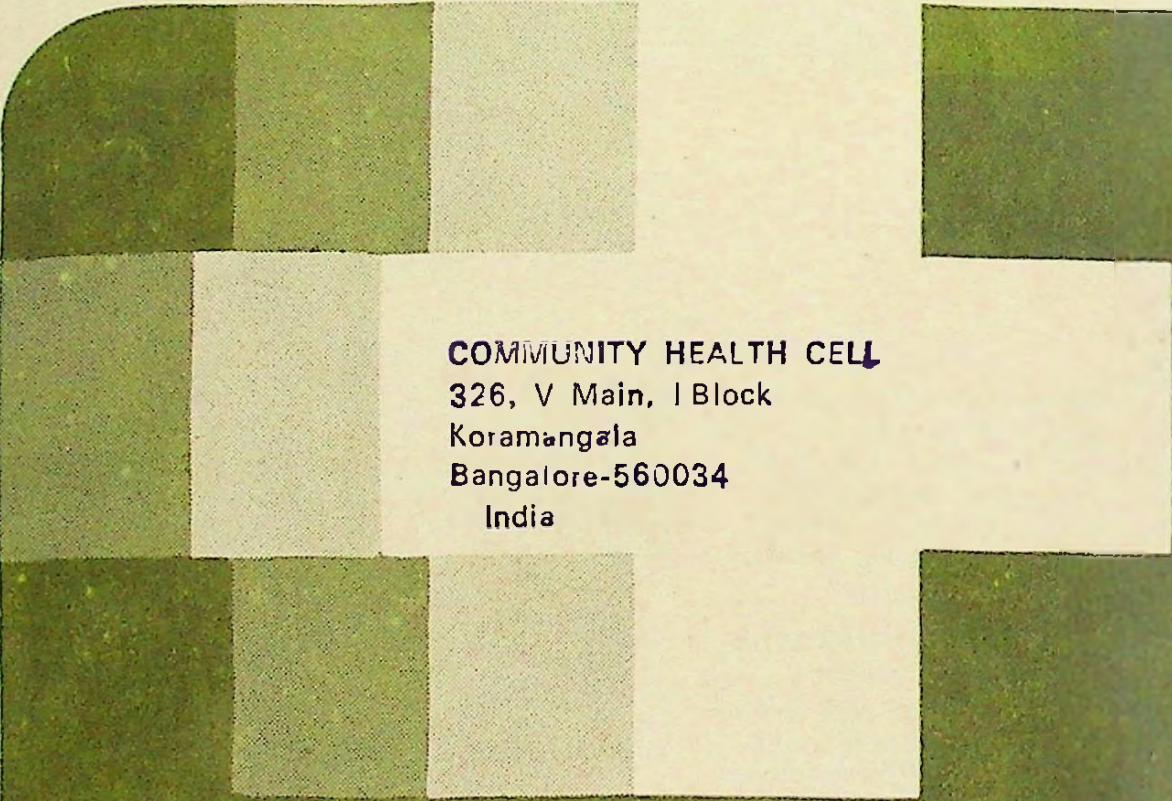


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MEDICAL SERVICE



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EDITORIAL

A big gap

"The constitution of India envisages the establishment of a new social order based on equality, freedom, justice and the dignity of the individual. It aims at the elimination of poverty, ignorant and ill health and directs the State to regard the raising of the level of nutrition and the standard of living of its people and the improvement of public health as among its primary duties, securing the health and strength of workers, men and women, specially ensuring that children are given opportunities and facilities to development in a healthy manner."

These were the opening words of the statement on the new National Health Policy of the Government of India. After thirty three years and more of the promulgation of the constitution of India, many a thing given in it remains still a dream for millions of people in the country. There remains always a big gap between what is envisaged in the constitution and what is in reality.

Our health care delivery system is one of the sectors where this gap is seen conspicuously. With doctor centred and sickness centred allopathic system of medicine enjoying a privileged position in our country at the cost of indigenous system, and the multinational drug companies thriving under this system, the constitutional provision of establishing a healthy society will always remain a dream for millions of poor people particularly in the rural areas, unless some drastic measures are taken by all concerned, in the health care delivery system.

India is one of the biggest democratic countries in the world. But the question to be asked is, does it reflect in our economic system or are we still in a capitalistic system? In the new health policy the government envisages a new social order and a new approach in the health care delivery system. But one may be inclined to ask, will the government at various levels have the courage to implement it. History will tell us that it did not happen in our country in the past, and common sense will tell us that it is not so easy, unless the common people become aware of their rights and responsibilities and start to demand their rights in a responsible way. And then only this gap can be reduced if not completely bridged.

What has been said about the government can also be applicable to various Voluntary Sectors, particularly the Church groups. No doubt the efforts made by the Church in the past are certainly significant in themselves, but they have not helped very much to bridge the gap. Maybe it is time for us, or rather already late, to take the common people into serious consideration particularly the poorest of the poor and the voiceless, lest we miss the boat altogether. After all that is what Christ taught and did, so also the early Christians.

Health Within Reach

Some missing links in development

Can health be promoted independently of other human needs and goals? How do social and economic factors interact in a condition of deprivation? Can service and research be combined in a single thrust? How well do nutritional feeding, health education, primary health care and community work training complement each other? What roles do local groups, government support and external funding play in health for development?

The report that follows is based on impressions of a visit to the Child-in-Need Institute, not far from Calcutta. It sheds some light on answers to questions such as raised above, based on the experience of an engaging experiment.

Change is a law of life even of institutions. And the role and character of CINI seem likely to change with the experience of its own response to children's needs in impoverished communities.

The small but compulsive beginnings of CINI are half its story. An Indian doctor working in the paediatrics outpatient department of a hospital in Behala in outer Calcutta threw up his hands because medicines did not work on malnourished children taken ill. Indeed conventional drugs appeared to do them more harm than good. About this time, an Australian nun teaching at a school in neighbouring Thakurpukur was foxed by the incapacity of malnourished children to absorb or retain their lessons; the effort seemed a waste of time. Something had to be done about this hopeless state of children from poor families. S N Chaudhuri and

Pauline Prince thought something could be done, together. That was in 1974.

A three-day visit to CINI revealed how far afield the original impulse of a nutrition intervention has propelled itself. It has evolved into a complex project of almost daunting dimensions—low-cost supplementary food which mothers could themselves prepare, inexpensive health care including immunization, and treatment of common ailments, plus nutrition and health education. But soon this concept of integrated child care proved simplistic!

For, if mothers were to be trained, the trainers have first to be trained. If children were not to be born malnourished, antenatal care had to be organised, and if they were not to die as infants post-natal attention was as necessary. Serious cases of malnutrition compounded by infection needed intensive care and hospitalisation, and thereafter a period of rehabilitation fully involving the mother.

Looking a little beyond, the mothers had to be enabled to look after their children—maybe through their own independent contribution to the family income. For, an increment to the father's earnings did not always lead to better nourishment for the child. Thus, income generating activities have had to be organised.

For making the mother aware of her productive potential and her rights in society, as well as for imparting to her health and nutrition education, functional literacy was an obvious means. For this, community organisations, like women's groups (mahila

mandals) and youth clubs, have had to be organised and activated.

With every successful step it took, CINI found itself deeper in new responsibilities, natural but challenging, covering the gamut from nutrition and health, through training, to community organisations and income generation. In the process, it found itself setting up a demonstration farm at Samali. When the 1978 floods ravaged the bowl of Moyana in Midnapore district and government doctors were not easily available to do relief work, CINI's help was asked for and gallantly given. But as the floods receded and CINI was withdrawing, the villagers asked it to stay on—and the Moyna project was born. For good measure, demands have been made on and met by CINI. Its director had to rush in 1979 to the relief of children among Kampuchean refugees in Thailand and during 1980-81 to help the very young in famine stricken Uganda and in the refugee camps in Somalia.

As the target population of children enlarged on CINI's horizon, its finances and facilities have had to be built up. It increasingly needed staff and storage space, vehicles and garages, office blocks and residential quarters, in short the paraphernalia of a modern expanding administrative set-up.

Some of this has come up. Presumably more will be established. But who pays the costs, initial and recurring? If CINI is essentially a community-oriented project, operating in an environment of steep poverty, will its steadily growing size and costs not put a distance between itself and the common people? Will they not remain at best recipients rather than partners? Will it succeed in transferring most of its functions to community organisations, as it apparently wants to, and become, in the long term,

basically a training institution? These and other questions arise as precedents pointing the wrong way are not wanting. The most hopeful aspect about CINI is that it is itself conscious of these vexing questions and is striving to find answers consistent with its avowed aims. The following discussion of its present activities seeks to keep the focus on options of the future.

