child health could pave the way for better referral services and far better utilization. The basic trust in doctors and paramedics is what anyone would look for and assurances alone would not be enough. Actions should be taken through sustained efforts at all levels from the people up to the Authorities in each block or district.



## Service Availability in the PHCs and Subcentres in Chegunta Mandal

Service/Infrastructure Village  Each covering approximately population of five thousand	ANM, MHW	Building Government Rented/ Own	Equipment **	Sign Board/ Standard Visiting hour board	Treatment of Pneumonia	24-hour service of deliveries	Sub-centre Kits	ANM accompanies complicated deliveries	Is Immunisation Coverage adequate (study)	OPD Clinics held	Distance from PHC
1. Chegunta 'A'	Both Available	Housed in PHC. No building	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	No	Along with PHC- therefore cant tell	NIL
2. Chegunta 'B'	ANM Available	Housed in PHC. No building	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	No	Along with PHC- therefore cant tell	NIL
3. Chethlathimmaipally	Both Available	No sub centre building	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	NO	NO	14 kms
4. Chandalpet	Both Available	No Govt Building/ In panchayat room	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	NO	10-11kms
5. Makkarajpet	Both Available	NO Govt. Bldg. In a Rented Room (6 ft X 8 ft)	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	NO	7kms
6. Wadiyaram	Both Available	No Subcentre building	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	NO	3 kms
7. Gollapally	ANM Available	In a Rented building (since April 04) before which no subcentre	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	NO	NO	9 kms

AP01											
Service/Infrastructure Village  Each covering approximately population of five thousand	ANM, MHW	Building Government Rented/ Own	Equipment **	Sign Board/ Standard Visiting hour board	Treatment of Pneumonia	24-hour service at deliveries	Sub-centre Kits	ANM accompanies complicated deliveries	Is Immunisation Coverage adequate (study)	OPD Clinics held	Distance from PHC
8. Reddipally	Both Available	No sub-centre building (Rented or Govt.)	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	NO	3 kms
9. Ibrahimpur	ANM Available	Rented Building	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	NO	14 kms
10. Bonala	ANM Available	Shared room	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.		No	NO	NO	17kms
11. Govindapur	ANM Available	Rented Room	Not Avbl. Table purchased by ANM	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	No	NO	NO	21 kms
12. Narsingi Subcentre A	Both Available	Govt. Building	Available	Not Avbl.	Not Avbl.	Avbl.	Not Regularly Supplied	NO	NO	NO	NIL
13. Narsingi Subcentre B	Both Available	Shared subcentre with Narsingi A subcentre	Shared	Not Avbl.	Not Avbl.	Avbl.	Not Regularly Supplied	NO	NO	NO	NIL
14. Narasampally Subcentre/ Narsingi C	ANM Available	NO building	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	NO	NO	5 kms from Narasampally

Not Avbl. –

\*\* –

Not Available

Table/ Chairs/ Fan/ Tube light/ BP Apparatus/ Weighing Scale/ Delivery Table/ Examination Room/BP Apparatus/ Stethoscope/ Boiler/Torch/Scissors

**Out of the 14 subcentres 5 are housed in the 2 PHCs reducing the access drastically. Moreover, the sub-centre areas are not accessible to PHC services because of the distances involved.**

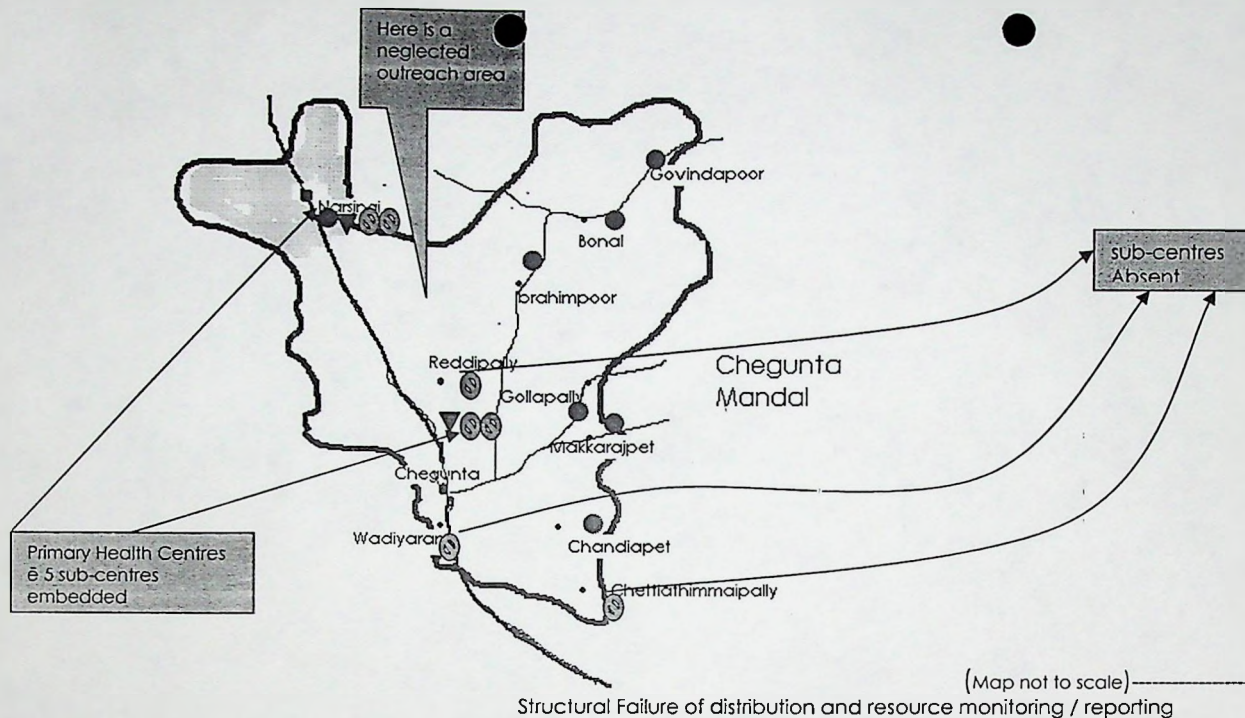
Only two of the 14 ANMs are stationed in the sub-centre premises, and they belong to the Narsingi subcentres located in the PHCs

(Enclosed Chegunta Mandal Map and distribution of sub-centres as file AP1A)



Map. Medak District  
The orange coloured area is indicative of Sanghamitra's presence





- ⊙ - Primary Health Sub-centre still not present/not taken on rent
- ⊕ - Primary Health Sub-centre with rented building/panchayat building
- ▽ - MPHC (Mandal Primary Health Centre)

Total Population	- 56,000
Number of PHCs	- 2
Number of Primary health sub-centres	- 14
Number of Staff ANMs/MHWs	- 18
Number of Medical Officers	- 2
Number of CHOs (community Health Officers)-	2



Date : 24-08-2004

To,

**Dr.Theima Narayan,**  
Community Health Cell,  
367, Srinivasa Nilaya,  
Jakkasanra First Main, Koramangala 1<sup>st</sup> Block  
Bangalore- 560034.

**Public Hearing on Health Care.****National Human Rights Commission.****Jan Swasthya Abhiyam.**

Dear Sir/Madam,

Kindly refer to your Notice- Public Hearing On Right To Health Care of National Human Rights Commission- Jan Swasthyam Abhiyam in Deccan Chronicle dated 18<sup>th</sup> July, 2004.

At the outset, before I start this communication, I would like to introduce myself as one .Thongath.Raju, who retired from Airports Authority of India on 30<sup>th</sup> June, 2001 in the Scale of Deputy General Manager

As per the existing Regulations of Airports Authority of India, a Public Sector Undertaking under the Civil Aviation Ministry, I was enrolled myself as a Member of the Retired Employees Medical Benefit Scheme which the authority mooted vide their letter No.AAI/NAD/MED/REMBS/ dated nil by paying a Lump some Contribution of Rs. 2000/- payable by the Deputy General Managers and above. Accordingly, I was issued with a Photo Identity Card for myself and my spouse Dr.(Mrs Sarojini Raju, along with a list of empanelled Hospitals and Rate for O.P and I.P. treatment vide AAI Letter NO.AAI/NAD/M/REMBS/GC dated 29-11-2001, a copy of which is enclosed for your ready reference. Subsequently, the rate for OP was raised to Rs.19,900/- and a fresh Laminated card was issued to myself and my spouse

The above being the case, the harassment by the Airports Authority of India, Hyderabad Airport started in the beginning itself when they refused : my Medical claim which I submitted for the first time one year after my retirement vide AAI. Letter NO.AAI (NAD)HY/REMBS/03/7056-57 dated

28-5-2003 a copy of which is enclosed for your ready reference When I sought certain clarifications on the subject, the Authorities released the Intra Office Note AAI/NAD/HYD/F&A/MEDICAL/2003-04 dated 20-5-2003 prepared by the Senior Manager (Finance &Accounts) to deny my claim.

A copy of the ION which is self explanatory is enclosed for your ready reference.

In the ION, the Senior Manager (F&A) states that I was paid a Sum of Rs.19,900/- as traveling allowance for shifting myself and my family to my home town in Kerala and hence he says that I cannot fall sick anywhere in India.. HOWEVER, THIS CLAUSE IS NOWHERE MENTIONED IN THE REGULATIONS SUPPLIED TO ME WHILE JOINING THE SCHEME.

In addition to above, what was astonishing was that after recognizing my wife as my dependant for 38 long years by the Department, having paid DA/TA to her to go to Home Town after my retirement and having issued Photo Identity card to her along with me, the authorities suddenly said that my wife is not dependant on me to deny the Medical claim.

Further, In order to deny my medical claim, the authorities assumed the role of drug inspectors to declare that the medicine I purchased were without drug licence and bills given by the medical shop owner was without proper address. They also brought the name of my daughter into the picture to deny my medical claim.

This is the first time in my 38 years of service that I came across a foolish and ludicrous excuse devoid of any semblance of reasoning to deliberately deny the medical claim of a retired Senior Citizen. However, the authorities relented and advised me to resubmit the claim when I sought certain clarifications on the subject.

The Harassment did not stop here. Again the authorities kept the bill pending for nearly three months on the pretext of clarification although they had the printed REMBS regulations in their possession.

