

# **AUROVILLE HEALTH CENTER**

## **ACTIVITY REPORT 2002**

### **1. The Auroville Health Centre**

The Auroville Health Centre was established in 1972 as a Primary Health Care Unit. Since then it has undergone many changes. The various activities of the health centre include...

- A clinic for all (mainly catering to the local population –Tamils) offering doctors consultations six mornings and six afternoons a week
- A pharmacy
- A ward for in patients with 9 beds and 24 hours nursing care for in patients
- A X-ray unit
- A Medical laboratory
- Operation theatre, currently used for cataract surgeries and minor procedures
- Ambulance service round the clock
- A physio and play therapy centre mainly for children with disabilities
- A health education unit producing Health Education videos and staging dramas
- Primary Health Care Program in 22 villages (pop approx 30,000)
- 7 Sub health centres in 7 villages

### **2. The Village Health Care Program**

A program for providing primary health care for the local population was started in a small way in 1992. Currently the program covers 22 villages. The program is implemented through 33 *village health workers* who are women selected from each village, given basic and continuing training, who are then responsible for 100 to 200 families each. The components of this program include

1. Antenatal clinics in 18 villages
2. The safe water and sanitation program
3. Liaison with the government to ensure universal immunization.
4. First Aid and wound dressing in each village
5. Conducting clinics in 7 villages with doctors consultations once a week.
6. Recording of vital health information
7. Early detection, referral and follow-up of the chronically ill.
8. School health education and child to child programs in 16 schools.
9. Construction and maintenance of toilets in 11 schools.
10. Health education Dramas and Videos
11. A program for children with disabilities.

### **3. Antenatal clinics in 20 villages**

Interventions to reduce maternal and infant morbidity are a major area of work for the H.C. Prevention and early detection of complications in pregnancies, early referral, monitoring of fetal growth and maternal nutrition, planning for delivery are all done in the antenatal clinics conducted once in two weeks in each of the 18 villages. A comprehensive record is maintained for each mother. Routine history and physical examination is followed by simple tests of urine and blood to identify mothers with anemia and other pregnancy-related problems. About 80% of the mothers suffer from anemia here, which can

result in problems for the mother and the baby. All mothers are given iron and folic acid tablets to improve their blood levels of hemoglobin. They are also tested for blood group, HIV and Venereal diseases. The Health worker also gives individual advice on nutrition and hygiene. A system of risk assessment is followed to identify mothers at high risk for closer monitoring and early referral to specialized medical centers. Mothers at risk are also visited by the Health worker at home for monitoring and re-inforcing health messages. Mothers with a new born child are also visited at home by the Health worker, to advice on good child rearing practices and also to liase with the Government Health functionary for immunisation of the child.

A brief analysis of the pregnancies and their outcomes in the past year is enclosed. (App 1) All these services are provided free of charge.

#### **4. Sub -Centre Clinics**

Clinics with doctors consulting are conducted in six villages once a week. They form the first line of referral for the health workers. A small lab for basic tests is available as well as a limited amount of free medication. The clinics are also open in the evenings for wound dressings, performed by the health worker. Apart from a small consultation fee for doctors all the other services are free of cost.

Patients requiring more investigations or specialized treatment are referred to the AV Health center or to specialized hospitals in Pondicherry. Those requiring long term therapy are followed up at home by the health worker, and if needed by the physiotherapist. An associated program helps children with post-polio paralyses and deformities and heart problems to meet the expenses for surgical correction and follow up physiotherapy.