Personnel

CINI does not find it easy to get doctors. The workload is heavy (8 a.m. to 1 p.m. or beyond), the remuneration is not much, the conditions of work are uninviting, and the degree of social commitment demanded is high. Nurses are, it is said, easier to get than doctors. Not all medical men who show initial interest get down to the job. The problem of getting doctors to work in villages remain—though West Bengal has more than an eighth of India's registered doctors. The answer may lie, not in putting all medical graduates compulsorily through the grind, but in locating and motivating the more human among them to set examples. CINI seems to have found a few.

This problem is there also in respect of other professional personnel needed. Dr. Chaudhuri says: "With no job security and low salary scales, it is difficult to attract personnel with leadership roles. It is very hard to implement a service as well as a research programme without professional expertise in the field of behavioural sciences, medicine, bio-statistics, management, and agriculture."

Health and Nutrition

CINI's clinics for under-six children are held every week at five centres—at the Daulatpur headquarters (Thursday), Samali (Monday), Thakurpukur (Saturday), Baruipur (Wednesday) and Behala (Tuesday and

Friday). The Daulatpur and Samali clinics were observed in operation. The attendance was about 700 and 300 respectively. The services rendered consist of treatment of ailments, nutrition supplement, immunization, updating the health cards, and advice to mothers on nutrition and health. A registration fee of Re. 1 is charged on the first visit and thereafter 70 paise per visit. The food packet, if given, costs another 50 paise. At both Daulatpur and Samali, the generality of mothers and children looked famished. Nearly all were ill-clad and barefoot.

Kasimul Khatun's husband died and her child Rija, a year and a half, was too malnourished to stand up. The doctor prescribed, and she was given, carminative mixture, multi vitamins, vitamin B Complex and a packet of CINI Nutrimix to last a week. There were many Rija's. There were some tubercular cases. Surveys of the area put the incidence of this disease at 6-8 per cent of the population, which is disturbingly high.

Clinics

The clinics are thoughtfully organised and the stages a mother and child have to go through have a logical time-conserving sequence. The stock of supplies and the bare facilities appeared adequate.

But not the space. At Daulatpur, the clinic extended beyond a portion of CINI's main building to a long and narrow cowshed where mothers were shown posters on nutrition as they waited in queues for their babies to be weighed in spring balances. The crowding at Samali within a ramshackle bamboo shed set in a waterlogged field was excessive even by village standards. Clinics at more locations, rather than enlarging the existing ones, may be the better solution, though either calls for fresh investment.

There is currently an effort at organizing more clinics in remote villages. This is done by training personnel from youth clubs and village women's groups (mahila mandals) at CINI. Initially CINI staff such as doctors, nurses and paramedical workers help out, but most of the work is now being done by the villagers themselves. CINI subsidises the running costs of these clinics upto 25 to 50 percent. But over the past few months the subsidies have shown a declining trend. In some situations, homeopathy is being integrated with immunization and other services.

Food supplement

CINI Nutrimix is a blend of powdered wheat, lentils and milk. 500 grams yield 1920 calories, 110 gms. of protein plus other nutrients. It is expected to fill the gap in a village child's food intake for seven days. Less than 300 calories a day, it is not a replacement of the usual diet.

CINI's policy in this regard has evolved over the years, and is evolving. At first selected mothers trained in the making of Nutrimix went out to the villages and organised, in a week-long routine — roasting, crushing and distributing, followed by nutrition lessons and home visits. Then in 1978, the Nutrimix programme was woven up with functional literacy classes — the mothers were given raw wheat/dal at village centres where functional literacy classes were held: they brought back the stuff, roasted and crushed, on another class day when the milk powder was added. This did not work out quite well, especially after the functional literacy course ended. Since 1979, Nutrimix is being prepared and packed at CINI headquarters by paid employees, for distribution to the mothers of needy children or clinic days.

This last bit obviously is no example of community involvement or self-reliance.

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More so, when part of the wheat comes from the Catholic Relief Centre in USA and the skimmed milk powder from the European Economic Community. The next phase in CINI's experiments with nutrition supplement could be—and CINI is said to be considering it—to organise and enable mahila mandals to prepare and distribute Nutrimix, training mothers and giving them nutrition education in the process. Here is a case of a sound idea awaiting an equally sound channel of implementation.

There are signs of this beginning to happen. The composition of Nutrimix has lately undergone a change. Milk powder has been dispensed with, without significantly lowering the nutritive value—because milk powder is not locally available except at a high price. Also moong dal has made way for the cheaper Bengal gram. It is admitted that mothers believed Nutrimix was effective because of its milk content. So, the educative process has to be stepped up to convince village mothers that even the new version of Nutrimix was worthwhile as a food supplement, in terms of calories, proteins and the net price. The cereal-pulse mixture is considered adequate to provide the deficit in calories and proteins. This blend, now the sole content of CINI Nutrimix, provides, in 500 grams, 1723 calories and 90 grams of protein.

How does Nutrimix actually reach the child? Nutrimix is fed to the children at least 3-4 times a day by the mothers. In rare instances when the mothers live far away from CINI and cannot come to collect the food packets once a week, Nutrimix is fed once a day. During home visits it is emphasized to the mothers that Nutrimix should be given to the child for whom it has been taken and not shared with other children. But very often in these poverty-stricken families it is shared resulting in the packet being used up within 3 days.

Imported foods

Apart from Nutrimix given to nutritionally needy children turning up at the clinics, CINI distributes blended food, bulgur wheat, soya bean and peanut oil, and skimmed milk powder—mainly because they are made available by "relief organisations" from abroad. Over 2500 under-six children and around 50 pregnant and lactating mothers are currently being given fortnightly rations of this food supplement. At the time of the visit, neither blended food nor oil was actually available; so they had to make do with wheat and milk powder. Irregularity of supplies apart, to the extent the distribution is linked to immunization, it may come to a stop when the schedule for the latter is completed. Efforts are made to associate youth clubs and other local organisations with the distribution programme, to have trained health workers visit homes, to monitor the health and nutritional status of the beneficiaries and to maintain health cards for them. A packet to last 15 days is charged 80 paise. In spite of these procedural refinements aimed at community participation, the programme seems not to have yet outgrown the donor-recipient ethos.

CINI's own perception is clear: Distribution of imported food stuff to malnourished children is fulfilling an immediate need. It is also a tool in delivering health education, getting children together for immunization and provision of primary health care.

Health results

What is the combined effect of nutrition supplement, health care and health education on the malnourished child?

An earlier study, confined to a CINI spot feeding programme showed that, after 45 days' feeding, over 84 percent of children in

2nd grade malnutrition gained 400 grams in weight on an average; and over 91 per cent in the 3rd grade category improved by an average 790 grams.

At present a detailed record is being maintained of changes in nutritional status, measured by weight for age, of all children in CINI's care. The register entries are still being made, but on the showing of data so far filled in, a decisive trend for the better is not evident. For example, the rural villages of Keyatola and Mondalpara show more deteriorations than improvements, while in the urban slum of Italgata results point the other way.

There is a plausible explanation for this: in Keyatola and Mondalpara the children belong to very poor families. They belong to a minority community (Muslims). Keyatola is a rural area where the families are landless and mostly survive as seasonal agricultural labourers, beggars, beedi-rollers, etc. In Mondalpara, a typical Calcutta slum, the parents earn their living as unskilled labour. There is high morbidity in both these areas amongst children. This probably is due to the vicious interaction of malnutrition and infection which prevails in these children due to their poor nutritional state. For many children, the nutritional supplement given by CINI is a major source of food which only partially meets the child's requirement.

Italgata, also a slum, is slightly better off socio-economically. The fathers work as unskilled or semi-skilled labourers, while mothers get regular work as housemaids in the houses of richer Calcutta citizens. This may be one of the reasons for the reverse trend here. When the programme was subsequently withdrawn from Italgata, the weights of these children improved slowly or remained static.

While a clearer picture would emerge when the data for all the areas served by CINI are entered, the point is driven home that social and economic inputs have to be ensured together for either to have effect.

Training

This function is basic to the concept of CINI and even if it is able, in time, to transfer its various other responsibilities to the local communities, its role as a practical trainer may rightly be expected to continue. Indeed, CINI has earned a reputation as a training institution for child health workers, originally for engagement by itself and then for other voluntary organisations.

The training programmes undertaken by CINI have expanded very rapidly. From about ten health workers trained by CINI in 1975, during 1979 and 1980 over 1,500 maternity and child health workers have been trained directly and indirectly by CINI training team. The latest phase is the supervisor's course of anganwadi workers under the countrywide government supported programme of the Integrated Child Development Services (ICDS). This programme is presently trying to qualify itself as a genuine community-based low-cost scheme with demonstrable public accountability. CINI is concurrently conducting both anganwadi and supervisor's courses. This rapid expansion underscores CINI's basic concern over the paucity of trained mother and child health workers in West Bengal.

A training centre which will accommodate upto 100 trainees and provide adequate facilities for training is under construction. This was one of CINI's long-term strategies to improve child care services in eastern India.

