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## SHAPE THE FUTURE OF LIFE HEALTHY ENVIRONMENT FOR CHILDREN

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A child's life centers around the home, school and community. These places should be healthy places where they can thrive, protected from diseases, but in reality these are most often the unhealthiest of places. This is primarily responsible for the majority of the deaths and the disease burden among children of the developing world. Every year more than 5 million children die due to diseases linked to the poor conditions of the environments in which they live, learn and play — in other words their homes, schools and their community. Degraded environments are the breeding grounds for germs, worms and disease bearing insects. Diseases such as malaria, schistosomasis, dengue fever and cholera debilitate half a billion children every year.

Many environmental risks to children's health are aggravated by persistent poverty, conflicts, and natural and man made disaster and the prevailing conditions of social inequity. These have detrimental effect on the child's growth and development. The development of the child starts inside the uterus of the mother and adverse environmental hazards that the mother faces is bound to affect the living being within. The human brain grows in size inutero and also during the postnatal period. 75% of the brain growth occurs from birth to the first two years. The factors that influence brain development are good health, proper hygiene, clean environment, proper nutrition, good sanitation facilities, enhanced care and healthy stimulation. In conditions where any of the factors are adverse, there will be a negative impact on the child's behaviour and social development.

In India where a sizeable proportion of our children are born to parents who eke out their living and are barely able to support their children, there the situation further worsens. Persistent poverty with social inequity leads naturally to creation of a huge group of undernourished children susceptible to all kinds of environmental risks. Children have a unique vulnerability. In the process of their growth and development, there are "windows of susceptibility", that is periods when their organs and systems are particularly sensitive to the effect of environmental hazards. It can be seen that the

children living under conditions that are environmentally hazardous very often mature into immuno-compromised adults. The resulting situation therein is that we have children with higher morbidity and greater likelihood of succumbing to the ever increasing onslaught of diseases. The WHO definition of good health, "a state of complete physical, mental and spiritual well being not merely an absence of disease and infirmity" is a distant reality yet to be achieved.

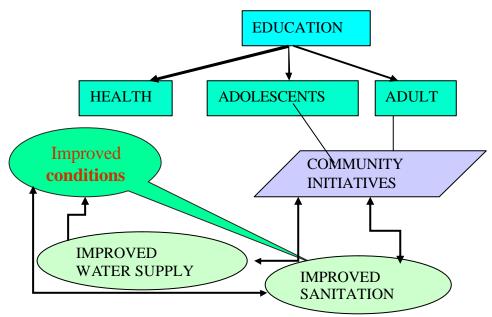
The current Infant Mortality Rate of 95 (per 1000 live births according to NFHS-2) is an indicator that many children born are not able to survive even the first five years of birth. Though IMR is not only due to the poor environmental conditions but a considerable portion of the deaths are due to neonatal sepsis and other diseases caused by the surroundings in which 30% of the population below the poverty line exist and survive. All efforts need to be made to ensure that each and every child born has the Right to survive and enjoy good health in the country. It is one of the fundamental Rights and providing a good environment is definitely one such major step to ensure the provision of these rights.

This paper attempts to draw attention to two micro level initiatives that the Sahishnatha trust had undertaken in their small endeavour to improve the living conditions of the poor children and provide a healthy environment for them. These are micro efforts which we have just made and it is too early to say statistically whether it was a success. Nevertheless the responses from the grassroots have been quite enthusiastic and one wonders whether many other micro initiatives can also be sparked as a result of such sharing.

## The first experiment and initiative: Educational inputs and community mobilization in Sathyanagar slum

Health education and community mobilization for positive action in the Sathyanagar slum (near K.K.nagar) in Chennai is the first initiative that is presented. The diagrammatic representation of how educational inputs synergistically act along with community initiatives for community change is presented below.

FIGURE – 1: Education and better Health

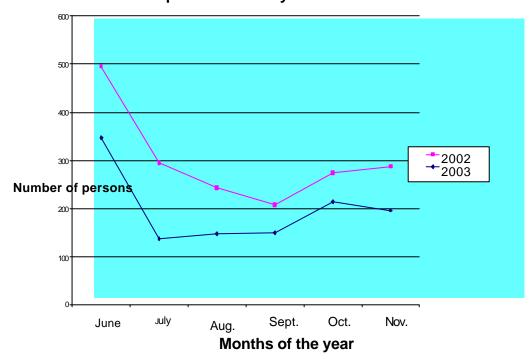


The diagram explains how educational inputs along with other inputs help in the improvement of the conditions of the people residing in Sathyanagar. The provision of educational inputs was a multipronged approach with three target populations – the general public, adolescents and the children where the three main thrust areas were – the general health, the adolescent counseling and the nutrition of children. The general health focused more on the preventive aspects with specific focus on the type of diet to be taken to maintain a healthy body and mind. In Sathy nagar the Balwadi was the centre or focus of all activities. Weekly health check ups were conducted and are still being conducted. The aim of the medical centre is not only to offer medicines for those who need medication but also to provide counseling for those not requiring medication but needing dietary advice or proper nutrition.