#### **5. Safe water and sanitation program**

About 50% of all patients in the clinics present with water borne diseases and diseases related to poor sanitation and hygiene. Of these, faeco-orally transmitted diseases are prominent. The provision of safe drinking water and ways of proper disposal of human and household waste combined with effective health education are the ways we adopt to address this issue. In five villages elaborate water supply systems with deep bore wells, pumps, distribution pipes and taps have been established and in four other villages, shallow bore-wells with hand pumps. Toilets have been built in ten public schools in the villages to teach and encourage children in the use of toilets. Safe water and sanitary practices are also taught as a part of the child to child program in the schools.(see below)

#### **6. The Health Education Dramas and Videos**

In Kuilapalayam, a village close to the Health Centre, a group of amateur drama artists were encouraged to prepare and stage live dramas focussing on various health issues relevant to this area. From a small beginning in 1995, this troupe has been regularly staging drama – plays twice a month with technical and financial support from the Health Centre. In 1997 an effort was made to record one of these plays on video. Subsequently videos on 12 topics were made using very basic equipment. These videos are being shown in the schools and villages twice a week, transporting a television and a video player with our ambulance. They are also shown in the outpatient waiting area of the Health Centre regularly. One of the videos was recently transmitted over the local cable network. In the past 4-5 years we have been witnessing the growth and increasing influence of television as a medium in this region. Apart from the government owned T.V broad casts, the satellite and local cable networks are expanding rapidly. The number of families owning/watching television is also increasing. This presents a good opportunity for us to utilize this medium for health education.

#### **7. School health Education and Child to Child program**

In sixteen Government public schools Health Education sessions are being conducted by the health workers. These sessions are held in the afternoons, four days a week. The Child to Child techniques are used to teach children about common diseases, their causes, and habits and behavior to prevent these diseases. Children are taught basic physical examination and examine each other for signs of common illnesses. This screening process

supervised by the health workers helps to assess morbidity patterns and to see changes in their health status periodically.

The main focus of this program is Health Education. This is done through games and participatory methods. Low cost games on various topics like diarrhoea, nutrition, hygiene, worm infestation, scabies etc are prepared and used. with emphasis on prevention by the health workers. The children enjoy these sessions where learning is fun.

#### 8. Village health Mapping (see appendix-2)

#### 9. Tuberculosis Project (see appendix-3)

#### **10. Other activities**

Total no. of patients seen by doctors in the clinic (AV Health Centre) not including those seen in 6 sub-centres.	10643
Total no. of children under the program for children with special needs (Physiotherapy and Mental Handicaps)	56
Total no. of wound dressings approx. in AV Health Centre only	19203
Total no. of patients admitted for treatment in the wards in the AV Health Centre.	61
Total no. of ward in patient (post operative care) in AV HC	18
Total no. of surgeries (Cataract) in AVHC	
Total no. of deliveries in the AV Health Centre	17
Total no. of emergencies (wounds, stitches etc.,) in AVHC	423
Total no. of children assisted for surgeries (cardial / orthopaedic correction)	12
Total no. of Adults assisted for surgeries outside AVHC	15
Total no. of X-rays at AVHC	425
Total no. of toilets in the schools built and maintained by AVHC	9
Videos made 1 <sup>st</sup> April '99 to 31 <sup>st</sup> March '2001 by AVHC	12
Total no. of Health Education Dramas staged in the villages by AVHC	24
Total no. of pregnancies attended AN Clinic at AVHC	45
Total no. of antenatal checkups performed for mothers at AVHC	264
Total no. of deliveries at the AVHC	6
Total no. of highrisk/complicated pregnancy and referred mothers at AVHC	1
Total no. of HB test for pregnant women (done free of cost) in AVHC	104
Total no. of HIV tests done for pregnant mothers in all villages at AVHC	185
Total no. of VDRL tests for pregnant mothers in all villages at AVHC (done free of cost)	185
Total no. of tests to identify blood groups of pregnant mother in all villages at AVHC (done free of cost)	175
Total no. of Urine tests done for pregnant mothers at the AVHC (done free of cost)	40