Sishu Kalyani's

In 1979, CINI was called upon to train some 1500 Sishu Kalyani's and supervisors for the mother and child care programme, sponsored by the West Bengal government with UNICEF support, in 30 flood ravaged blocks of the state. Lacking facilities as well as time, CINI trained the personnel for two blocks and trainers for the rest. Incidentally the comments heard from diverse quarters on this one-time mother and child care programme were that (a) not all the project officers were in position even after a year, (b) the organising effort was not geared to meet the physical or spending targets, (c) the Shishu Kalyani's (paid Rs. 100/- a month) were reluctant to go out into the field of work, and (d) the future of the programme, once the UNICEF role ended, was uncertain.

All this is not a reflection on CINI. Yet it is of some consequence to it if its training effort does not bear full fruit. The answer to this situation may be to re-found the programme in the village communities, to reduce its dependence on the bureaucracy and to make the Sishu Kalyani's accountable to a community organisation, if not belong to one. The problem however is that there are no community organisations ready; for even the panchayats (local self-government institutions) take after the government in culture, style and impact.

Community action

CINI has two wings, one for community action and the other for community organisation. The two are linked in that the aim of the former—to transfer programmes to local groups—can succeed only if local groups come into being through proper organisation.

The components of this dual effort become clear in the experiences discussed below.

Family help

With the help of money from the Christian Children's Fund, a scheme has been started in 1979. A sponsor provides a fixed monthly amount to a child in need and his or her family. CINI does the selection of deserving candidates in association with panchayats, schools, etc. About half the amount goes direct to the child (clothing, books, school stationery, fortnightly food supplies to prepare nutritious snacks, medical check-up, emergency help to the family and small savings). About a third of the donation goes for community programmes like repair and reconstruction of schools, educational aids to teachers, food supplements at school, health check-up for all school children, brotochari (action songs), mobile library, and so on. The rest of the donated money goes for administrative expenses. Under this scheme some 500 children are directly benefited. As a dispenser of funds, CINI follows democratic procedures, enlisting the participation of teachers and parents.

The strategic aim of the Family Help Project is long-term. It helps to improve the socio-economic status of the family, thereby reducing the need for future food supplementation.

Income generation

As part of the Family Help programme, as well as outside it, CINI has made a small start in income generation in poor families, through initiatives in kitchen gardening, farming and fishery, sewing, weaving, umbrella making, book-binding, mat-making, fish drying, etc. The initial investment is

provided as loan or grant. Materials, equipment and marketing outlets are found wherever possible.

The move is unexceptionable, but the organizational structure for the effort is yet to be built up with roots in the village community.

Mahila mandals and youth clubs

The panchayats in West Bengal have been reactivated, but they seem busy with concerns more of a political-governmental than social-developmental nature. In any case, Daulatpur (CINI haadquarters is located there) seems to be in the grip of illicit liquor brewers who are not on the same wavelength as health promoters. So the search is on, by CINI, for representatives of the community of the poor, for identifying or organising women's forums, who can shoulder the responsibilities for mother and child care and supportive measures at the village level.

A few mahila mandals have been formed. A 10-point guideline has been drawn up to help this process, with the focus on the well-being of the child. The progress appears modest. Pre-schools centres (balwadis) are being run by mahila mandals at fourteen villages. CINI has extended an initial working grant to these women's groups preparatory to their registration with the (government) block development offices as autonomous societies.

CINI's director clarifies: CINI has always regarded itself as a catalyst and a 'facilitator'. Some of CINI's programmes like food distribution are already being handled by youth clubs. A continuous dialogue is going on to increase their participation. Mahila mandals are being organised in CINI's pro-

ject areas. A few of them already run day care centres.

CINI's faith in community based action groups (youth clubs are mahila mandals) is fairly firm.

Functional literacy

This has rightly been identified by CINI as the missing link in village development. Sessions are conducted at three or four places, for 20 mothers each, three times a week. The emphasis is on discussion, the aim is to enhance awareness, the focus is on topics like health, sanitation, adulteration, money-lending, middlemen, etc. Some successful Bangladesh experiments have been adapted to fashion the syllabus.

Development agents

More than anything else, CINI needs young motivated workers for community development. It now has some 17 of whom 9 are men and 8 women. The men help in promoting income generation activities, pumpsets for irrigation, fish-rearing in leased bonds, etc., while the women do health promotion work, take literacy classes, organise mahila mandals and so on.

These development agents are selected from among those suggested by the local community but it cannot be said that the system is working very well. At first the remuneration was food-for-work, then Rs. 100 per month and now Rs. 200. Its adequacy apart, the lack of security of tenure seems to sap their enthusiasm. CINI is looking for a more viable arrangement—for example, a community organisation having its own development agents whom CINI can train.

Finance

CINI's 1980 budget was of the order of Rs. 2.2 million of which Rs. 100,000 came from UNICEF, Rs. 30,000 from the Central Government and Rs. 47,000 from the State Government. The Samali farm yielded Rs. 120,000 (which was slightly less than the current investment in it) and the contributions from the beneficiary community add upto Rs. 50,000. That is to say, about Rs. 1.8 million came as foreign donations, of which nearly Rs. 6,50,000 was being awaited with transparent anxiety.

On the expenditure side, construction, establishment, transport and administration accounted for over Rs. 950,000. That left Rs. 420,000 for health programmes, Rs. 150,000 for training and Rs. 440,000 for family help and community action.

Of this picture, CINI makes no bones:-

Budget outlays for health care (curative) have increased due to high medicine prices. There has also been an increase in living costs, forcing a raise of salaries by 15 per cent. There has been no expansion of curative health services.

This is a constant source of a feeling of insecurity to CINI staff. The Government is also suspicious of voluntary organisations receiving foreign funds. Government grants are difficult to come by when foreign funds are received,

Thus two points emerge: (a) Dependence on foreign funds will reduce when domestic response increases.

(b) CINI's long-term strategy calls for current investment in infrastructure, including the build-up of a professional team.

Lately, government funds have been made available on a liberal scale, for the training programme.

The future

According to its director, CINI's growth 5 years from now is envisaged in the following areas, in an order of priority as below:

Training

For all categories of workers both in the voluntary and governmental sectors desiring to fulfil the international community's call to achieve "Health for all by 2000." CINI is developing innovative training strategies, setting high standards in motivation resulting from the natural empathy that exists for those who are poverty stricken and weak.

Family centered integrated socio-economic programme

Primary health care services adequately supported and integrated with developmental activities benefiting needy families will be the pivotal point of CINI's activities. Community participation needless to say has to be ensured from the beginning. Proper records will be maintained to share this experience with others. The mother and child care services will be used as an entry point. *Identify voluntary action groups* in West Bengal and other parts of India in order to replicate integrated mother and child care services.

Review

CINI started eight years ago as a voluntary agency for promoting child nutrition. While this focus is unchanged, today it has transformed itself into a community develop-

ment organisation, not yet full-fledged, but evolving to reach a viable shape.

A personal discussion with Dr. S.N. Chaudhuri, CINI's founder-director, could not take place, as he had just left for Uganda, but a lengthy interview he gave not long ago yielded certain insights:

- malnutrition cannot be treated with medicines
- the causes of malnutrition are many—lack of purchasing power, non-availability of food, ignorance
- malnutrition in the first two years has an irreversible effect through life
- malnutrition interacts dangerously with infection
- a malnourished child can be helped only via the family and the local community
- the mother should be enabled to provide at home nutritious low cost food for her child.
- motivating the child-health worker and training the mother are crucial tasks.
- functional literacy is important for building a bridge between the development agent and the community, on an equal footing.
- an integrated programme of nutrition, health care, health education and functional literacy cannot be sustained without generating income over which the mother has some control.

These insights are easier commended than translated into practice. CINI has made

a valiant attempt and finds itself in the process expanding rapidly and in diverse directions, supported largely by foreign munificence. Yet it has not been able to show solid positive achievements in terms of health and nutrition, or lay practical emphasis on every aspect of supportive action—in spite of the dedication and team spirit of its members. For example, sanitation and hygiene seem to have received little attention at CINI's hands—for no fault of its. Will not dewormed children soon be getting their worms back?

The stage has probably come when poor village mothers have to be organised into self-reliant groups and CINI's responsibilities transferred to them slowly one by one. The trend of dependence on foreign supplies has to be reversed faster. On the other hand, CINI will have to expand its own capacity for training workers deputed by the village community in all departments of child development. These trainees will have to organise the mahila mandals (which will eventually support and superwise them) and hasten the process of transferring CINI's various non-training functions to these local bodies. With appropriate arrangements worked out, possibly with the Government, for a minimum of basic medical supplies and regular supervision by medical personnel and other technical experts, CINI's emergency ward, nutrition rehabilitation centre and headquarters clinic could be maintained and developed as demonstration service centres. This way CINI may service a larger area than its neighbourhood, maybe the whole of West Bengal and beyond, by training, teaching and demonstrating to the local people that child health and child development are within their reach.