Not satisfied with the above ignoble acts, again the authorities harassed me and stopped my Medical claim when I submitted my second bill on account of a very simple mistake in total calculation. The owner of the Medical shop made the bill for Rs.1301/- instead of Rs.1310/- a profit of Rs.9/- for the AAI. But still, the AAI authorities of Hyderabad Airport refused to pass my bill despite my numerous reminders on telephone and in writing. Finally, instead of passing the claim or returning the same to me for correction and re-submission, the AAI authorities iniquitously chose to send some office Thugs and Musclemen to the shop owner to threaten and



intimidate him for selling medicines to me. They also threatened him with a police complaint and demanded his entire bill book to be carried to the AAI office for calculating Rs. 9/- less in the bill. Now, the shop owner is refusing to sell Life Saving medicines to me.

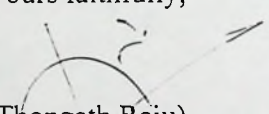
In this connection, it is brought to the Commission's notice that the decision to indulge in such obnoxious activities were devoid of any iota of civility expected from the Officers of a Premier Public Sector Undertaking. It was also an Horrendous Betrayal of Confidence the AAI Management reposed on these Officers for Good Governance. The entire above inept and vindictive actions of concerned Officers show that their Administration is devoid of any Accountability due to the Perversion of Rule of Law.

The four lower rung Officers who indulged in the above atrocities are S/S. G.G.S. Rao, Senior Manager (P&A), S.K. Ravindran Senior Manager (F&A), Lokeswar Rao Asstt. Manager (Accounts) and finally Mrs. Kasturi, Junior Executive Trainee.

In view of the above Indiscreet and Indefensible actions of the above four responsible officers of Airports Authority of India, Hyderabad Airport I request the National Human Rights Commission to take effective steps to avoid the recurrence of such harassment to the Senior Citizens in their Health Care.

Thanking you,

Yours faithfully,



(Thongath Raju)  
136, S.P. Colony, Trimulgherry,  
Secunderabad - 500 015 A.P

**The state of the Public Health System in Patancheru and Jinnaram  
Mandals of Medak District, Andhra Pradesh**

Prepared by  
Abraham Thomas, BDS  
Staff, Community Health Cell, Bangalore

The preliminary study was done to understand the functioning of the Public health system in the Industrial Blocks of Medak District and to understand the relevance of the health system in light of the health report made by Greenpeace India. Patancheru and Jinnaram Mandals were covered in the study.

For this...

- The distribution of the Primary Health Centres (PHCs) and Rural health Centres (RHCs) in the area were examined
- The services rendered at the PHCs and RHCs were examined
- The functioning and efficacy of the sub centres were taken into consideration
- A preliminary tool evaluation of services rendered to women and children were evaluated thorough a screening for Vitamin A deficiency
- Observations were made on the availability of staff of the health centres - PHCs, RHCs and Sub centres

Add pic of bhanur PHC



## The investigators chief observations

The area is most certainly in chemical crisis with all water sources being polluted by a variety of cocktails of chemicals. The stench in the ground water and the colour speak clearly of the pollution without the aid of studies and reports. There are many children, women and men, both young and old having many health disorders affecting all body systems. There are children having arthritic pains, allergies, eczema, rashes and scabies. Many women whom we came across complained of severe skin allergies and rashes and reproductive disorders, which were chronic, and they had little money to approach private doctors for medical or surgical care. This certainly speaks of a lack of primary health care and lack of awareness among people of the neglect. There is big need for a change in tact of the health services in Patancheru to make healthcare available to those already under tremendous pressure from pollution, lack of livelihood opportunities, and the lack of clean air to breathe. Staff should be trained to report different cases of pollution related health risks and monitor the quality of life of the people in the Mandal by assessing the situation regularly with the necessary tools.

The whole of IDA Bollaram area of Jinnaram Mandal has a combined population (migrant population plus local population) of more than 30,000. The official figures of the PHC show it to be less than one fourth that figure. To add to it, there is no sub centre building or staff member posted in the IDA Bollaram area (the post remains vacant). The interior location of the Jinnaram Mandal PHC makes it inaccessible to the far-off sub-centre areas. On the brighter side, the Jinnaram Mandal PHC medical officer is residing at the PHC staff quarters and is one of the very rare doctors in the public health system to do so. He is available at the PHC on at least 350 days of the year, as some locals put it. He is one of the very rare Government Doctors who do so in Medak District.

The RHC at Patancheru is manned mainly by staff from the Osmania Government Hospital in the Hyderabad city and has no direct binding to share responsibility with the staff of the sub centres under the Bhanur primary health centre. **On enquiry, the RHC staff didn't have data on sub-centres fall under the purview of the Bhanur PHC.**

**If I was a doctor in the Public Health System, I should constantly build awareness among locals about the dangers of living with such toxic chemicals and also report these findings regularly to officials to act immediately, but this is not easy for a doctor in a system that does not give that kind of leverage for free thought and feedback. I think the staff and doctors in the Public Health system in all these areas need to be motivated to wake up the health system in the Industrial Areas and deliver now. First cover the backlog, and then keep the system crisp and sharp.**

The need of the hour is an apology from the Government to its little children for neglecting them and their healthy futures to such a great extent that they have permanent damage to eyesight, their psyche and to each cell in their body that has taken chemical insult that was preventable. I wish these children wouldn't have to feel guilty for being so helpless, really helpless.

## The Profile of the number of health facilities in Medak District

Sl.No	Item	Units	Particulars
<b><u>ELECTRICITY</u></b>			
1	No. of villages electrified	No.	1262
2	Domestic services	No.	2445804
3	Commercial	No.	21598
4	Agricultur	No.	130531
5	Substation 33/11 KV	No.	153
6	Substation 132/33 KV	No.	16
7	Substation 220/132 KV	No.	3
<b><u>RURAL WATER SUPPLY</u></b>			
1	Habitations covered with P.W.S.	No.	1464
2	Habitations covered with C.P.W.S.	No.	13
3	No. of Handpumps	No.	12753
4	No. of seasonal Borewells	No.	263
<b><u>EDUCATION</u></b>			
1	Primary School	No.	1687
2	Upper Primary Schools	No.	622
3	Secondary Schools	No.	389
4	Higher Secondary Schools	No.	5
5	Junior Colleges	No.	23
6	DIET (TTC)	No.	1
7	Degree Colleges	No.	8
8	Medical colleges	No.	1
9	Engineering Colleges	No.	3
10	I.T.I.	No.	5
11	ITI	No.	1
12	Polytechnic colleges	No.	2
<b><u>MEDICAL FACILITIES</u></b>			
1	Government Hospitals	No.	12
2	Civil Dispensaries	No.	4
3	Primary Health Centres	No.	57
4	Sub centres	No.	331
5	Bed strength in Hospitals & Dispensaries	No.	869
6	Docts	No.	180
7	Hospitals for Leprosy	No.	1
8	T.B. Control Centres	No.	2
9	malaria units	No.	2
10	Urban Health Centres	No.	4
11	Round the clock women health centres	No.	15



## I. PATANCHERU MANDAL

### Structural Deficiency (what do you mean by deficiency)

Lack of planning on the distribution, location, and services Patancheru and Jinnaram Mandals are located in the southern part of Medak District adjacent to Hyderabad. The distribution and functioning of the Health facilities in the area was found to be quite illogical or inadequately planned considering various factors. In addition, they were **grossly inadequate**.

- In view of the local population and a large additional migrant population in the region
  - At the Rural Health Centre (RHC), people from the Patancheru town and many other little towns are refused treatment and referred for treatment follow up to the Bhanur PHC because the town area does not come under the jurisdiction of the RHC.
  - The Mandal Primary health Centre is located deep inside the southern half of the Mandal and very far from its sub centres located in the northern part of the Mandal. One could simply put it as "**inaccessible**" without much research.
  - Primary healthcare and messages of primary health is not reaching a large target population in Patancheru Mandal
- Refer: The screening of children from around Patancheru area (**Iylapur and Gandigudem, Photos attached**)

The Patancheru Mandal has one small PHC catering to 20 sub centres and to a population of more than 80 thousand (each sub centre catering to approximately 4600 to 5000 population).<sup>ii</sup>

Since the industrial area is catering to heavy traffic, the roads are extremely bad and the people have very few transport facilities. The system therefore has not taken this into consideration before making Bhanur the location for the PHC. Added, the PHC infrastructure should have been set up beginning operations.

The location of the Bhanur PHC makes it totally irrelevant and unused. This PHC was set-up a year ago and has no services to offer (surgical or medical). The PHC is simply located wrongly.





The RHC (rural health centre) run by the Osmania Medical Hospital is located in an old building in Patancheru caters to 2 sub-centres in the Mandal and one in the adjacent Sangareddy Mandal.

**NB:** The RHC refuses treatment to those hailing from villages that fall under the Bhanur PHC. Please refer the Map of the area.

The structural deficiency in the Public Health System in the Mandal is obvious to everyone except the department.

#### **Lack of services for Women's Health**

The RHC has 70 staff members on its rolls including gynaecologists, paediatricians, medical officers, senior house surgeons, staff nurses, administrative staff members, Male health workers, peons, ayahs, and paramedical staff members like lab technicians and pharmacists.

Here DPL (family planning operation) camps are conducted regularly to meet family planning operations and a few deliveries are done. The 70-staffed health centre does not have an anaesthetist to aid in hysterectomies, other emergency operations like C-sections. The private hospitals in the neighbourhood have 5 staff members but have theatres to cater to the people, though at a cost. Hysterectomies are being performed in the area indiscriminately for costs between 7 and 10 thousands.

The RHC timings are very arbitrary and often unsuitable for use. The days our investigators went to the RHC (20<sup>th</sup> and 21<sup>st</sup> August, 2004), the RHC closed services at 12:15 pm sharp. When we took some pictures of the RHC, the peons were offended and made a big scene.

The RHC evidently did not deal with treatment of people living with HIV/AIDS. The stress was completely on DPL camps and tubal ligation procedures and uncomplicated deliveries.

#### **Lacunae specific to Patancheru, Jinnaram and Gummadidala PHCs**

The PHCs and RHCs do not assess the health status of the people in the Mandal in view of the increased pollution. They are not geared or equipped to do so, while they could best perform surveillance, referrals, and follow-ups and also monitor and assess the impact of industrial pollution on the people's health in the region. This is again a deficiency because of the uniformity with which all PHCs and RHCs are treated with their duties in view.