## APPENDIX 1

Analysis of births in 22 villages-1 <sup>st</sup> Apr 2002 to 31 <sup>st</sup> Mar 2003		
Total no.of births	221	
Males	112	50.6%
Females	97	43.8%
Not known	12	5.4%
Place of delivery		
Govt.hosp..pondy	89	40.2%
JIPMER	59	26.7%
Home	20	9.0%
Auroville health centre	17	7.7%
St. Joseph, Cluny Hosp	22	10%
Others	4	2%
Not known	10	4.4%
Type of delivery		
Normal vaginal	198	89.6%
Forceps	1	0.5%
Caesarian Section	11	4.9%
Not known	9	4.7%
Post partum Sterilization	26	11.8%
Primi gravida	80	36.2%
BIRTH WEIGHT		
Less than 2.5 kgs	24	10.9%
Between 2.5-3 kgs	100	45.2%
3 kgs and above	66	29.9%
Not known	31	14.0%

## APPENDIX - 2

### Village health mapping.

#### Summary:

**Aim:** Through the village health mapping, we aim to get an overview of the health problems specific to a village from among the 20 villages in and around Auroville area. This would help us to develop and strengthen with necessary preventative strategies the current on-going village health program.

**Methodology:** With the help of our 29 health workers, a village health map is to be made in each village, taking into account the population distribution, accessibility to health care, water sources and disposal of waste water, income distribution, food sources and housing.

**Uses:** This would serve as an important informative tool for planning health interventions and other educational and communicative activities.

#### Background:

Different people may have different problems, because no two people are the same. The villages around Auroville are also different from each other. Therefore, they have different problems and each village might need a different approach to their specific problems.

For example; in Bommaipalayam is a rather big kuppam, where most people are fishermen. Fishermen face other health problems than for example villagers from Aprampattu, who are mostly farmers.

In addition, the villagers are different too with a few rich landowners and many poor laborers. They also face different health hazards, because one group might have easier access to health care than an other group.

The purpose of village health mapping is to get a view of the village. Only in this way it is possible to know and to understand the health problems and felt needs in a specific group. Once all the problems are listed it can be decided what, when and how to take action in relation to a specific health problem.

The difference between village health mapping and a monthly report is that a village health map contains more data of a village. The village health map is made at one moment in time. It can be repeated after one or two years. Then can be looked after the major changes in a village.

A monthly report contains numbers and subjects that can be counted easily every month, like total population, deaths and births.

### *The contents of village health mapping.*

In a village health map should be described all the subjects in a village that influence and affect health. Not all subjects might directly affect health, but can contribute to development of diseases. For example, a simple bowl with water standing in it will not be directly a health hazard, but can be a breeding place for mosquitoes. A well for example is a more direct health hazard, in the sense that people can fall in.

#### *1. Population.*

The first and maybe the most important step is to count the total population of an area. With the total population of a specific area, one can calculate percentages of people affected by a specific problem. Within the total population a distinction should be made between males and females, children, especially under-fives, and elderly.

#### *2. Access to and use of health care.*

Access to health care is very important to people, but is not always guaranteed. In the villages people usually have four options to choose from. They can either go to a natural healer, a government hospital a private hospital or a NGO, or a health worker, who provides health care. It depends on where the government and private hospitals are situated, whether people have easy access to health care and where they choose to go. The choice in where they go depends also heavily on which type of transport is available.

The use of health care rather depends on believes, values and prejudices people have towards health care. Also it is important to take into account if people are satisfied with the health care, which is provided in the area, at this moment or previously.

It is important to record the access to health care and the use of health care. Besides it is important to investigate the decision taking in using health care. Often there is a delay in reaching the hospital and sometimes valuable time is lost.

#### *3. Water and wastewater.*

Water can be one of the sources in which diseases and can develop. In many villages there is very poor water supply. Water is leaking away in the tubes or the tap cannot be closed. Drainage is even poorer, so water stagnates in the road and creates a nice breeding place for mosquitoes and bacteria's.

It is important to know how water is stored and how the water is drained and look for ways to improve the storage and drainage of water.