Courtesy : *FUTURE*, UNICEF

In Praise of the DAI

as a promoter of primary health care

In most parts of India, the traditional birth attendant (who is called *dai* in several states) is the source of support when a women is in labour.

With his experience in community health promotion, VIJAY KUMAR explains that the *dai's* present lack of knowledge, equipment and even literacy, should not lead to underestimating her demonstrable potential.

Given a little training, and their country-wide presence, *dais* can, he illustrates, not only bring down the unacceptable rates of infant and maternal deaths but also make the rudiments of primary health care take root in the family where it matters most.

Shanti was expecting her first baby. One day the female health worker from the neighbouring village visited and examined her. She was advised that she must have her delivery at the health centre, because her 'case' was not normal. She was told that having the baby at home might be risky for the baby and for her too. Shanti, of course, listened but the family did not give heed to the advice.

Familiar story

When the pains started, the family called in the *dai*, the traditional birth attendant. Shanti had a long and difficult labour. She managed to survive but she delivered a dead baby. The family consoled her, and itself, by believing that this was God's will and so nothing could have been done about it

anyway. Shanti remained sad and disappointed for she had looked forward to starting her own family.

A disastrous outcome of pregnancy for mother and baby is common in India. This is borne out, year after year, by health statistics which show a high death rate among women during pregnancy or after child birth and among babies in the first month of life. These mortality rates are considerably more than in most developed countries and in several developing countries.

There are many reasons for intercountry differences in infant and maternal mortality rates, but a major risk relates to the fact that in India (as in many developing countries) delivery is usually conducted at home by an untrained traditional birth attendant or a similarly ill-equipped relative.

Dai in the house

The logic behind this practice is not difficult to understand.

- It is more convenient to get the *dai* home than travel to the health centre, the *dai* being easily available day and night.
- Cost is an important consideration for poor people and the *dai* does not cost much. Indeed she accepts compensation for her services in kind, like clothes and foodgrain.
- The *dai* has a strong cultural affinity with the client family: she is known

and local. She identifies herself with the family because of her familiar dress and speech, she performs the rituals and observes the taboos as convention decrees.

- Finally, the *dai* saves the family a good deal of trouble and possible dislocation. She washes the clothes, prepares tea, bathes the baby, massages the mother, disposes of the placenta, cleans the delivery room. In fact she does jobs that a scientific, trained full-time person does not do.

Dais learn their art from elders by acting as apprentices. They are usually unlettered and seldom would they have received any formal training in midwifery. Inevitably, they lack the necessary skills. Many *dais* are without even the basic equipment needed for conducting safe delivery at home. In the caste-ridden professional structure in rural India, birth attendants mostly belong to the "lower" castes and often are traditionally responsible for sweeping and scavenging. And that enhances the chances of introducing infection if simple hygienic needs are neglected.

They are here to say

If we take stock of the overall situation in India, it seems unlikely that the services of *dais* and the practice of delivery at home will be replaced in the measurable future by trained midwives and hospital delivery. Resources are not in sight to provide trained midwives to most villages. The public policy to let *dais* have the essential training, skills and equipment, is therefore realistic. Also, it is a prudent decision to provide a small incentive for the *dai* to supply to the health centre vital information on the cases she has handled. The question remains: Can the *dai* deliver the babies and help bring down

the high rates of infant and maternal deaths? The answer is yes, on two counts:

- these deaths are preventable through simple precautions at the community level; and
- they could be prevented through timely action by the *dai*.

willingness to train

In 1978, our team identified 82 *dais* active in the villages of a development block. We conducted detailed interviews with them to find out their current attitudes and practices relating to care during pregnancy, at the time of birth and in the few weeks following delivery. They were enthusiastic in participating in the interviews and they were willing to learn from us voluntarily. The urgent need for transfer of essential skills prompted us to start a training programme for *dais*. We designed it with a view to imparting some skills, improving their practices and changing their attitudes in a socially valuable direction.

The methods we used were justified by our experience. In consultation with a few perceptive *dais*, the more important topics were selected; and these were in conformity with government recommendations. During the first year, and after, the training was organized at the primary Health Centre once every month. The sessions were organized by a team comprising a doctor, a nurse and staff from the PHC. The learning during the first year was through open sessions of discussion. It took the form of a two-way exchange in which simple scientific knowledge and skills were communicated. The *dais* were encouraged to articulate their current beliefs and practices on each topic in its turn. The material generated has been incorporated in subsequent training programmes. Based on the experience during

the first year, pictorial material was developed to strengthen and smoothen the communication process. Presently, *dais* are receiving ongoing training on a voluntary basis, once every month at three centres. The teaching sessions focus on :

- essential antenatal care;
- nutrition during pregnancy and lactation;
- high-risk pregnancy;
- anaemia in pregnancy and lactation;
- clean delivery and resuscitation of the newborn;
- breast feeding;
- prevention of neonatal tetanus;
- post partum care of the normal newborn;
- sick newborn babies;
- care of low birth-weight babies;
- family planning;
- importance of maintaining records.

Results of training

The *dais* have sustained their enthusiasm for training. They now come neatly dressed, and they observe greater personal hygiene than previously. All of them, even the illiterate, bring notebooks with records of the deliveries they have conducted the preceding month. They maintain them by giving the information to a literate person in their village who notes down the data. Vital information on birth-weight, sex of the baby, outcome of pregnancy and tetanus toxoid immunization is known by this technique. Illiterate *dais* have also recorded information on pictorial cards by making a mark in

front of the picture in the square for that particular month of pregnancy : This again has helped generate useful information on pregnancy. It also reminds the *dai* of her role in providing essential care during pregnancy. This includes identifying individuals 'at risk' and referring them to the health centres. *Dais* can now recognize low birthweight babies. They have learnt to weigh newborn babies and to read the weight range by looking at the colours on the weighing machine. So too, they check the height to know the 'risk' that short-statured mothers run — they use a bamboo painted with different colours below 145 cm, between 145 and 150 cm and above 150 cm. A notable achievement is the adoption by *dais* of a disposable 'dai pack' with a sterile razor blade, cord ties, cotton swabs and antiseptic solution. They use this pack while cutting the umbilical cord. This procedure combined with promotion of tetanus toxoid immunization has led to a dramatic decline in cases of neonatal tetanus, which is a major killer of babies in many parts of India, from 90 per 100,000 births to 10 per 10,000 births in three years.

Increasingly, *dais* recognize and refer 'at risk' cases to the health centre or hospital. There is also a welcome change in their attitude towards upgrading the mother's diet during pregnancy, feeding colostrum (the first milk) to the newborn, avoiding injections to hasten labour pains, and recognizing the importance of providing care throughout the period of pregnancy. The success rate of breastfeeding in our rural area is 95 percent. *Dais* have been alerted against the usual practice of rejecting colostrum and of giving instead prelacteal feeds. While they have understood the importance of colostrum, its acceptance by the community is slow. Not more than 25 percent of the women breastfeed their babies on the day of birth.

The range of their support

The role of the *dai* in the delivery of health care in India is crucial. She is called upon, not only to conduct the delivery, but also to take care of the mother and child for the first few weeks after delivery. This is a decisive period in human life, posing as it does risks which threaten survival and have no parallel in the rest of life.

The constant interaction of our team with *dais* has helped us realise that it is the *dai* who is responsible for resuscitation of the newborn, making him breathe or cry if he fails to do so. Besides cutting the umbilical cord, she provides the cord care necessary to prevent tetanus. It is she who provides warmth to the newborn and prevents babies from dying, as sometimes they do, from exposure to excessive cold or warmth in the atmosphere. She gives the first feed, delay to which may lead to low levels of blood glucose. She encourages breast feeding to avoid the rejection of the first milk which is known to protect the baby against infections. She gives the baby its first bath. She pro-

vides the mother with essential health care. She participates in the functions and celebrations related to child birth and maintains close ties with the family. More than anyone else, she can mark the beginning of bringing to the family the concept and practice of primary health care.

A future for them

It is important that *dais* continue to enjoy the confidence of their village communities. For this they must be encouraged to retain their pre-existing profession and source of income, while equipping themselves through training with the simple skills and tools they need. Health workers and doctors can help strengthen the role of *dais* in two ways: by assisting in their training and equipment and secondly in providing prompt care to the cases referred by them. That way, rather than through cost-intensive ventures of short-lived value, the presently high death rates relating to the pregnant and the newborn, may climb down faster than we have been trained to think.

Courtesy : Future, Unicef

Use your Creative Talent

Maithily Jagannathan

Ask anyone what a hobby is, and he or she will tell you that it is something apart from your regular work, something (they may give here a shrug and a smile) that can be expressed in the Tamil phrase, is "pozhuđu pokku"; a way of passing the time.