The responsibility of the PHCs and RHCs to regularly make impact assessments on the health of women, children, men, young and old, has significance when they are under tremendous pressures from environmental damage and livelihoods are drastically changed.



Service/Infrastructure Village  Each covering approximately population of five thousand	ANM	New or old sub centre	Building Government Rented/ Own	Equipment **	Sign Board/ Standard Visiting hour board	of Treatment Pneumonia	24-hour service of deliveries	Sub-centre Kits	ANM accompanies complicated deliveries	Is immunisation Coverage adequate (study)	Distance from PHC
1. Bhanur PHC /Sub centre	Available	Old	None are own and functional	PHC Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	No	NIL
2. Nandgaon	ANM Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	No	8 -10
3. Rudraram	Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	NO	10 kms
4. Lakdaram	Both Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	11 kms
5. Isnapur	Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	8 kms
6. Muthangl	Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	5 kms
7. Patancheru A	ANM Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not supplied regularly	NO	NO	10 kms

	ANM, MHW			Equipment **	Sign Board/ Standard Visiting hour board	Treatment of Pneumonia	24-hour service of deliveries	Sub-centre Kits	ANM accompanies complicated deliveries	Is Immunisation Coverage adequate (study)	Distance from PHC
8. Patancheru B	Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	10 kms
9. Patancheru C	ANM Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	10kms
10. Patancheru D	ANM Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	No	NO	10 kms
11. Patancheru E	ANM Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	No	NO	21 kms
12. Patancheru F	Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	NO	10 kms
13. Ameenpur	Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied	NO	NO	11 kms
14. Beeranguda	ANM Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Avbl.	NO	NO	5 kms
15. Kistareddipet	ANM Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied			30 kms
16. Sultanpur	ANM Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied			28 kms
17. Indresham	Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied			33 kms
18. Pocharam	Available	New	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied			5-7 kms
19. Kesharam	ANM Available		No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied			
20. Indresham	ANM Available	Old	No building own	No Equipment	Not Avbl.	Not Avbl.	Not Avbl.	Not Regularly Supplied			

None of the sub centres have examination tables, adequate illumination, signboards, tables, chairs, delivery tables, and adequate infrastructure to cope with an emergency to provide primary care. The sub centre rent provided monthly to the sub-centre staff is being grossly misappropriated. No health education camps were conducted in the sub-centre areas of Sultanpur and Ameenpur and Kistareddipet in the last one-year. (Date: Aug 20 2004)



## I. A

Screening of Children with Vitamin A deficiency in Gandigudem Village in Patancheru Mandal

Total screened 36 children

Examined on Saturday, 21 August 2004.

Dr. Abraham Thomas, Community Health Fellow, CHC Bangalore.

The examiner is Telugu speaking

### The Criteria for identification of Vitamin A deficiency are

- Bitot Spots (small white plaque-like patches on the sclera)
- Brown to black discolouration of the sclera with wrinkling and dryness
- Severe if – an Infected eye with damage to the sclera and the cornea
- Children who give a history of poor vision and night blindness

### Available resources for examination and documentation

- Torchlight
- Good sunlight
- Camera

NB: All children came along with their parents for the screening

### Chart showing the details of the screening

Name of child	Age	Bitot Spots	Brown Wrinkling of Sclera	Remarks/Diagnosis
1. Pothagiri Divya	4 ½ yrs	Negative	Negative	
2. Santu	5 yrs	Negative	Positive	Vitamin A Defficiency
3. Golla Anusha	3 yrs		Positive	Vitamin A Defficiency
4. Mouinika Godugu	4 yrs	Positive	Wrinkling	Vitamin A Defficiency
5. Aslam Sheik	1 ½ Yrs		Wrinkling, Severe Discolorati on	Vitamin A Defficiency
6. Akram Sheik	1 yr		Wrinkling, Severe Discolorati on	Vitamin A Defficiency

Name of child	Age	Bitot Spots	Brown Wrinkling of Sclera	Remarks/Diagnosis
7. Vani	5 yrs	Negative	Negative	
8. Baby Shalini	8 yrs	Positive	Discoloration	Vitamin A Deficiency
9. Shashi Kumar	5 yrs	Negative	Negative	
10. Sai Kumar	3 ½ yrs	Positive	Positive	Vitamin A Deficiency
11. Lahari	1 yr	Negative	Negative	
12. Shaheen	11 – 12 Yrs	Positive	Positive	Severe Vitamin A Deficiency with vision defects and Night Blindness, Insensitivity to light Excessive Tears
13. Nusrat	7-8 Years	Positive	Positive	Severe case of Vitamin A deficiency
14. Sravanti	5 yrs	Positive	Positive	Vitamin A Deficiency
15. Shabbir	4 yrs	Negative	Positive	Vitamin A Deficiency
16. Tarun	4 yrs		Positive	Severe discoloration of Sclera
17. Pinky	1 ½ yrs	Negative	Negative	
18. Tayyab	3 yrs	Positive	Positive	Vitamin A Deficiency
19. Sai Kumar	7 yrs	Positive	Positive	Severe case of Vitamin Deficiency
20. Anusha	5 yrs	Positive	Negative	
21. B Mounika	11 – 12 yrs	Positive	Positive	Vitamin A Deficiency
22. Naresha	6 yrs	Positive	Positive	Poor Health, with Scabies, fever and cough
23. Priyanka	2 – 3 yrs		Positive	Vitamin A Deficiency
24. Nazeema	12 mont hs		Positive	Vitamin A Deficiency
25. Navaneetha	7 yrs	Nil	Nil	Nil
26. Kalyan	4 yrs	Positive	Positive	Vitamin A deficiency
27. Madhhu	2yrs		Positive	Weakness in limbs, inability to walk, and Vita A deficient



Name of child	Age	Bitot Spots	Brown Wrinkling of Sclera	Remarks/Diagnosis
28. Poojitha	11 mont hs	Negative	Negative	--
29. Harish Yadav	3 yrs	Negative	Positive	Severe joint aches (non specific??)
30. POChiaiah	3 yrs	Positive	Positive	Vitamin A Deficiency
31. Radha	3 - 4 Yrs	Negative	Negative	
32. Sruthi	10 mont hs	Negative	Negative	
33. Pravalika	4 years	Negative	Negative	
34. Meena	4 yrs	Positive	Positive	Severe case of Vitamin A deficiency (belongs to Dayaram village under Sultapur Subcentre)
35. Anisa D/o Anganwadi Teacher Ms. Hussein Bi	2 yrs	Negative	Positive	Mild case of Vitamin A deficiency
36. Madhuri	3 yrs	Positive	Positive	Vitamin A Deficiency

Our assessment showed that most children 3 years and older suffered from severe Vitamin A deficiency. On enquiry, it was found that the ANM, as a practice, visited the village only once a month and the Anganwadi was set up only 2 years ago.

**Observation:** This kind of occasional visits to villages is dismally inadequate keeping in mind the necessity of community awareness building. These are the reasons for poor access and poor utilization of services from the government too.

Gandigudem is a little village of 1400 people with around 170-200 households. The Anganwadi centre caters to around 34 children below 6 years. The Anganwadi Worker, Ms. Hussein Bi, was posted there two years ago, when she came to the village after her marriage. She has reduced the incidence of Vitamin A Deficiency since the last two years.

**Question:** What is the fate of the children in the villages/hamlets that do not have an Anganwadi centre and an Anganwadi Teacher like Hussein Bi as yet?

The Jinnaram PHC and Gummadidala PHCs are located in the Northern half of the industrial block. The Gumadidala PHC is catering to a thirty thousand people and the Jinnaram Mandal is officially catering to about 35,000 people.

### Glossary

PHC – Primary health centre

RHC – Rural Health centre

ANM – Auxiliary Miltipurpose Nurse

MPHA (M)- Health Assistant Male

MPHA.(F)- Health Assistant Female

AWW –Anganwadi Teacher

Vit A –Vitamin A

Bitot Spots –Eye lesions diagnostic of Vitamin A deficiency

### Attachments

1. Photographs of children with vitamin A deficiency, (Iylapur and Gandigudem Villages)
2. Photographs of woman with burn like scars during planting paddy
3. Children having scabies and skin lesions
4. Photographs of PHC of Patancheru at Bhanur and its surroundings
5. Attendance register at PHC at Bhanur
6. The distances and population wise distribution of sub centres from the Jinnaram PHC (note population of IDA Bollaram that is unrealistically calculated)

### References

• The Profile of the number of health facilities in Medak District, ([www.apind.com/medak.pdf](http://www.apind.com/medak.pdf)) (commissionerate of industries, Govt of Andhra Pradesh) Accessed on 22 August 2004]

• NHFS report 1999

• GIS FOR ENVIRONMENTAL AUDIT OF HYDERABAD METROPOLITAN REGION, RANGA REDDY & MEDAK DISTRICTS OF ANDHRA PRADESH, INDIA

Dr.Kausalya Ramachandran, D.Sai kiran, M.Purnend & M.Kaipana Central Research Institute for Dry land. agriculture, Santoshnagar, Saidabad P.O. Hyderabad -500 059. E-mail: Kausalyar@yahoo.com  
<http://www.inqindia.org/gisforenvironmental.html> (accessed on 24 August 2004)

<sup>15</sup> PHC, Bhanur and ANM available at the time of visit. Since no doctor or other administrative staff members were available on Friday, 20 August 2004



Sight Savers International

[Comprehensive Eye Care Services (CES) Project]

Village: Chinnasivanur Mandal: Chegunta School: UPS (SSP) Date: \_\_\_\_\_

Class name	Total no of childrens/students			Students present s.s.p day		
	male	Female	Total	male	Female	Total
I <sup>st</sup> Class	27	28	55	27	28	55
II <sup>nd</sup> Class	29	17	26	9	17	26
III <sup>rd</sup> Class	16	13	29	16	13	29
IV <sup>th</sup> Class	11	10	21	8	10	18
V <sup>th</sup> Class	10	19	29	10	19	29
VI <sup>th</sup> Class	17	12	29	13	11	24
VII <sup>th</sup> Class	9	12	21	9	12	21
Total	99	111	210	92	110	202

Name of School Teachers list:

S.No	name of Teacher/H.M	Signatures	S.No	name of Teacher / H.M	Signatures
1.	K. Lingaiah	K. Lingaiah			
2	Ch. Manikya Rao	Ch. Manikya Rao			
3	S. Srinivas	S. Srinivas			
4	R. Raja Reddy	R. Raja Reddy			
5	F. Srinivas swamey	F. Srinivas swamey			
6	T. Rameshwar (H.M)	T. Rameshwar			
7	Ch. Murala Reddy	Ch. Murala Reddy			

D. V. Ramana  
CES project Incharge.

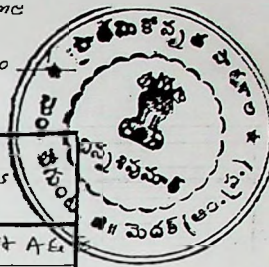
Signature & Seal

3/04

**ప్రొఫెసర్ ద్వారా**

Hon'ble

పే.కె.హెచ్. రిన్నీ శంకర్, ముఖ్య కమిషనరు



S.No	Name of children	Age/ sex	Class	Name of Father/Guard Village name	VISION		ACCEPTANCE		Eye defect Diagnosis	Remarks
					OD	OS	OD	OS		
1	Habeeb Siddique	m/4	1st	Jahangir	6/6	6/6	6/6	6/6	Bitot spots	Cap vit A
2	S. Suvaartha	4/F	1st	O/o Sangalah	6/6	6/6	6/6	6/6	Bitot spots	" "
3	Ch. meema	8/F	3rd	Anjalah	6/6	6/6	6/6	6/6	Allergic Conjunctivitis	" "
4	B. Ramesh	8/m	3rd	Chendram	6/6	6/6	6/6	6/6	pinguicula o.d	" "
5	m. praveen	9/m	4th	Balalah	6/6	6/6	6/6	6/6	O.D Bitot spots O.S Chalazion	" "
6	K. shekar	10/m	5th	Ramulu	6/6	6/6	6/6	6/6	Bitot spots	" "
7	m. Santhosh	10/F	5th	Chandram goud	6/6	6/6	6/6	6/6	O.D Chalazion	" "
8	P. mamatha	5/F	1st	Gadagoud	not Cooperated		not Cooperated		O.D Chalazion Bitot spots (right)	" "
9	J. prashanth	11/m	6th	Santhoshgoud	6/6	6/6	6/6	6/6	Bitot spots	" "
10	m. Ravi	11/m	6th	Anjalah	6/6	6/6	6/6	6/6	Bitot spots	" "
11	U. Anil	11/F	6th	Devadas	6/6	6/6	6/6	6/6	Bitot spots	" "
12	B. meema	12/F	6th	Rayudu	6/6	6/6	6/6	6/6	O.D Bitot spots	" "
13	K. Gredatha	12/F	7th	Mallesh	6/6	6/6	6/6	6/6	Dryness	" "
14	K. Rani	12/F	7th	Swarthy	6/6	6/6	6/6	6/6	Bitot spots	" "
15	K. gadagiri	12/m	7th	Shankar	6/6	6/6	6/6	6/6	Bitot spots	" "

CEH worker  
Signature

CEH Supervisor  
Signature

D.V. Ramana.  
CEH Coordinator  
Signature

[Signature]  
Ophthalmic Asst  
Signature

[Signature]  
School  
Signature & Seal  
(S. S. S. Chinnasivannur, Chinnasivannur)



## TAMIL NADU HEALTH REPORT

### **Health Profile of Tamil Nadu**

As on 1<sup>st</sup> March 2001, the population of Tamil Nadu stood at 62110839, according to provisional results of the census of India 2001. In population it holds the sixth position among the states in the country. The Density of population was 478. As against all India decadal growth rate of population 21.34% during 1991 – 2001, in Tamil Nadu this has further slipped to 11.19% from 15.39% during 1981 – 91. The sex ratio (ie, the number of females per thousand males) of population in the State has improved from 974 in the previous census to 986 in the present census. During 2000 – 2001 the Birth Rate (per 1000 population) was 19.2; the Death Rate was 7.9; Infant Mortality Rate was 51. Expectation of life at Birth : 64.85 for male and 65.20 for female. Still Birth Rate : 16.1. Fertility Rate : 2.0. Couple Protection Rate : 58.7. Tamil Nadu State reveals morbidity incidence rate per 1000 in rural area as 52 and in urban area as 58.

The Literacy rate in the State has shown remarkable improvement. This has increased to 73.47%, when compared to 62.66% ten years back during 1991 census. The per capita income at current price is Rs.20975, in 2002.

### **Health Budget**

The provision under the Medical(792.96 Crores) and Public Health demands (541.76Crores) in Budget Estimate 2001-2002 was Rs.1334.72 Crores, which worked out to 5.44% of the total expenditure on the Revenue account of Rs.24522 Crores in Tamil Nadu State budget. The provision for Health and Family welfare for 2003-2004 is Rs.1380.29 Crores.

## **Primary Health Care**

In Tamil Nadu 1411 Primary Health Centres and 8682 Health Sub-Centres are functioning. These Institutions provide preventive, promotive, curative and rehabilitative health care services. Between April 2002 and February 2003, 498 lakhs outpatients were provided treatment in the Primary Health Centres. All Block Primary Health Centres have been provided with telephone facilities. To involve the community in the maintenance of Primary Health Centres, Participatory Community Health Committees have been formed in all the Primary Health Centres.

## **Upgradation of Primary Health Centers**

This Government has decided to provide at least one 30 bedded Health Institution in each block. These Institutions will have specialist doctors and modern equipments like Ultra Sonograph, Portable ECG, and X-Ray, along with improved laboratory facilities and ambulance. During the year 2002-2003, 58 Primary Health Centres have been taken up for upgradation.

## **Improving Quality of Primary Health Care**

To improve the quality of Health Care at Primary Health Centres, each Block is provided with a Portable ECG machine to diagnose cardiac problems. A Glucometer is also provided to each Block Primary Health Centre to enable early detection of diabetic patients. The Operation Theatres attached to the Primary Health Centres have been provided with Anasthesia apparatus, operating table and surgical instruments to enable them to perform minor surgeries.

The Village Health Nurses at Sub-Centres have been trained to take Blood Pressure and each Health Sub Centre is provided with BP Apparatus and



Stethoscope. The Sub-Centres are also supplied with a Medical Equipment Kit consisting of basic instruments and weighing scales.

The Health Sector is equipped to maximize the use of Information Technology. All the District Offices are provided with Computer and E-Mail connectivity. Computers have been provided to Primary Health Centres in Madurai, Theni, Salem and Namakkal Districts.

To meet the manpower needs of the Primary Health Centres, Government has proposed to recruit 500 more doctors to fill the existing vacancies.

### **Speciality Medical Camps**

Specialised Treatment is not easily available to rural people for illnesses like cancer, and diabetes. Specialty Medical Camps to detect diseases like cancer, diabetes, heart ailments, hypertension and geriatric problems are conducted at the rate of one per Block. During 2002-2003, 385 Speciality Camps have been conducted and 7.98 lakhs people were screened. 5.24% were found to be affected with diabetes, 5.02% with heart ailments and hypertension, 0.54% with cancer and 22.4% with geriatric problems.

### **Mobile Health Services**

In order to ensure that people living in tribal, remote and inaccessible areas get medical facilities, 25 Mobile Health Units have already been launched and 20 more Mobile Health Units are being established in the current year. So far 1,79,571 patients have been provided with treatment by the Mobile Health Units.

## **Maternity and Child Health Care Services**

Maternal and Child Health Services are the most important of the services provided by the department. The services provided are Antenatal registration and check up, administering vaccination against Tetanus, immunization against vaccine preventable diseases, delivery care and post-natal care. At present the institutional deliveries account for 89.9% of the total deliveries in the State.

Immunization against vaccine preventable diseases are sustained at 100% every year. Apart from routine immunization, Pulse Polio Immunization is conducted every year and two additional doses of oral polio vaccine are given to all children below 5 years of age. In the current year the first round of Pulse Polio Immunization was conducted during 5<sup>th</sup> January and 9<sup>th</sup> February covering 73 lakhs of children under 5 years of age. The successful implementation of Pulse Polio Immunization added with sustained coverage in routine immunization has made the State free from polio for the past three years. Other vaccine preventable diseases are also under control.

Hepatitis B Vaccination has already been started in the city of Chennai from February, 2003. This will be extended to 4 more Districts viz. Virudhunagar, Ramanathapuram, Madurai and Nilgiris during 2003-2004.

## **Malaria**

Malaria is prevalent mainly in urban, coastal and riverine areas in the State. In Tamil Nadu more than 70% of the total malaria cases occur in urban areas. Chennai is the major problem area.



The cases in Chennai city are mostly confined to North Chennai. To eliminate the Malaria parasite so as to make Chennai free from Malaria, the Directorate of Public Health and Preventive Medicine and Chennai Corporation jointly organized a "Malaria Free Chennai Campaign" from September 15 to December 15 last year. A total number of 1228 Malaria cases were detected and treated during the campaign. People were advised to adopt measures for the reduction of Vector breeding sources.

### **Filaria**

The National Filaria Control Programme is implemented in Tamil Nadu since 1957. The recent advances in the field of Filariasis Control have indicated that annual single dose Mass DEC administration for at least 5 years is one of the most cost effective methods of eliminating this disease. Mass DEC administration has been carried out to 2.3 crores of people in March 2003 to eliminate lymphatic filariasis in 13 filaria endemic Districts.

### **National Leprosy Eradication Programme**

The National Leprosy Eradication Programme was launched in 1954-55. The programme is marching towards achievement of the target of less than 1 per 10,000 population and ultimately total elimination of leprosy. Towards this MLEC IV was launched to detect hidden cases in the community, with a specific focus on tackling urban leprosy with the help of Non-Governmental Organisations as facilitators.

### **Diarrhoea**

Acute Diarrhoeal diseases and suspected Cholera are common among the water borne diseases in Tamil Nadu. 2232 Anti Cholera inoculations were given

and 60,507 water sources were chlorinated in 2002 as preventive measures. Administration of Oral Rehydration Salt during epidemic outbreaks of Acute Diarrhoeal diseases has been popularized through Intensive Health Education.