Continuous education on preventive aspects of disease prevention has shown that there has been a general decline in the number of patients attending the clinic. Studies elsewhere also have indicated that the health education programmes have a tendency to reduce the cost of care to the patients. The existing studies indicate that there is a potential in the health promotion programmes to improve physical and financial health. It was seen that the primary goal of these programmes was improvement in health habits. It is a wide spread conviction that appropriately designed health promotion programmes directed at reducing demand and need can actually save money. <sup>2</sup>

In addition there has been periodic counseling on nutritional food intake and emphasis is on correcting nutritional deficiencies by taking a properly balanced diet. This is presented in the graph below.

#### Reported Morbidity for 2002-2003



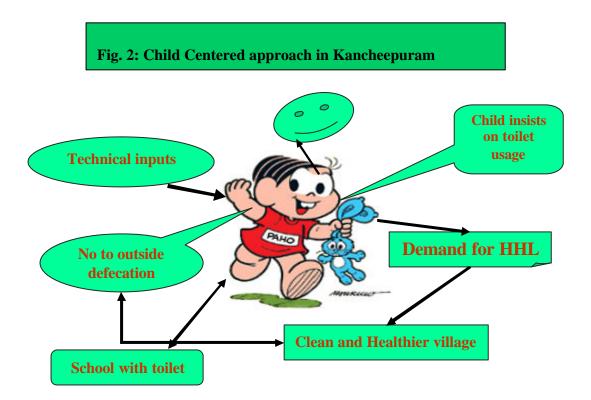
The graph above has been presented for the months of June to November for the two years, 2002 and 2003. It is clearly evident from the graph above that the number of patients attending the clinic and reporting sick have declined in 2003 when compared to the year 2002. The comparison is done for the same months as the climatic conditions would be similar in the same period of the year. This decline in the morbidity can be attributed to the improved living conditions of the residents of the slum. There is irrefutable evidence linking sanitation to health and nutritional status and this is the evidence that has come out also in the study area.

Education with supportive community action has enabled the slum to initiate action for better sanitary conditions like removal of waste and the building of drains and sewerage facilities. The provision of community based garbage collection and disposal has made the slum appearance a laudable one. Safe drinking water has been provided at the doorstep of the slum and this has reduced the household drinking water problem a great deal. A child's water and sanitation environment can be perceived as a series of interdependent zones. Centered on the child, these zones extend to the household, to the community, to the micro watershed and outward to the macro watershed. In order to ensure a child's right to clean surroundings and adequate safe water, it is essential to protect and improve the environment at each level. In Sathyanagar, micro initiatives to tackle these issues of hygiene and sanitation have shown noticeable results. Though early to pronounce it a great success, one can generally hope that this initiative if continued in the same spirit would yield substantial and remarkable results worthy of replication elsewhere.

# THE SECOND INITIATVE: A CHILD CENTERED APPROACH TO BEHAVIOURAL CHANGE IN KANCHEEPURAM DISTRICT

Social attitudes are at the heart of environmental concerns. Much of the hygiene and sanitation is in the mind, rooted in conceptions of purity, pollution and dignity of labour. An individual's attitude and responsibility with respect to waste disposal remains particularly relevant. The ICMR-ICSSR joint report in 1981 emphasised that many health problems of the poor can be reduced to a large extent by health education. They would relate to messages on sanitary disposal of excreta and wastewater, control of vectors, use of protected water, maintenance of good personal hygiene etc. The report emphasises that people can be taught to prevent and manage many debilitating diseases.