The sharp differentiation between work and hobby is rooted in our minds, and the roots go deep down into our social ethics, religion and philosophy. Work is something sacred and noble, it is a duty to one's society, Scriptures, like the Gita and teachings from Buddha to Gandhi have told us so.

But a hobby — well by definition is only *pozhuđu pokku*, and so it may be anything, cooking, babysitting, loafing, any other interesting or uninteresting activities you may be indulging in, between your hours of study or work. In South India and some parts of Eastern India there is formal, traditional sanction for some hobbies for girls, such as singing, playing instruments, classical dancing; in north India, they are kindly permitted to stitch and embroider for all they are worth to show their worth to prospective in-laws. Fine-arts do not get much encouragement anywhere. For boys, the only acceptable hobby, as far as one can make out, is to stand in groups at street-corners, actually they seem to take to it like drakes to the water or politicians to public offices, and perhaps even make it their permanent employment.

Assuming that you have enough time on your hands, and creative ideas in your head,

and take up, say, journalism or flute playing, it remains, by definition a mere pastime, a whim or a fancy, it can be thrown or retrieved like a rubber ball whenever you want; you may use it like a ladder, run up and jump off when you are tired. You can change your hobby, or have ten in a row. It does not matter. No one is surprised, no one disapproves. They are not even amused. They would be even less amused if they know what a loss this is to them and to the country.

It is well known that the period between 16 and 22 is the most creative one in the life of a human being. The world's masterpieces have been written, sung, painted, produced or composed at this stage of life. Later on, you may know more of work harder, but you will never have the immense energy and pure inspiration of these years.

In our country, we spend this invaluable time in studies, which are mostly a slavish imitation of other peoples' ideas. This is supplemented by feeble and insincere attempts at a few subjects like arts or languages sometimes in science and crafts. The terrible national waste affects the national character. People with time on their hands are prone to envy, jealousy, are easily frustrated, have poor stamina, less initiative, become fatalistic. Worst of all, there is a gradual withering away of the inner resources which alone can strengthen and nourish the human spirit.

"Know Thyself" say the Upanishads, and this is exactly what young people should do today. They should experiment and realise

their talent and creative talents, whether it is astronomy or archaeology, sciences, humanities, or arts, put in their best creative effort, plunge into it as the deep-sea diver plunges into the ocean for the perfect and priceless pearls. Like him, you will also find a reward, not necessarily in terms of money, but definitely in a physical and mental strength that will help you even in the long, dark hours which come in the life of every human being.

Who knows ? By your efforts, your hobby may become your work, so that you have both pleasure and profit, or it may be paral-

lel and equal to your work, each complementing the other, adding to the dimensions of your personality. Most of you would not hesitate to take up a job if it seemed to suit you; similarly, if something interests you, don't be afraid to take it up as a hobby. Very often, we do not have the choice of selecting a job in which we can achieve something great, but we can always take up a hobby which develops the creative instincts to the highest level, which releases the store of energy that is within us, which makes us into complete and happy human beings.

— Courtesy : HOME SCIENCE

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Do you Hear Me ?

Ajay Kothari

"When the hair turn grey near the temples, eyes demand reading glasses, your child enters into a college and you miss the mumbling, that is the time, Man refuses to accept the process of ageing."

You must have noticed (or experienced) that between the age of 42 and 45, one feels the need of reading glasses. During the same period, hearing also gets affected in higher frequencies. It is not necessary that glasses and deafness always come together. Persons with cataract may have normal hearing whereas in some the deafness precedes (like a pilot car) much ahead of his visual problems. It is observed that early deafness may be hereditary. This kind of deafness is found earlier in males than in females.

Diabetes Mellitus, prolonged anaemia and high blood cholesterol affect the blood circulation of the inner ear. Similarly, excessive smoking, tobacco intake or alcohol consumption also reduce the inner blood circulation, thereby promoting early deafness.

Is it possible to check the deafness due to ageing ?

To a certain extent — Yes. Control of contributing and aggravating factors mentioned above can postpone and check deafness. Besides, there are certain diseases known to affect the sensori-neural component of hearing, viz: typhoid, infective hepatitis, chicken-pox, mumps and other infectious diseases. Adding B_1 — B_6 — B_{12} in the beginning of the therapy protects the nerves

to a great extent. Dihydrostreptomycin, quinine, salicylates, kanamycin are known for their otoneurotoxicity on prolonged usage, over dosage or in sensitive patients. B_1 B_6 and B_{12} prevents otoneural damage to some extent.

The process of ageing produces gradual degeneration of cochlear hair cells, resulting into hearing loss for higher frequencies. The deafness due to ageing can be divided into three stages.

Stage I

Person finds it difficult to catch certain syllables like V,D,B, Th, or F. Instead of 'BUT' he may hear 'PUT' but, on hearing the entire sentence he will correct himself to catch the proper meaning. The hearing difficulty becomes acute when the conversations are restricted to a word or two, when his reply might flabbergast the questioner or produce laughter.

Stage II

With the advancing age and further degeneration of cochlear hair cells, the individual misses words. Often he has to apologise to speakers asking him to repeat. Gradually, amongst family members, neighbours and relatives, he is nicknamed as 'Duplicator' for his habit of asking to speak twice. He misses the link in cinema, dramas, on radio and T.V. programmes. He elbows his adjoining person for link, gets snubbing from the other viewers for this disturbance, accompanied person also loses the concentration, misses the link and gets annoyed.

'Keep quiet, and just see. I will tell you at the end'. A person loses interest from such programmes and tries to keep away from it. He is now labelled as 'Aurangzeb'.

Stage III

By this time, person has reached the age of retirement. The deafness increases from missing of a word or two to missing of a good bit of a sentence. Relatives and office staff avoid conversations with him. He senses 'selfishness' in their attitude since he is retiring. Inability to grasp the conversation makes him suspicious that others are all the time talking 'something about him'. In fact, he is still able to hear words slowly, distinctly and NOT of high pitch but speakers with the fear of being asked to repeat, speak in a louder pitch, thereby decrease the listening ability of the aged. On the home front, he might have become the grandfather. The frequency loss is such that he cannot hear door bells, alarm clock, telephone bell and the cry of his grandchildren. Because of the hormonal protection and some unexplained reasons, grandmother (his wife) may not have acquired the same degree of deafness. His son, daughter-in-law, daughter and son-in-law, not knowing these factual differences, often comment sarcastically. "Because you have to keep our children, you are faking your deafness".

Persons with conductive deafness speak very softly, but those with sensori neural deafness have a tendency to speak loudly. Greater the loss of hearing more is the loudness of the voice. This is often interpreted as anger or annoyance by the nearer and dearer ones and they try to keep him 'at a distance'. He starts feeling loneliness, depression, inability to ventilate himself, and often his own wife is not prepared to share his thoughts. With ageing, his visual acuity

also reduces due to cataract. He cannot read particularly after evening, nor the relatives permit him to go out alone. He dabbles into unnecessary things. Instructs the servant for cleanliness, cook or daughter-in-law for recipes, son for business, grandchildren for perfectionism and wife for economy. He threatens everybody with his sudden death and paints a gloomy picture for them after his death. There are instances when the aged have changed their will out of sheer suspicion due to deafness. The only place he often visits to ventilate himself and to narrate the selfishness of the family members, is the dispensary of his doctor. It is not unusual to find aged sitting in the dispensary giving 'company' to the patients waiting for their turn. It is here that the family doctor has to understand the psychology of the aged, his relatives, environment, boost up the morale and create the interest in his life, cement the cracked relations and to act like a catalyst.

What should you suggest ?

1. Persons with severe sensori — neural loss should face the listener so that besides hearing he can pick up the words from lip-reading.
2. Speaker with cigarette or pipe between the lips, chewing pan or tobacco, loses the clarity of the speech, making it difficult for the aged to grasp. At least the home members must refrain from these habits while conversing with the aged.
3. Avoid talking loudly. Instead, suggest a slow, clear and low pitched voice.
4. When the person is asked to repeat, it means that he has not heard sufficiently to derive the meaning.

Speaker should try and repeat the sentences, without changing the phraseology or grammar. Explain the process of deafness and the psychology to the aged and their relatives for their mutual benefits.

5. Suggest a hearing aid and its psychological effect on an individual to prevent avoidance of usage.

Aged and the Hearing Aid.

When the person is asked how long he has been having the deafness, he detests the phraseology, but the same sentence when reframed, "How long have you been having difficulty in hearing?" He starts ventilating himself. The stigma is for the word 'deafness'. Similarly I feel that suggestion for a hearing aid should be a matter of tact. In India, unlike West, hearing aids are not accepted on first suggestion, irrespective of the age or sex of the patient. For a diminished vision, individual immediately accepts the glasses, but avoids hearing aid for a fear of being teased. Some on the verge of retirement are afraid of losing their jobs, if they wear the hearing aids. The attitude of the society is perhaps responsible for the stigma attached to the hearing aid.