## **Conclusion**

Inspite all these health care arrangements by the government, people are affected by the structural deficiency in public health care services. Public hearings are organized by National Human Rights Commission in association with JSA to streamline the public health care systems on one hand and to increase awareness about health rights in the community on the other. The Public hearings will also facilitate dialogue between the public and the government health officers.

## **Source**

1. Census of India, 2001 (Provisional)
2. Ministry of Health and Family welfare Reports, 2000, New Delhi.
3. Health and Family welfare Department, Government of Tamil Nadu.
4. Statistical Hand book of Tamil Nadu 2002.



## SIPCOT, Cuddalore: Special Needs of Pollution Impacted Communities Ignored

The SIPCOT chemical industrial estate in Cuddalore is one among many such clusters of polluting industries in India. The needs of communities and workers in such areas is remarkably different from those of communities not living in polluted places. In unpolluted places, the health of communities would be the responsibility of the municipality and/or the health department. In pollution-impacted communities, the causes and sources of pollution are often within the jurisdiction of agencies such as the Pollution Control Board and the Factories Inspectorate, whereas the health of the workers outside the factory and residents comes under the purview of the District Administration and the public health system. Given the peculiarities of this situation, it is important that any approach to addressing health issues in such areas is done in coordination among these bodies.

The pollution-related health problems in SIPCOT, Cuddalore have been mentioned by community residents since at least 1984. However, till date no official study has been commissioned to enquire into the reported health problems in the area.

In her submission to the Indian People's Tribunal on Environment & Human Rights, Dr. R. Sukanya, a public health specialist notes of the SIPCOT environment:

*"Health problems among people due to exposure to environmental toxins is an important public health problem. Threat of emerging antibiotic resistance, eye problems, chronic compromise of lung functions, high morbidity among children, lack of proper medical care and rehabilitation, medical apathy are all highlighted in the case studies from Eachangadu."* In conclusion, Dr. Sukanya notes the need for a comprehensive health assessment of the villagers and SIPCOT workers, and "active measures to stop the contamination from the nearby factories and to restore the quality of the water to prevent further damage to health of all."

While the kinds of industries and the number of people living within the impact range of pollution may differ from place to place, the problems faced by and the demands of workers and communities living along or near the fenceline of polluting factories is identical throughout the country.

The following issues inevitably arise with regard to health in pollution-impacted communities:

- High rates of morbidity among exposed people, especially women and children. Because women, children stay at home and, hence, in a polluted atmosphere all day long, they (along with factory workers living within the pollution-impacted community) are worse affected than men or others who may leave the pollution area to work elsewhere.
- Children are routinely identified as one of the most affected groups in SIPCOT, Cuddalore.
- Symptomatic treatment for chronic illnesses caused by exposure to pollution
- No specialized treatment for cases of industrial poisoning
- Medical expense disproportionately higher than income
- Loss of income due to lost work days

- Standing the Precautionary Principle on its Head: Anecdotal evidence, testimonies of pollution-impacted people, complaints and even simple studies seem to be inadequate to move district authorities, the health department and the Pollution Control Board into action. Rather than act on this evidence, they demand conclusive proof of harm from complainants or belittle their claims as exaggerated.
- No preventive action: Ongoing exposure – Many officials at regulatory authorities believe that pollution is inevitable. They also recommend “reason” and “patience” saying that the pollution has to be reduced gradually keeping in mind the need to balance the interests of the industry and the community. In a sense, this attitude condones pollution and authorizes the ongoing exposure of communities to pollution. Alarming, the Health Department is noticeably absent from the discussion around the issue of health in pollution-impacted communities. In the absence of any steps to stop exposure to pollution, there is little that can be done to improve the health status of pollution-impacted communities.
- Lack of specialized infrastructure in the event of a disaster or emergency.

This case will be a presentation by Nityanand Jayaraman based on documented and referenced interviews with representatives of the District, Health and Environmental administration, and testimonies gathered from residents of SIPCOT.

#### Recommendations:

- Operationalise the Precautionary Principle, and use the Precautionary Principle rather than a cost-benefit analysis to guide decision-making on the matter of environmental health.
- Notify areas around polluting industries as “Zones of Environmental Health Concern.”
- In the health administration infrastructure (ESI, PHC, GH etc) covering “Zones of Environmental Health Concern,” deploy specialised environmental health cells or retrain existing health department staff to deal with a) long-term monitoring health among pollution-impacted communities; b) providing long-term specialised health care to people living, working within such Zones; c) cases of acute poisoning by industrial chemicals.
- Deploy an emergency plan to contain the damage already done to children’s health, and initiate measures for the rehabilitation of children’s health.
- Operationalise the Polluter Pays Principle: Polluting industries maximize their profits by externalizing the costs of pollution to the community in the form of transferred health care costs to repair pollution-related health damage. These industries should be made to pay for the health care of pollution-impacted communities and for the specialized health care infrastructure required in such communities.
- Take steps to eliminate exposure by stopping pollution
- Involve representatives (particularly women) from the pollution-impacted communities and local public interest organizations in monitoring health and reporting pollution incidents.



### Industrial Accident Leading to Death

On 9 April, 2004, Mr. R – a contract worker from Periyapillaiarmedu, SIPCOT, Cuddalore – began work as a daily-wage labourer hired by a contractor at Tanfac Industries Ltd.

On 11 April, 2004, Mr. R was exposed to concentrated sulphuric acid fumes while cleaning an acid tank at TANFAC Industries Ltd. Immediately upon exposure, he climbed out of the acid tank and fainted. After he recovered, he was given something to drink and sent back to clean the acid tank where he was exposed further.

Upon returning home, his wife reports that he was coughing and complained of heaviness in the head, and difficulty in breathing. The problem worsened, and he was taken to the Government Hospital in the early hours of 12 April, 2004.

On the same day, the doctors at the GH recommended his relocation to a private hospital. He was moved to Kannan Hospital, Cuddalore. No ambulance or hospital vehicle was provided to convey him to the Private Hospital.

On 22 April, 2004, Mr. R was transferred to JIPMER, Pondicherry, after his complications failed to subside. He succumbed to his exposure on 30 April 2004.

His post-mortem report identifies the cause of death as “chemical pneumonitis.” A chemical analysis report prepared by the chemical examiner of the Public Health Laboratory, Pondicherry, confirms the “presence of corrosive acid such as sulphuric acid.”

This case demonstrates a prevalent problem – failure of regulatory authorities such as the Factories Inspectorate to sincerely implement the rules relating to industrial safety, health and hygiene. Victims of such failures are almost always workers, particularly contract workers.

Mr. R, an untrained contract worker, was sent to do a highly specialized and hazardous job. The acid tank was not certified free of toxic fumes as required by law. There was no first aid available, and the worker was sent back to the toxic work atmosphere.

#### Denial of Health Care :

- Lack of preventive care: Ensuring health practices within industries is the mandate of the Factories Inspectorate. In practice, this department serves as the Government’s arm on onsite industrial health and hygiene. The Factories Inspectorate failed to ensure the rules in TANFAC, thereby eliminating any possibility of preventing harm from happening. The absence of substantial punitive measures against violators is tantamount to condoning violations and represents a failure to prevent injury or health damage.

- Lack of emergency response: Again, the failure of the Factories Inspectorate to rigorously implement the rules has led to a situation where Mr. R had no access to first-aid and sensible advice after the accident.
- Lack of adequate and appropriate facilities in Government Hospital: Despite its proximity to an industrial area notorious for its pollution- and accident-related injuries and deaths, the Government Hospital in Cuddalore seems ill-equipped to deal with cases of chemical poisoning. This is clear from the fact that Mr. R had to relocate to a “better” hospital within hours of getting himself admitted at the GH.
- Challenges in Accessing Redressal: If accessing health care for Mr. R was difficult, the task of accessing compensation and assistance from the District Authorities and the ESI is proving to be even more complicated. The widow has received no interim relief. No case has been filed against the violator – Tanfac. Pension under ESI is still several files away. These complications are very much related to the failure in regulating industrial safety and health, and in maintaining appropriate health systems.

Consequences: Death (avoidable if proper first aid and treatment facilities were available and used)

#### RECOMMENDATIONS:

1. The Health Department should play a proactive role in ensuring that practices to prevent harm are followed within industries. They should do this by coordinating with the Factories Inspectorate.
2. The Health Department should facilitate the routine monitoring of workers health data required to be collected under the Factories Rules to identify problems (if any) of occupational diseases among them.
3. The Factories Inspector should be directed to diligently perform his/her functions, particularly in regard to maintaining industrial safety and ensuring emergency response by industry. The Inspector should also ensure that only trained workers are deployed on hazardous jobs and contract workers are not used for such activities.
4. Hospital infrastructure in the areas near polluting industries should have trained personnel and equipment to deal with cases of industrial injury and poisoning.
5. The District Administration should be instructed to assist the victim or his/her survivors in accessing compensation and/or pension.



### Injury to Fishermen as a Result of Water Pollution

In September-October 2002, fisherfolk working in the river Uppanar, that runs behind SIPCOT, Cuddalore, stopped fishing after all active fishermen began developing serious skin problems. They attributed the problems to an illegal discharge of acidic effluents from Pioneer Miyagi Chemicals -- a routine occurrence, according to them.

The company uses large quantities of hydrochloric acid to dissolve bones (and manufacture Ossein). The New Jersey Department of Health warns: "Contact [with hydrochloric acid] can cause severe skin burns and severe burns of the eyes, leading to permanent damage with loss of sight. Exposure to dilute solutions may cause a skin rash or irritation."

A submission by the Joint Director of Health Services, Cuddalore, corroborates the charges by the fisherfolk against Pioneer Miyagi for discharge of untreated acidic effluent into the river. "On 20.9.02, 13 persons (fishermen) suffered chemical burns due to the effluents/discharge from SIPCOT industries into Uppanar River," the statement read.

The fisherfolk said medicines from the Government hospitals and private hospitals did little to ease their problem. No systematic treatment was provided for the victims of acid burns.

When the fisherfolk approached the District Collector for assistance, the Collector is reported to have dismissed their concerns and advised them to look for an alternative livelihood. This attitudinal malady that afflicts many bureaucrats and people in regulatory agencies is the most serious obstacle to implementing the Precautionary Principle, or taking any sensible steps in the matter of health.