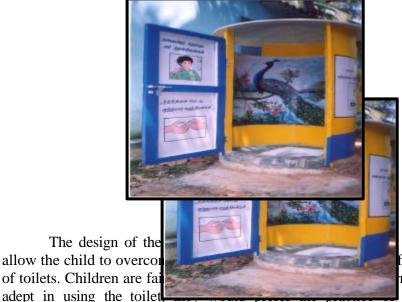
Schools as transmitters of values to the next generation become central, so too do media in its role of shaping what is acceptable social behaviour. Children can be made as change agents or catalysts of change as they have a natural curiosity to learn, an open mind and are much more amenable to new and fresh ideas. The concept of personal hygiene and using household latrines can be promoted using the child as the centre in the whole gamut of behavioural changes that needs to be made at the community level. The building of school/balwadi toilet facilities and teaching the usage of these facilities along with the operation and maintenance work are useful precursors to individual building and use of toilet facilities. The diagrammatic representation is given below.



In this approach, the child starts using the toilet facilities at school. Some are even initiated as early as the Balwadi and as a result of practice they refuse to go for public defecation and insist on the building of household latrines (HHL). This in turn results in a better community environment. Improved sanitation facilities have had greater impact on health when compared to improved water supply. But improvements in water and sanitation were synergistic in producing larger impacts in rural areas. Improvements in the pattern of excreta disposal can bring about a one third reduction in the incidence of diarrhoea. Besides reducing the incidence and severity of diarrhea, the use of sanitary latrines also reduced the incidence of worm infestations. Improvements in hygiene, primarily hand washing were found to have as high an impact as excreta disposal. These inputs are provided to the children and they are periodically monitored.

The improvements in personal hygiene has shown reduced incidence of morbidity. The right to a clean environment is a collective value that needs to be protected collectively by the community, for a contaminated environment is harmful to all even though only a few infringe on this right. Individual action is required and is to be encouraged, but it is community wide adherence to desired behaviour that is essential. Hygiene and sanitation are a matter of behaviour and attitude and it is this, which hast to be changed, using the child as the agent or catalyst of change. The concept of child friendly toilets to encourage children even from the Balwadis to use the facilities has had positive effect on the usage pattern.

FIGURE 3: A CHILD FRIENDLY TOILET



The pictures in the toilet ften associated with usage ns and when they become using the toilet to open

defecation. The Kancheepuram District administration is making all efforts to ensure that all schools and Balwadis are provided with the infrastructure of toilets. The building costs

are shared by the local panchayats, Parents Teachers Association of the schools and by the district administration. The operation and Maintenance costs are however the responsibility of the schools and the school sanitation and the village water and sanitation together decide on the technicalities.

Children in the schools are also taught the seven components of the sanitation package: handling of drinking water, disposal of waste water, disposal of human excreta, disposal of garbage and animal excreta, home sanitation and food hygiene, personal hygiene and village sanitation. Investments for ensuring access to safe drinking water will bring desired health benefits only when complemented by investments in all the seven components of sanitation. Studies indicate that the bulk of the burden of illness and associated costs is accounted for by preventable illness. Even if only 50% of the total burden of the illness is due to preventable diseases, the costs averted would still be enormous. There is thus a prima facie case for advocating health promotion programmes like the one initiated in Kancheepuram.<sup>3</sup>

The programme in Kancheepuram district is designed with this in mind and the training has been provided on how to use the children to spread the message of the seven components by personally imbibing and then disseminating it to their peers and then to the members of their family. The child in this case becomes the catalyst of change. However, the response to this initiative would be much slower as the change that is to be made is behaviour change. Attitude and behaviour change are deep rooted and often cannot be changed in one shot. Persistent reiteration and monitoring only will ensure the use of toilets in the schools by children. Once that starts, and continues, then they can be expected to ask for replication at the household level too. The transition, even if it slow can assure a permanent one. One cannot enforce this type of behaviour change by legislation or by probable punishment. Any change has to be an individual acceptance of the practice for better life style and health. The training under the Total sanitation programme has been initiated only last year and again in this experiment too it is early to speak of concrete evidence. But the reports from the district say that there have been rapid constructions of household toilets with utilization being much higher than it was earlier.

In both these experiments education and concentration on providing a healthy environment to the children has been the primary focus. These two initiatives highlight changes or alterations made to the areas of control in the household and the community to provide a healthy environment for children. Gabriel Mistral of Chile had commented, "We are guilty of many errors and many faults but our worst crime is abandoning our children, neglecting the fountain of life. Many of the things we need could wait, the child cannot. Right now is the time his bones are being formed, his blood being made and his senses are being developed. To him we cannot answer, 'tomorrow'. His name is today". These words are highly pertinent to Indian children too and it is high time many such small initiatives to help the children spring up continuously and consistently so that there is a spill over effect and every child of India would have a bright future in the coming years.

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