How often have you heard an interviewer questioning a job seeker on his eye glasses (in a routine job)? but if he sees hearing aid, his first question is on candidate's deafness rather than on his qualifications or eligibility. Hearing aid on parents (particularly mother) or bachelor daughter often comes in the way of daughter's marriage with the fear of hereditary transmission of deafness (?) to the grandchildren. Well! This is our society (in marked contrast to the western world) who accepts the obviously visible weak eyes but not prepared to

accept the 'hidden' weak ears; eye glasses are accepted as a necessary aid but not the hearing aid. Nobody brings the fingers close to the eye glasses for counting but tendency is to raise the voice further seeing a hearing aid, again giving difficulty in hearing to the wearer. The aged develops the tendency to demand immediate attention and instant relief for their ailments. On wearing the eye glasses he starts visualizing clearly, but that is not the case with the hearing aid, which is nothing but an amplifier, magnifying every sound reaching the ear. As a result, even when nobody is speaking, aid wearer gets continuous low frequency humming in the ear. He gets annoyed, shuts off the machine or stops using it, relatives accuse him for wasting their money and he criticizes the doctor for advising 'wrong' machine.

To this extent analogy drawn between eye glasses and hearing aid may be scientifically correct but psycho-socially far from true.

When you travel first time in a crowded train, you will find it difficult to converse with your friend, but to your surprise you will find other commuters converse freely ignoring the extraneous voices. Every hearing aid buyer must wear aid daily and make a habit to converse so that gradually brain 'trains' ear to eliminate extraneous sounds. The brain training may take a month or so.

Notions —

Many feel that all imported things are excellent. The lame belief that they have foreign hearing aids especially when one of their progenies settled abroad, ('Can the son not send a small aid for his aged father?'). The aids available in India are equally good, besides repairing of foreign aid will be

difficult or costly. The other notion that aid itself increases deafness is baseless.

How many aged are partially deaf ?

No statistics are available, but it is presumed that as many aged are with eye glasses, those many aged are with partial deafness. As an individual, friend, relative, member of a social organisation or as a doctor have we helped them anytime ? Instead, society has made best use of such

deafness in provoking laughter in drama, cinema or literature.

When WHO has given the theme 'Add life to years' remember what the aged feels,

"I do not hear, my eyes full of tears :

I look upon 'you', hoping something you can do ! Can we make their lives, years without tears" ?

Courtesy : Bombay Hospital Journal

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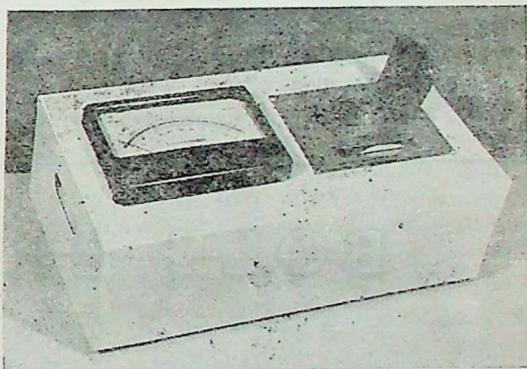


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Community Health Department of CHAI Plans Future Action

The Community Health Department of CHAI had a planning and study session from 7th - 17th April 1983 at St. John's Medical College, Bangalore. The session was attended by the present and would be staff of the Community Health Department of CHAI together with a few representatives from other organisations. Resource persons from various organisations based in Bangalore came and shared their views and experiences in the field of Community Health and allied fields. The session was organised with the help of the department of Community medicine of St. John's Medical College, Bangalore, particularly that of Dr. Ravi and Thelma Narayan.

It was encouraging for the team when Dr. G. M. Mascarenhas, the Dean of the College, extended a hearty welcome to the team when we began the session on 7th morning in an informal way. He also promised all help from the part of the college in the future for promoting Community Health Programme.

The participants spent quite some time in sharing their own experiences in the field and also in understanding the very concept of Community Health in its entirety based on the teachings of the Church and keeping in line with the new health policy of the Government. The input that came, in this regard, from the resource persons by way of sharing their views and experiences was of great importance. At the end of the session

it was felt that the team needs an indepth study of the various documents pertaining to this new concept of health. Hence it was decided that the team members would spend the time till end of June visiting different projects and studying the various documents. It was also proposed to have a follow up of this session in the second half of June 1983. This was felt necessary so that whoever is responsible for promoting such activities can have a clearcut understanding of the concept of Community Health in its various aspects.

In order to promote this new thrust, taken by CHAI, through our member institutions, it was proposed to expand the central team of Community Health Department by including a few more people with competence and field experience. Efforts are on to realise this.

At the end of the 10-day long session of sharing, reflection and discussion, the following statement was brought out by the participants which gives the philosophy, aims and objectives which would guide the team in implementing the Community Health Programme :

"In the light of the WHO call "Health for all by 2000 AD", the revised national health policy of the Government, and in line with the document by Pontifical Council Cor Unum on "the new orientation of health services with respect to primary health care",

the teaching of the Church and of the recent Popes, and the statements of the CBCI from time to time, as well as in the light of this consultation, the working team of CHD of CHAI concludes that :

1. Health is the total well-being of individuals, families and communities as a whole and not merely the absence of sickness. This demands an environment in which the basic needs are fulfilled, social well-being is ensured and psychological as well as spiritual needs are met.
2. The concept of Community Health here should be understood as a process of enabling people to exercise collectively their responsibilities to maintain their health and to demand health as their right. Thus it is beyond mere distribution of medicines, prevention of sickness, and income generating programmes.
3. In a country like India, so vast and varied, where 80% of its population live in the rural areas and about 90% of the country's health care system caters to the needs of the urban minority, a new orientation and re-thinking of the whole health care system is the need of the hour.
4. The present medical system with undue emphasis on curative aspect tends mainly to be a profit-oriented business, and it concentrates on selling 'health' to the people, and is hardly based on the real needs of the vast majority of the people in the country. The root causes of the illness lie deep in social evils and imbalances, to which the real answer is a political one, understood as a process through which people are

made aware of the real needs, rights and responsibilities, available resources in and around them, and get themselves organised for appropriate actions. Only through this process can health become a reality to vast majority of the Indian masses.

In the light of the above conclusions, we identified the exploited and the unorganised masses, particularly in rural areas as our target group. We intend to reach this group through the existing health institutions in the country, especially through the member institutions of CHAI and other individuals and groups engaged in the field of people-oriented programme. In this process, possibilities of collaboration with other voluntary organisations which upholds similar philosophy and objectives will be explored to the maximum.

We also felt that the Church in India should take a clearer stand on our involvement in the health field based on the documents mentioned and this stand should be made known to all our health care institutions and others concerned. In order to facilitate this we also felt that the study of the documents dealing with this new concept of health should form an integral part of the curriculum in seminaries and religious formation houses. The same, we felt, holds good for all our educational institutions.

The team will study this statement further with the help of resource persons during the follow-up meeting planned for June 1983. □

STAMPS RELEASED ON ST. FRANCIS OF ASSISI

A one-Rupee denomination stamp on St. Francis of Assisi commemorating his

800 birth anniversary was released in a simple but impressive ceremony held at 9.00 a.m. on Monday, April 4th, here at CBCI Centre, New Delhi, by Archbishop Angelo Fernandes of Delhi in the presence of Shri V.N. Gadgil, Union Minister for Communications, and many other State and Ecclesiastical dignitaries. Fr. Saturnino Dias, the newly-appointed Dy. Secretary General of the CBCI accorded a warm welcome to the chief guests and others. While releasing the stamp Archbishop Angelo Fernandes in his message emphasized the relevance of the life and inspirations of St. Francis of Assisi to the present-day world particularly his message of Peace.

The chief Guest Shri V.N. Gadgil, Hon. Minister for Communications, gave a short but very impressive reflection on the life of St. Francis of Assisi in the following words :

"I am happy to be associated with this function organised by the Catholic Bishops Conference of India on the occasion of the release of the stamp of St. Francis of Assisi. The issue has been made possible largely due to an interest taken by our Prime Minister, Indira Gandhi. St. Francis was a remarkable person—a Saint in the tradition of Indian Rishis.

Born of a cloth merchant in Italy, very little is known about his early life. In 1202 he took part in a war between Assisi and Perugia and was held a prisoner and on his release fell seriously ill. After his recovery in 1205 at Spoleto he had a vision that bade his return to Assisi. On his return he gave himself to solitude and prayer so that he might know the will of God for him.