In October 2002, NGOs FEDCOT and CorpWatch requested public health specialist Dr. R. Sukanya (M.D) to look into reports of the September 2002 occupational injuries among fisherfolk, and the general state of health in SIPCOT. In her report submitted to the Indian People's Tribunal on Environment and Human Rights, Dr. R. Sukanya states: *"In the fishing village of Sonnanchavadi, chemical contamination of the river poses a serious and ongoing occupational health threat. The fact that the villagers have been forced to stop fishing - and suffer wage losses - is a violation of their fundamental and constitutional guaranteed right to livelihood."*

#### Denial of Health Care :

1. Lack of preventive care: Adequate efforts have not been made to eliminate pollution-related health injury.
2. Absence of appropriate treatment: Fisherfolk received no effective treatment for their ailments.

Consequences:

1. Prolonged skin problems
2. Difficulties in accessing redressal (including compensation)
3. Lost wages and added expenses due to health care costs

Recommendations:

1. Action to be taken as suggested in Case/ and as applicable to this type of chemical pollution.
2. Primitive action against the industry as deterrant to future violations.



Testimony of S.J.

Name : S.J

Age : 45, male

Address : N.Punjampatti, P.O Dindigul-644503, Tamil Nadu

Date : 30.6.2004

S.J met with an accident and went to Dindigul Government Hospital for treatment at 10.30 p.m. with head injury. They did the first aid but did not take CT Scan to diagnose head injury even though the patient had severe pain and swelling of face. There was delay for attending the patient. Consequence of the delay caused blood clots in the eye and reduced eyesight, severe pain and his condition become serious.

Finally operation was done after paying the bribery amount. The medicine was bought outside for the operation and it costs Rs.750.00. CT scan also taken outside. The patient paid money to all level of people at the hospital. They borrowed money for high rate of interest and spent Rs.5,500/- for getting treatment. Proper care was not given when he was getting the treatment and whenever medical attention was needed the hospital staff ignored him.

Denial of Health Care:

Negligence

Bribery

Delay in health care

Unnecessary expenditure: purchase of medicines and taking of CT scan outside.

Name : S.G

Age : 45, Female

Address : Pullampadi P.O, Lalgudi, T,K. Trichy Dt. Tamil Nadu.

S. G was suffering from TB. First she went to PHC of Pullampadi and after the check up her disease was found to be pulmonary. Then she was sent to Government Rajaji TB Prevent Centre, Trichy for continuous treatment. Last one year she was going to Trichy from her village for getting treatment. Important medicines were bought from outside medical shop. 8 times 'scanning' were taken from outside. She did not get any improvement now she is getting treatment at private clinic called Madha Clinic, Pullampadi. For the treatment she borrowed Rs.15,000/- and sold 24 gram gold jewellery, 10 goats and one milch animal

Denial of Health Care : Ineffective treatment

Asked to get medicines and tests done outside.

Consequences : Delay in improvement of health

Heavy indebtedness, borrowing money and selling assets.



Patient's Name: H.S.

Address : Lalkudi Taluk, Trichy (Dist), Tamil Nadu

For more than 2 years, H.S. suffered from cold and Asthama. He used to go to Pullambadi Government Hospital. But he could not overcome his disease through the medicines and services, given by the Government Hospital. So, he went to private hospital in Lalkudi. He spent nearly Rs.30,000/- for his complaints. In order to raise the amount he sold his cattle, land and jewels.

Denial of care

1. No proper services available in Government Hospital
2. Unnecessary expenditure of Rs.30, 000/-, making the patient sell his assets.

### Treatment without Examination

Case 1: P, aged 50 years, went to Government General Hospital at Manaparai in Trichy district. She is suffering from high blood pressure. Earlier she was taking treatment with a private clinic. At present due to economic crisis in the family she is going to Government Hospital. She said the doctors at the governmental hospital are without checking her blood pressure, giving her medicines. She takes the tablets and goes to the private clinic to check her blood pressure and takes the tablets according to the doctor's advice there.

Case 2: M, aged 38 years, is going to the Government General Hospital for diabetes. They give her the tablets without examining her urine and blood. She goes to a private clinic to get her urine and blood examined and take the tablets according to the doctors' advice there.

Denial of Health Care : Negligence  
Absence of simple diagnostic aid (B.P. apparatus) not performing;  
the needed tests, before the administration of drug

Consequences : Unnecessary expenditure to get the tests done at the private clinic.  
Delay in administration of drugs.



M, aged 20 years, went to Government General Hospital at Manaparai in Trichy district for first delivery. The baby was delivered through caesarean. The day when delivery was conducted she suffered from more pain but they did not give her any medicine. She had to wait till the doctor came the next day to give her the injection.

Denial of health care: Delay in health care and relief of suffering.

Name : NS

Address : Manaparai, Tamilnadu

He was admitted in Manaparai Government Hospital. The staff did not give him proper food. They are selling the food and other things. Due to this patients are not getting proper services from hospital.

Denial of care: Negligence and corruption



Name : Natarajan

Age : 45, male

Address : Pungawadi, Manapparai, Tamil Nadu

Hospital visited : Manapparai Govt. Hospital, Manapparai, Tamil Nadu

He got 'bad damage' in the spinal cord due to hit by the bullock. He was admitted in the Manapparai Government Hospital for 4 days . Hospital staff told him that , ' he need Rs. 10,000/- to rectify his complaint, but he could not pay that amount, so he was discharged from the hospital. Now his two limbs are not useful to him. He is living without the usage of his legs.

Denial of health care :

Medical attention denied because the patient could not give the 'bribe demanded' by the staff of the Government Hospital.

Consequence :

Disability; unable to use the legs.

Patient's Name : G.P.

Address : Sangralingapuram, Tamilnadu

For the heart complaints she used to go to Aruppukottai Government Hospital. On 8.8.03 she was admitted in the above hospital for treatment. There she had an X-ray taken. Due to the non-availability of doctor and the deficiency of the medicines, she didn't get timely treatment. As a consequence she died.

For the treatment of her complaint she spent almost Rs.20,000/-. She raised this money through selling her land and borrowings.

Denial of Care

- Non availability of doctor and medicines in the Government Hospital
- Free health care if not given; so, she had to spend more than Rs.20,000/-

Consequences : Death



Patients' Names :

1. A.S
2. A.L
3. V. M
4. K G

Hospital Visited : Cuddalore , Government Hospital

Among the four, two of them went for delivery and other two went for Family Planning operation. The Cuddalore Government Hospital is the District Hospital. All of them gave Rs.700 to Rs.500 rupees as bribe to avail the services. They received good treatment and other services from the hospital.

Denial of Care : Bribery

### Case Study of Theni, TamilNadu:

The situation in Theni, the largest cotton producing district of Tamilnadu is very unique since pesticide use in cotton growing areas is higher than in any other crop in India. Such high pesticide use which goes up to 25 sprays in one season brings with it a large number of health related issues ranging from cases of acute poisoning to a high rate of fainting due to inhalation of pesticide fumes and chronic disorders like impaired mental developmental abilities in children.

#### The health care scenario in Theni District:

Three to six villages have a representation of the Village Health Nurse (VHN) who are provided with living quarters next to their small dispensary. They have the capacity only on issues like vaccination, vitamin and mineral deficiencies and maternity advice. The villagers too do not depend on them for any serious health problems. Even for common illnesses like fever, they might either go directly to the PHC (Public Health Centre) or to the nearby private doctor. Approximately three or four of these VHN's come under a PHC. They have a few beds and a doctor is assigned to each PHC, who hardly comes on time and leaves by lunch. By and large, they do not admit patients and send them to the district General Hospital. Even first aid is mostly not administered on the pretext that they are anyway going to the GH. Most of the cases who have been admitted in the PHC's seem to have got some political pressure exerted by the local party men.

As observed by the Greenpeace study "Arrested Development" in Theni, in three villages, the effects of pesticides are highly pronounced on the mental abilities of children. An issue, which needs to be taken up seriously, is the faulty system of health care, which consists of callous professionals who have been risking the life and health of the future generations.

#### Denial of Health Care

Exposure to toxic and hazardous chemicals (pesticides) without adequate preventive and precautionary steps.

Inadequate health care to tackle the adverse effects of the chemicals.

#### Consequences

Arrested development of children.  
Impaired mental abilities.

#### Recommendations

Apply the precautionary principle at all stages for the pesticides.



## **ARRESTED DEVELOPMENT – An Executive Summary**

In the cotton-growing season between April and December 2003, Greenpeace India studied the chronic effects of pesticides on the development of children growing up in cotton cultivating areas of six states of India. The results of this study, published in April 2004 as *Arrested Development*, reveal that exposure to small doses of pesticide during childhood years has severely impaired the analytical abilities, motor skills and the concentration and memory of children from farming communities – the 1648 children who participated in this study are representative of the population of India.

Most studies in the past have focused on pesticide residues in food and water, instead of which this study attempts to correlate the indiscriminate use of pesticides with the health of unsuspecting little children (4-5 years) and older ones (9-13 years); children who appear normal and happy but whose mental development lags far behind their counterparts in pesticide-free environments. The study focuses on children, as they are particularly vulnerable, given their physiology and behaviour patterns

A total of 899 children from six locations in the cotton-growing belts of the country, (which implies the intensive and high use of dangerous pesticides cocktails) were compared with 749 children of the same age, economic background and ethnicity in a different location (within the same state) where the pesticides usage was far less.

The researchers arrived at the data for this study through using a Rapid Assessment Tool. Through this tool, the children were asked to participate in a wide range of tests using a play approach, where the tools were individually and verbally administered to each child.

Widespread documentation on neurological effects of pesticides including effects on memory, judgment and intelligence as well as personality, moods and behaviour determined the kinds of tests administered.

The tests included the use of wooden blocks and jigsaw puzzles to measure mental abilities, ball catching and balance tests to test motor abilities and memory games to assess the level of concentration and memory.

The study found a remarkable difference between the abilities of the two groups of children, with more or less consistent trends across different locations in both the age groups. With all other possible confounders controlled for, the only significantly accountable reason for these disturbing findings is the children's exposure to pesticides.

The findings of Arrested Development make a strong case for the application of the Precautionary Principle. In the case of hazardous and toxic substances like pesticides, Precautionary Principle needs to be applied in their manufacture, distribution, marketing, storage and use. The current legislations, policies and practices in India do not adhere to this precautionary principle.