#### *4. Income and use of food sources.*

It is important to know the income distribution of people in the villages and how they spend money. In the group of people who are able to work, a differentiation should be made in the different kinds of jobs people have or whether they are unemployed.

To what items they spend money? Can and how people make use of food sources? Is there a market in the village or do people use their own crops? Do people know what is good and healthy food?

### *5. Housing.*

It is also useful to know the housing conditions and the way people live and with how many in a house. A stone house is often more hygienic than a straw hut. The more people live in one house the more likely people in the house get sick. Furthermore, it is important to know, for example, whether a family has their own tap or hand pump, their own toilet rarely.

### *Conclusion.*

When it is known what are the possible health risks in a village, a health team can take preventive actions. If there is an outbreak of any disease the health team can come swiftly into action to control the outbreak.

It is good to understand a village, so we are able to decide strategies according to need. The health team knows what the village is capable of and so unnecessary actions will not be taken.

## APPENDIX - 3

### The Tuberculosis project.

*Aim : To improve surveillance and monitoring activities of the tuberculosis patients and their contacts in the 20 villages in and around Auroville.*

*Methodology: This can be implemented by regular training of health workers and co-ordination at all levels with the Hemmeric center in Raunthakuppam in their case-finding, testing and follow-up with the treatment regimens.*

#### *Prevalence:*

Keeping in mind the global increase in the number of tuberculosis patients, the number of TB-patients is decreasing in this area, where the Auroville Health Centre is working.

Out of thirty health workers, only eleven admit there are TB-patients in their area. One out of those eleven says she has more than three TB-patients.

According to statistics, recorded by Hemmeric Centre in Raunthakuppam, a number of 10 out of 100 persons will have signs and symptoms of TB, in which 2 persons will have active tuberculosis. Since 1 TB-patient can spread TB to 10 to 15 patients, in this area TB-numbers can be higher.

#### *Hemmeric Centre:*

The Hemmeric Centre in Raunthakuppam is an NGO, specializing in treating leprosy and TB. Hemmeric Centre does the sputum test and in case the test is positive the patient receives free treatment from Hemmeric Centre. The village workers of Hemmeric Centre visit the patients regularly to support the patient and give education about TB, food and education.

#### *Village health workers:*

The health workers, appointed by the Auroville Health Centre, live in the villages and know patients who are under treatment and who are complaining about signs and symptoms of TB. Also, education about TB is given by the health workers to the villagers. The health workers receive regular training on TB.

When the health worker suspects a villager of TB, she will report this to the main Health Centre and the Health Centre will inform the Hemmeric Centre after which they will visit the patient and collect sputum to test.

#### *Problems in TB-treatment:*

TB-treatment faces often problems. The treatment is long and takes much energy. People are ashamed to have TB and fear social ostracism

Another problem is irregular treatment. People feel well after starting their treatment and stop their treatment, because they think they are cured.

Many TB-patients start drinking alcohol. The patient feels he is a burden to the family not only because he is sick but also because he is unable to earn his livelihood. So, if the patient dies, the family sometimes is even happy.

The last but not the least important reason why people stop with their treatment is that they have too much trouble with side effects, caused by the medication, often in relation with alcohol.



*DOTS-method:*

In many countries, facing the same above mentioned problems, a DOTS program is started. This means that the patient takes his medication under direct supervision of a nurse or health worker. With this method it is able to increase the number of successful cured patients.

As long the patient is under supervision of a health worker, the health worker can give the patient support and education. The patient can be followed up and when there is a problem, action can be taken swiftly.

Together with Hemmeric Centre, the Health Centre tries to implement the DOTS -method in the villages. The Hemmeric Centre will check for TB and provide the medication. The health workers will give the medication and follow the patient. It is also the duty of the health workers to check people for signs and symptoms of TB and report this to Hemmeric Centre.

**Conclusion :** We thus hope to supplement and strengthen the already existing program from the Hemmeric Center and take effective steps of preventing further spread of the tuberculosis.