A number of episodes very similar to the episodes in the life of Lord Budha - make up what is called his conversion - the vision of Christ while he prayed in a grotto near

Assisi, an experience of poverty during a pilgrimage to Rome, where in rags he mingled with the beggars and begged alms; an incident in which he who had always felt a deep repugnance for lepers not only gave alms to a leper but also kissed his hands. One day at the ruined chapel outside the gate of Assisi he heard the crucifix above the altar command him to go back. He hurried home, gathered much of the cloth in his father's shop and rode off to a nearby town where he sold both cloth and horse. Angered, his father kept him at home - and later brought him first before the civil authorities and then before the Bishop. Before accusations could be made, Francis without a word removed his garments even down to his breeches and restored them to his father. Then he said, "Until now I have called you my father on earth. But hence forth I can truly say : Our Father who art in Heaven". The astonished Bishop gave him a cloak and Francis went off to the woods beyond the city.

On February 24, 1208 he listened at a mass to the Gospel account of the mission of Christ to the Apostles, "Take no gold, nor silver, nor money in your belts, no bag, nor the tunics nor sandals nor a staff; for the labourer deserves his food, and whatever village you enter, find out who is worthy in it and stay with him until you depart". (Mathew 10.9.11) Although a layman, he began to preach immediately thereafter. His fraternal charity, total poverty and magnetic personality drew thousands of followers to his side. Soon thereafter he became the leader of the religious movements of the early 13th century that were attempting to reform the medieval church, morally scared by its struggles with civil rulers.

Love of poverty is basic to his spirit and his contemporaries wrote about his poverty

as his "lady" in the allegorical *Sacrum commercium* or as his "bride" in the fresco of Giotto in the lower church of S. Francesco at Assisi. It was not, however, mere external poverty he sought, but the total denial of self. He considered all nature as the mirror of God. He called all creatures his "brothers" and "sisters" and in his "Canticle of the Creatures" he referred to "Brother Sun" or the "Sister Moon", and even "Sister Death".

In the summer of 1224 he went to the Mountain retreat of Verna to prepare for a 40-day fast. As he prayed one morning he beheld a figure coming towards him from the height of heaven. St. Bonaventure, an important thinker of the 13th Century wrote : "As it stood above him, he says that it was a man and yet a Seraph with six wings . . . The face was beautiful beyond all earthly beauty, and it smiled gently upon Francis. Conflicting emotions filled his heart, for though the vision brought great joy, the sight of the suffering and crucified figure stirred him to deepest sorrow. Pondering what this vision might mean, he finally understood that by God's providence he would be made like to the crucified Christ not by a bodily martyrdom but by conformity in mind and heart".

His whole life is thus the life dedicated to the service of humanity, a service based on denial of all worldly pleasures - a tradition which obtains in India from time immemorial. I am sure Mahatma Gandhi and Vinobaji had Saints like Saint Francis in their minds when they preached the concept of "Asangraha".

The last two years of his life were very painful. He became blind. In the words of H.F.B. Mackay "As Sunset on October 3rd drew near, Francis sang his last song. It was the 142nd Psalm, "I cried unto the

Lord with my voice". Loud and clear rang out the last verse. "Bring my soul out of prison", sang Francis, "that I may give thanks unto thy name, which thing if thou wilt grant me, then shall the righteous resort unto my company". Then there was a long silence, while within and round the little hut the brothers knelt.

The sun sank to the horizon and the dark of the October evening fell upon the forest lands of Umbria. Silence lay upon the little darkened hut.

Then all the larks of the forest rose and soared. Stretching their wings and tuning their voices they gathered in a company above St. Mary of the Angels, and rose into the evening sky a circling crown of song.

In the heart of the circle the veil of the temple of nature was rent for Francis Bernardone and he entered into the joy of his Lord.

As Father Cuthbert wrote, "He was not of the world, and yet the world loved and, in its blundering fashion, worshipped him. It was so in his life; it was even so in his death".

May I paraphrase his message in my own way : "To die for love is a great adventure. To live for love is a far greater adventure and that means bringing love meet love every day in the common things of life".

I am glad that my Ministry is today issuing a stamp to commemorate such a unique personality. I earnestly hope this stamp will travel all over the world and help in strengthening the spirit of peace and service for which he devoted his entire life."

The way he has paraphrased the message of St. Francis is certainly thought-provoking and challenging for all of us today.

The function came to an end with a vote of thanks by Msgr. Hippolitus Kunnumkal OFM. Cap., Prefect Apostolic of Jammu and Kashmir. □

REPORT OF THE JIVODAYA HOSPITAL, ASHOK VIHAR, NEW DELHI FOR THE YEARS 1980-83

Sisters of the Destitute have been engaged in the medical service Delhi for the last 16 years. They first started with the Holy Angels Nursing Home on 2nd October, 1966, in a rented building in Kailash Colony. With the cooperation of the Government, the Archbishop and other benefactors the construction of this Hospital was made possible. Several agencies and individuals have helped in this noble adventure. On 19th March, 1980, Jivodaya Hospital was inaugurated, and it started functioning in a small way initially, with the only two Departments of Obstetrics and Gynae, and Paediatrics. In course of time as the needs of patients became more demanding, the Departments of Surgery, Medicine, ENT, Ophthalmology and Orthopaedic were started.

Administration and the staff

Jivodaya Hospital has 12 specialised doctors, two junior doctors, 6 sister nurses and 13 lay nurses. There are also 5 other sisters who look after the administration of the hospital. In addition to this, it has one sister who is in charge of the clinical laboratory, two assistant technicians and 17 nursing assistants.

Facilities in the Hospital

In order to provide adequate medical treatment for patients efforts are being made to make the Hospital well-equipped and self-sufficient. The hospital has the provision of accommodating 50 inpatients. It also has a well-equipped operation theatre,

neonatal unit and a clinical laboratory. The radiology unit which has been recently added will be put to use shortly.

Patients and treatment

The total number of patients including inpatients and outpatients treated in the hospital in the year 1980 came to 5511. This number increased to 12,241 in 1981 and to 24,276 in the year 1982.

The Hospital is forced to depend on the medical fees collected from the patients for the hospital expenditure. However, in order to help the deserving poor, a special clinic has been opened which functions on all week days. These poor patients are mostly from Jahangirpuri, J.J. Colony, Wazirpur Village and surrounding areas. Although the treatment is the same as that given to the paying patients, it is subsidised in favour of these poor patients. Under this clinic 2450 poor patients were treated in 1980 and this number rose to 8980 in the year 1982.

Jivodaya Extension Programme

Goaded by the keen desire of service of the poorest and under-privileged, the Sisters started a dispensary in 1978 at Jahangirpuri, a resettlement colony, about 8 km. from the Jivodaya Hospital. Jehangirpuri is inhabited mostly by the poor, afflicted with poverty, ill-health and unemployment. The 1978 floods had heightened the misery of the people in this area. With the starting of the Jivodaya Hospital, medical help to these people has become much more organised and a boon to them. Health Camps and Health Care Programmes have been conducted. The trained community health workers are the liaison between the community and the dispensary, which is the nucleus of the work of the Sisters in Jahangirpuri, covering 15,000 families. □

DAMIEN SOCIAL WELFARE CENTRE— BRIEF REPORT OF 1982

Total number of registered cases of the Centre is 19120.

3224 voluntary cases were reported in 1981 and 3588 voluntary cases reported in 1982.

More emphasis is given for Health Education at the Centre's clinics presently.

Laudable achievements and remarkable progress have been reported briefly under the following headings:-

- A) *Hospital Services*: Nirmala, BMP, Bhowrah — 200 beds for leprosy patients.

Admissions— 1485, surgery — 166, physiotherapy — 879, MCR shoes for 961, laboratory—8303 skin smears and 1168 general tests.

- B) *Leprosy Control Project*:

68,000 people were examined and 1156 cases detected.

Newly registered cases in 1982:

Lepromatous cases	— 398
Non-infectious cases	— 2263
Borderline cases	— 1474

Total	4135

- C) *Leprosy Workers' Training Centre*

D) Rehabilitation Centre

E) Welfare Department

F) De Britto Hostel, Gomoh

G) Nirmala Hostel, Govindpur

H) Other Activities

1) *Health Education for Communities*

Health Education Department, Damien Social Welfare Centre, approached Health Education with a different strategy in the year 1982 to root out leprosy in the district of Dhanbad. The programmes varied depending on the type of population, i.e. rural, urban and also the capacity of people to grasp the message. A campaign was launched in January '82 to educate the people about leprosy. More than 50 institutions collaborated with the Health Education campaign. The Health Education efforts gained momentum as the Centre employed a full-time Health Education Officer, Health Educator and four Assistants.