The report strengthens the evidence against pesticides and calls for a ban on all pesticides, starting with those banned in other countries. As cleaner, safer alternatives for farming have been well demonstrated by farmers in the country, the study is a wake up call to the government and a demand for them to provide greater support to organic farming in terms of resources, mechanisms for more research, extension and crop loan support and infrastructure.

Notes:

The six locations were chosen from states and districts where cotton cultivation and pesticide use are high, and from where earlier reports of pesticide-related problems have emerged. The problems here could have been environmental, human health or agronomic. These locations are:

- Bharuch in Gujarat (Halder, Kavitha and Samlod villages)
- Bhatinda in Punjab (Bangi Nihal Singh, Jajjal and Mahi Nangal villages)
- Raichur in Karnataka (Khanapur, Manjerla and Poorthipli villages)
- Theni in Tamil Nadu (Rassingapuram, Silamalai and Visuvaspuram villages)
- Yavatmal in Maharashtra (Dahelitanda, Kopamandvi and Sunna villages)
- Warangal in Andhra Pradesh (Atmakur, Oglapur and Peddapur villages)



**Testimony of Mrs. P**

Mrs. P aged 20 native of Rosalpatti village Virudhunagar block -studied upto 12th standard -doing agricultural collie work. She was admitted to Municipal maternity hospital Virudhunagar in July 2003.,for delivery of baby and there was no doctor in the night. Only health nurses attended in a rough manner. After 3 hours doctor came and did caesarean operation and still born baby was taken out. Unusual delay caused the death of the baby. Later Mrs. P had to district general hospital, Virudhunagar to remove the fluids in the stomach. After one month she recovered and now is pregnant again with 5 months baby. Since the fluid came out from the uterus, the baby had to die after a few hours. The timely treatment was denied.

R aged 22 was admitted to Government Hospital Virudhunagar due to labour pain, in August 2003. The doctor was not available. Relatives were waiting right from 7 a.m. in the morning. (more details awaited)



**PRIMARY HEALTH CENTER STUDY**

**Location of Primary Health Center :** Kaniyambadi in Vellore district, Tamil Nadu.  
**Name of the interviewer :** Sri. Syed kaleem Ahmed  
**Date of documentation :** 4<sup>th</sup> August 2004

**Infrastructure**

This primary health center has all the staff except the lady doctor. All the staff are staying within the campus of the PHC. The condition of the building is good with water and electricity condition. The road to this PHC is good and is well accessed by public transport facility. This center has an ambulance. The vehicle number is TN 09G1537

No information is given regarding the ownership of the building and water problem. The center is clean. The center has toilet facility with water supply and the people who visit the center are allowed to use it. It is reported that the beds and the labour room is in good condition. The Operation Theater and the operation table also are in good condition. The refrigerator is in working condition. The center has facility for autoclave. The microscope is in good working condition. The ambulance is working condition and it is made available for patients free of cost.

**Part II**

The center has always anti snake venom for snakebites and anti rabies vaccine for dog bites. There is no information regarding anti malarial medicines. TB medicines are available. There is no information given if all the medicines are given free of cost and prescription is given for any specific medicine.

**Part III**

The center conducts cataract surgeries. No information is given if the center provides first aid, does sutures and facility for putting the cast for fractures. The interviewer does say that the center treats fractures cases. He also says that first aid is given for burn cases and snakebites.

**Part IV**

Health camps are regularly held for pregnant women and children. The center has facility for conducting normal delivery round the clock. There is facility for conducting both vasectomy and Tubectomy.

Treatment is given for women's health problems such as white discharge and problems related menstruation and if women attend the center for these problems. The report says that the center has facility for medical termination of pregnancy (MTP) but it does not give any information regarding about the conditions for MTP, such as that the patient must

accept planning after MTP, need the permission of the husband, family. It is reported that no fee is charged for MTP.

The center provides childhood immunization, and provides treatment for pneumonia and diarrhoea and dehydration. The center has facility for treating childhood disease.

### **Laboratory facilities**

The center has facility for diagnosing anemia, malaria, and tuberculosis. It also has facility for doing urine examination for pregnant women.

During the past three years, there is no report of any epidemic of the following diseases; malaria, measles, cholera, jaundice. The report says that that the staffs of the PHC are kind and polite with the patients. None of the doctors from this center do private practice either during office hours or after office hours. There is no report of this center ill treating dalits, traiblas, and other marginalised people. People affected by TB, Leprosy and HIV/AIDS are not discriminated. The center has private place for examining women with their attendants and they are treated with respect. The center has facility for treating in-patients. The centers provide complete treatment for chronic illnesses. The center refers immediately the patients to the nearest hospital at times of emergencies and when they feel they cannot manage. The center has complaints register. No information regarding if there are any complaints written.

In the any other information column the interviewer recommends this center and Dr. Palani Bhushneshwai for conferring any award.

NB- further clarification have been sought from Sri.Syed Kaleem Ahmed, to fill in some aspects that are incomplete.

### **Testimonies:**

I belong to a minority community. I have admitted my grand daughter S at the PHC for family planning surgery. They do not discriminate because we belong to Islam. I vouch that there is no human right violation in this center. I thank Dr. Mrs. Bhuvaneshwari, Mrs. Subbalakshmi and Mrs. Vijayakumari for whole-heartedly giving us the treatment lovingly.

Signed :-

Mrs. S  
Saidapet  
Vellore- 12

V.Subbalakshmi ANM  
Kaniyambadi PHC

Dr.Bhuvaneshwari  
Civil surgeon.  
Govt. Primary Health Centre



I am R related to Mrs. B who was admitted at the Kaniyambadi PHC for family planning surgery. Dr. Bhuvaneshwari and her colleagues ANM Mrs. Subbalakshmi and Mrs. Vijayakumari treated us lovingly. They did not discriminate me because I belong to a tribal community. I vouch that in this PHC there is no violation of human right for people belong to dalit and tribal communities.

Signed

Mrs. B  
Karugamputhur Village  
Vellore Taluk

Dr. Bhuvaneshwari  
Civil Surgeon  
Govt. Primary Health Centre  
Kaniyambadi.

V.Subbalakshmi  
ANM, PHC Kaniyambadi.

**PY01**

Name: Mrs. M  
Age : 60, female  
Address : Karaikal

Mrs M. received treatment at Karaikal Government Hospital for her eye defect. She visited the hospital six times for checkup and treatment, and every time she did not have to wait more than 15 minutes to get the treatment. Both her eyes were operated on one after another, and on both occasions the operation was done the day after admitting her as inpatient. Good care was given at the Centre, and staff of the Centre rendered good service whenever required. They were available in their duty time.

According to the patient, all equipments were kept ready in working conditions for diagnosis and treatment. Except eye ointment, all medicines were supplied from the hospital. The expenditure was only on their own transport, food and for purchasing spectacles. They did not pay any bribe to the doctors or any other hospital staff. Mrs. M was satisfied about her treatment and experience at the Karaikal Government Hospital.

**Result : Patient satisfaction, when there is quality of care**

**PY02**

Name: Mrs. IM  
Age : 49, Female  
Address : Sonampalayam, Pondicherry

Mrs. IM visited the Pondicherry Government Hospital twice at Chenchsalai, Pondicherry twice, to get treatment for excess bleeding (uterus related).

Without any delay her check up was done with scanning etc. She was happy with the care she received and have no complaints about the hospital. Care and attention was given when she was at the hospital, the equipment were in usable condition, and she received all the medicines at the hospital. She mentioned that she did not spend any money for this treatment. She is happy about the treatment received by her.

**Result : Patient satisfaction with the services provided in the public health facility.**

**PY 03**

Name:	Mr. N
Age :	29 years
Sex:	Female
Date of interview:	3 <sup>rd</sup> July 2004



Problem: chest pain and stomach pain

She visited the Othiyansalai Primary Health Center in Pondyicherry to get the treatment. She said there was delay of about 30 minutes in attending to her after she reached the PHC but she received the necessary treatment. The doctor checked her Blood Pressure and did an ECG. She received good care and treatment from all the staff in the health center. She was given free all the medicines necessary. All the equipment at the center is functioning condition and kept ready for use. Regarding expenses she said, she did not spend any money for her treatment, she spent only for transportation. She is happy with the treatment provided to her at this PHC.

Result : Patient satisfaction

#### PY 04

Name: Ms. AK  
Age: 44 years  
Sex: Female  
Problem: fracture of the hand

She received the treatment for fracture of her hands at the Karaikal Govt. General Hospital. She said proper treatment was given to her at the general hospital. She said she unnecessarily spent money for buying oil from the traditional healer before she went to the general hospital.

Result : Patient satisfaction

#### PY 05

Name: Mr. DA  
Age: 30 years  
Sex: Female.  
Problem: throat pain

He received the treatment for his throat pain. He said, though the doctors attended to him but they were not very attentive, as there is ego problem among the doctors. Otherwise everything at the General hospital was good.

#### PY 06

Name: Mrs.K  
Age: 36 years  
Sex: Female.  
Date of interview: 26<sup>th</sup> June 2004  
Problem: abscess

She visited five times the Primary Health Centre at Censalai in Pondicherry for treatment. She says that proper treatment is given to her.

**PY 07**

Name: Mrs.L  
Age: 35 years  
Sex: female  
Problem: Chronic headache

She visited Thuppurayapatti Primary Health Center to get treatment for her headache. She also said proper treatment was given to her.

**PY 08**

Name: Mrs. R  
Age: 38 years  
Sex: Female  
Problem: chest pain

Radhika says that she received good treatment from the oliyansalai Primary Health Centre in Pondycherry.

**PY 09**

Name: Ms. S  
Age: 24 years  
Sex: Female  
Problem: not mentioned  
Date of documentation: 25<sup>th</sup> May 2004

She did not mention for what she received treatment at Karaikal General Hospital. But she said she received proper treatment.

**PY 10**

Name; Ms. T  
Age: 40 years  
Sex: Female  
Date of documentation: 30<sup>th</sup> June 2004  
Problem: Not mentioned

Comment: The staffs at the Nedunagar Primary Health Center do not give proper care and treatment with concern.



### **PY 11**

Name: Ms. ER  
Age: 45 years  
Sex: Female  
Problem: Diabetes

She says that she is receiving proper treatment from Karaikal General Hospital.