Anti Leprosy Year 1982 — activities:

1. An article giving the facts of the disease, the importance of regular treatment and giving details where treatment was available in the district, was published in a local daily having a circulation of 35,000 copies.
2. 78,000 pamphlets were distributed at bus terminals, railway stations, places of worship on important feast days, the court, office compounds and bazars.
3. Five advertisements on the facts of leprosy were published in a local daily newspaper.
4. A public meeting was arranged in February under the Chairmanship of the Deputy Commissioner at Municipality grounds.
5. 6500 people attended Leprosy Exhibitions held at 5 localities.
6. On 243 days small exhibits and mike announcements from an eye-catching rickshaw were done at 396 locations.

7. Seven leprosy stalls were held in the year with the assistance of voluntary and religious agencies.
8. Anti-leprosy slides were screened at 17 cinema halls on a regular basis with the assistance from the Deputy Commissioner.
9. 26 slide shows were held for an audience of 4680.
10. 68 film shows on leprosy were held for an audience of 19,100
11. At 5 places roadside display on leprosy was held and 1500 people took benefit of it.
12. Two anti-leprosy hoarding boards were fixed at two important places in the area.
13. Eight puppet shows were attended by 2300 people.
14. 3610 wall posters on leprosy were pasted on walls.
15. 25 orientation lectures on leprosy were given to doctors and nurses of seven big hospitals, four big government institutions and different groups of teachers and social workers. This is besides the many schools covered by the PMWs in the field.
16. 73 group discussions were held in villages.
17. There were group discussions for 8 Professional groups.
18. Students participated in an Essay Competition and in a campaign to make known the facts of leprosy.
19. 132 leprosy cases were detected during H.E. work. ☐

THE FIRST INTERNATIONAL CONGRESS- FOR THE FAMILY OF ASIA AND AUSTRALIA JANUARY 26TH FEBRUARY 1ST, 1983, MADRAS

The first International Congress for the Family of Asia and Australia was held at Madras from 26th January, 1983, to 1st February, 1983. The Inaugural Session on 26th evening highlighted the profound human values that can be promoted through the family.

H.E. Cardinal James Robert Knox gave the inaugural address referring to Familiar Consortio as the 'Magna Charta' for anyone involved in the apostolate of the family; Dr. John J. Billings gave the keynote address cautioning the pro-contraceptionists about a drastic and acute reduction in population; and Mrs. Margaret Alva gave the presidential address which was one of challenge as to the role of each individual and each Christian in regard to his/her responsibility in society and as a member of the country.

The deliberations of the Congress were grouped under the following sub topics:-

- 27th January : a) The change and challenge of the family in the 80's
b) The fracturing family
c) The world round up.
- 28th January : Challenge of the family in the Church.
- 29th January : Family Pastoral Ministry
- 30th January : The latest research findings in fertility regulations.
- 31st January : The family and natural family planning programme.
- 1st February : Facing the future. The satellite programmes of the Congress.

24 countries— India, Bangladesh, Singapore, Malaysia, Sri Lanka, Thailand, Korea, Pakistan, Ghana, U.S.A., Tanzania, Philippines, Australia, Indonesia, Papua — New Guinea, Italy, England, French Polynesia, Burma, Guatemala, Mexico, Kenya, Fiji, Poland — participating in the Congress was a historic event. The evaluation highlighted

the high quality of this Congress, as also the spirit and atmosphere of the warmth, love and cordiality that prevailed among the participants.

Mrs. Hima Balachandran of India gave her evaluation as "Impressed by the organisation and spiritual values and attitudes it focussed on.

Payment of Membership Fees

Though we have made a record in the payment of membership fee this year, there are several members who have still to pay the membership fee for 1983 ; there are a few who have also to pay previous dues. As payment of membership fee is a major criterion for the success of any organisation, I request all those who have not paid the fees to do so before the end of June, 1983.

May I also take this opportunity to appeal to all the members to make it a point to pay their membership fee in the month of January itself of each year without waiting for any reminder. This will save a lot of money, time and energy for our organisation which could be used for other purposes.

Executive Director

Process Pulses for Better Nutrition

Grain legumes, popularly known as pulses, are the most common food articles in the diets of all the segments of the population. Bengal gram (Chana), red gram (Tuvar or arhar), green gram (Mung) and black gram (Urd or Masa), are the four pulses which are important both in terms of production and consumption. Legumes are rich in protein quality; hence their role in diets based on cereals and millets is well recognised. They are good sources of minerals and vitamins also. Two major problems which limit the use of legumes are (1) the presence of certain antinutritional factors in them and (2) the long periods of time needed for cooking. Before they are consumed, pulses are generally subjected to simple processes like dehulling as dhal, germination, roasting, fermentation, cooking, etc. Most of these household practices, though primarily developed to satisfy the palate of the consumer, confer certain nutritional advantages and help improve the food value of these grains.

Use of pulses after decortication to dhal is a most common household practice. The outer seed coat of the pulse grain which constitutes about 15 per cent of grain weight, is composed of complex polysaccharides, and certain pigments. Except perhaps as roughage, the seed coat has very little nutritional value and the nutrient composition of the dhal is not different from that of the whole grain. Recent studies have shown that the polyphenolic compounds such as tannins which interfere in the absorption of iron, are mostly located in the seed coat of the pulses. Bioavailability of iron in pulses (as judged by the ionisable iron content) was therefore found to be about 2-4 fold higher in the dhal when compared with

whole grain in case of bengal gram, red gram, green gram and kidney bean.

Soaking in water overnight and then germination or sprouting of the grains is yet another very common household practice for processing of pulses. During germination it is well known that several enzyme systems become active and bring about profound changes in the nutritive value of pulses. Vitamin C, which is practically absent in the dry grains of the pulses, appears in significant amounts after germination; similarly folic acid and other B-group of vitamins show 2-3 fold higher values in germinated grains than in raw pulses. Antinutritional factors such as phytates and tannins which adversely affect the bioavailability of bivalent ions are broken down on germination. By just soaking in water overnight, about 50 per cent of tannin is lost from bengal gram and red gram; while in green gram and black gram the loss was about 25 per cent. Germination for 24-48 hours, further reduced tannin content by 10-25 per cent. Phytate which constituted over 60 per cent of the total phosphorus in the raw grains of bengal gram, was only 44 per cent in the 48-hour germinated grains with no change in total phosphorus. The beneficial effect of these changes is seen in the two-fold improvement in the bioavailability of iron from pulses after germination.

Germination also modifies the starch component of the grain and improves its digestibility. It is well known that consumption of pulses leads to flatulence. Inclusion of legumes in the diet at levels which provide 20-25 per cent of total calories results in manifold rise in the amount of gas produced in the intestines. Bengal

gram is more gas-forming than other pulses. One of the factors associated with this flatulence phenomenon is the high amounts of certain oligosaccharides of the raffinose family present in these two grains. These sugars, due to absence of suitable digestive enzymes in humans, are not absorbed. But in the large intestine they are acted upon by the microflora, resulting in gas production. Studies on commonly consumed pulses namely bengal gram, green gram, black gram and red gram have indicated that there was a continuous fall in the oligosugar concentration with increasing period of germination. In grains germinated for 24 hours, the oligo-sugar concentration was 50 per cent of the initial value. By 48-72 hours it was below 25-15 per cent. This suggested that sprouted pulses probably are less flatulent producing.

Another conventional method of processing pulses, particularly in case of bengal gram and green gram, is roasting and puffing. This results in imparting a desirable flavour and taste. It also destroys the antinutrients which are thermolabile. Paste thickness of the flour of roasted pulses is reduced significantly and the calorie density is higher. This is an important factor in child feeding where bulk is of concern.

The commonest process of preparing pulses for consumption at the household level is to cook them by boiling in water. This obviously inactivates most of the heat labile antinutritional factors present in the pulses. Some of the minerals are leached out in to the medium of cooking. In the case of red gram, it was observed that the loss of riboflavin on cooking varied from 5-25 per

cent depending upon the variety. Recent studies on tannin content of the pulses have shown that over 80 per cent of this antinutritional factor is lost from the grain after cooking. It was also observed that in the case of red gram dhal as well as rice, bio-availability of iron in terms of ionisable iron content is not affected by cooking.

Fermented food products are important components of the diets in several parts of the world. In many cases, the final product makes an important contribution to the diet as a source of protein, calories and vitamins. In India, idli, dosa, dhokla, vada, are most common preparations in which pulses are used. As in the case of germination, nutritive value of the ingredients is also modified by the process of fermentation. Vitamin content particularly thiamin, riboflavin and niacin is shown to enhance on fermentation. Breakdown of phytate and inactivation of trypsin inhibitor are also noted. Studies on bioavailability of iron indicated that fermentation of rice and pulse mix, used for idli preparation did not alter the ionisable iron content, when compared with unfermented mix.

Legumes will continue to occupy an important place in the diets of large segments of our population. Their therapeutic value in the treatment of severe cases of protein calorie malnutrition is important in the face of poor availability of other protective foods. Significance of different methods of processing at home level for consumption of various pulses in the context of nutrition is of great relevance.

—Courtesy HOME SCIENCE