### **PY 12**

Name: Mr. S  
Age: 38 years  
Sex: Male  
Problem: Tuberculosis

He says he received proper treatment for tuberculosis.

### **PY 13**

Name: Ms. GS  
Age: 38 years  
Sex: female  
Problem: ulcer of the stomach

Comment: She says she has received proper treatment from Mummombakkam Primary Health Center.

### **PY 14**

Name: Ms.S  
Age: 40 years  
Sex: Female  
Problem: White patches

She says she has received treatment for white patches from Villianur Primary Health Center. She went there four times. As she was not cured, she went to JIPMER in Pondicherry. She says, though she did not get cured at the Primary Health Center she was treated well by the staff there.

1. Kuppampatti village
2. Rossalpatti
3. Sivakasi family planning operations
4. Ansar case - Bribery
5. Ramu - heart valve
6. Grace Mary
7. Jesu Raj
8. Selva Kumar
9. Prasanna



**No 6. Grace Mary, N. Panjampatti village, Dindugal district**

Grace Mary delivered a still born baby in the auto on the way to Alamarathipatti PHC, two kms away from her native village. She spent one night at the PHC and was referred to Dindugal district hospital. She was told by the PHC staff that she needed blood transfusion as she had lost blood after her delivery and was very weak. No ambulance was provided from the PHC to the district hospital. The patient took an auto. She spent one week at the Dindugal G.H. No blood transfusion was provided. When she asked the attendant nurse, she was abused verbally by her "Why do you want to live? Why don't you commit suicide? What are you going to achieve by living?". Then after one week, she was referred to the Madurai G.H for further treatment. She was unable to go because of the expenses involved.

*Grace Mary has one living child and two abortions. She is a very poor woman who survives by coolie labour.*

**Denial of care**

No ambulance at PHC

No life saving blood provided at district hospital.

Verbal abuse by staff in Dindugal district hospital.

Incomplete and inadequate treatment provided

**MLJesu Raj, N.Panjampatti, Dindugal district**

M.Jesu Raj (age 41) is a vegetable vendor from a poor family of 6 members. He suffered an accident on 8.6.2003 on the way to Panjampatti in the night. M.Jesu Raj was hit by a lorry and was left bleeding for half an hour on the road. He was taken to local doctors in A.Vellodu village who refused him treatment. He was then taken to Dindugal government headquarters hospital. Doctors told him that they could not treat him. Even first aid was not provided. One of the doctors referred him to a private hospital - Raja Rajeswari, where the same doctor works in the evenings. He finally went to Ganesh hospital. Without knowing that there was a skull injury, he was given stitches and sent home. No scan was taken. His face started swelling and he suffered head aches. So he went back to Dindugal govt hospital where a scan was taken after payment of Rs.550. He found out that he had suffered a skull fracture. Due to continuous problems, he went to the Madurai G.H for treatment. He was treated well at Madurai and recovered.

**Denial of care**

Denial of care at Dindugal Govt hospital - Govt doctor referring him to a private hospital.

Due to delayed care and negligence, he has lost three months of work.



**Ramu (23 yrs), Makavarayanpatti village, Thiruvarangulam block, Pudukottai district**

Ms.Ramu suffered from chest pain, dizziness and fatigue. At the general hospital Pudukottai, she was told that she had no problem. But her symptoms continued. She was admitted in a private hospital in Pudukottai for 15 days and treated. She was told that she had a valve problem. So she underwent heart valve surgery at the Thanjavur Medical College hospital four years back. She spent 45 days there – 15 days after the surgery. She had to pay the nurses for any kind of services during her stay in the Thanjavur hospital. Sometimes, she had to pay each nurse upto Rs.50 per day. Payment in kind was also demanded – tamarind, coconut from her village.

For three years, she was okay. She has started feeling the symptoms again. She went to Pudukottai G.H where she was not given proper care. Finally at Trichy G.H she was told that she had a leak again. She was referred to the General hospital in Chennai. At Chennai, it took her three days in the hospital to see the concerned doctor. She was asked to come back on the 16<sup>th</sup> of July (15 days away) for admission for surgery. When she returned on the 16<sup>th</sup> of July, she was told to go back and come again after 15 days. On her third visit, she was informed that the machine was faulty and surgery will be possible only in December.

**Dental of care**

No proper treatment in Pudukottai General Hospital.

Illegal payment to nurses in Thanjavur Medical college hospital.

Denial of treatment at Chennai General hospital – harassment of patient through repeated visits from her village in Pudukottai to Chennai.

**Selvakumar (13 years), Koothiripatti village, Annarasal taluk, Pudukottai district**

He was diagnosed as having a heart valve problem in Thanjavur Medical College hospital three years ago. He kept returning for treatment to Thanjavur for 6-7 months after diagnosis. Then he discontinued as his family could not afford the travel and treatment. His mother is a widow raising two children through coolie work. He has been getting medicines from Pudukottai G.H for the last two years. It costs him Rs.22 to travel by bus from his village to Pudukottai G.H. He makes two visits in a month.

His mother says that there is no proper information about his current health status from the doctors in the Pudukottai G.H. She does not know if his condition has improved or worsened. Both mother and child are suffering from great anxiety due to lack of any information.

**Dental of care**

Right to information of patient and patient's family violated which is leading to anxiety and trauma of mother and child

Non-availability of life saving drugs at PHC level



**Prasanna, Thiruthani block, Thiruvallur district**

Prasanna conceived in May 2002 after undergoing two abortions. She went to a private clinic for ante natal care. At the ninth month, she went to the Egmore Mother and Child Hospital for a check up. The doctor who checked her said that the heart beat of the child was fine and there was no problem. When Prasanna's sister explained that she had undergone two abortions earlier and requested special treatment, the doctor checked her again and asked her to get admitted. She spent the night on the floor along with 17 other pregnant women. The same blade was used on all the women for shaving. Prasanna asked for a new blade and was refused. All the women had to pay Rs.10 for the use of the blade.

Another doctor checked her the next morning and said that her child had died and there was no heart beat. The doctor, who checked Prasanna on the previous day and declared her normal, suddenly announced that the child had actually died 14 days ago. Even after finding out that the child was dead, Prasanna was kept in the ward for two days without any treatment or surgery. On the second day, delivery was induced and the baby was born dead. She was told that the baby had died because of her diabetes. The private doctor she had seen had ~~not checked~~ her for diabetes. She suffered pain and injection for more than a month because the stitches were not properly done.

**Dental of care**

Poor quality of ante natal care in the private clinic. No counseling about diabetes. Trauma suffered by patient. After informing her that the child had died, no treatment was provided for two days.

Vijayan, 40 years, Periakadambur village, Thiruthani block, Thiruvallur district  
Vijayan went to Kasavaraj pettai PHC for treatment for snake bite six months back. For four days he was given injection and medicine. But no blood test was done. He went to the Thiruthani Taluk hospital about 4-5 times. Blood test was done and patient was declared normal. But the swelling did not subside. So he went to a private hospital where he was given injection and medicine after which the swelling subsided.



**Rajeswari**

**Pertiya Karuppal (Mother in law)**

**Klppanpatti village**

**Virudu nagar block**

After suffering in 12 hours pain (the town bus will come to their village only in the 7.00 a.m. Ms. Rajeswari was admitted in the Virudu nagar hospital on 11/08/2003 around 12.30 p.m she delivered male baby. But the mother had been kept in the labour room upto 3.30 in the evening and was deprived of food. In this concern the relatives and staff had exchanged hot words. Even the nurse tried to beat her mother in law. At 4.30 p.m she got pain in her abdomen. So, the nurses gave her two tablets. All the relatives called the staff. No body attended the patient. The staff said that we don't want to enter into the stinking ward. So for more than 90 minutes she suffered terrible pain. At last she died. The doctor finally arrived when the staff informed him. He told to the relatives that if the staff would have called an hour before her life could have been saved. Now the child is with his grand mother and they are spending lot of money on the child's health.

**Dental of care**

**Strong negligence of care**

**Negative attitude of the staff**

**Name :J. Pandeewari, W/o.Jayaseelan**

**Age :23**

**Rosalpatti village**

**Virudunagar district**

Having been unable to conceive for three years after marriage of Pandeewari, sought treatment for infertility. She finally conceived and for her ANC she approached private hospital for five months, following, which she went to a Municipal hospital. on 19<sup>th</sup> November, 2003 she got admitted for her delivery. The doctor examined her and said it will take 2 more hours for delivery and she left. After she left immediately pandeewari went into labor pains and was not attended by the nurses who insisted that the delivery is only conducted by the doctor. The labor got prolonged and half the fetus body had progressed. In order to facilitate the delivery around 13 staff member gathered around her and hit her and used abusive words. After 3 hours the fetus was pulled out with the aid of forceps, which was obviously dead.

She did not urinate for 5 days and her abdomen was bloated and went to the same hospital from where she was referred to district hospital. After being catheterised, her scan was taken which revealed she has stone her bladder was damaged and infected. Then they referred her to Madurai Government hospital for further treatment. But she don't want to go to Govt. hospital and went to private hospital. There they took scan and said that she had bad damage in the bladder and infected. She was at the home for more than 45 days and she pass urine through tube. Now she is getting treatment in the private hospital of Virudu nagar and still continuing with the same problem. She spends around 15,000 rupees for her treatment so far.

#### **Dental of health care**

Negligence of timely cares which leads to death of the child and chronic infection on the bladder.

Strong negative behavior of the staff towards the patient in an un human way.

Spends 15,000 thousand money in private hospital which adds her economic burden.



## SUMMARY OF RECOMMENDATIONS TO STRENGTHEN THE PUBLIC HEALTH SYSTEM

1. Implement the Karnataka Integrated Health Policy, focussing on primary health care and public health.
2. Incrementally increase public sector expenditure on health care, bringing it up to the norms of the National Health Policy, 2002.
3. Focus on the basic determinants of health – food, water supply and sanitation, environmental pollution.
4. Ensure quality of health care by regulation of the public and private sector services and improving the quality of training and medical education.
5. Improve governance and social accountability of the health sector, reducing corruption and improving utilization and impact.
6. Reduce disparities in access to health care by increasing sensitivity to needs of women, children, elderly, disabled, scheduled caste and scheduled tribe groups.

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