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TOTAL HEALTH CARE PROJECT : 1974 - 75

R E P O R T

on

FAMILY HEALTH PROBLEMS

in a rural society

[Sonarpur P.S., 24-Parganas district, West Bengal]

_____ GUIDE REPORT _____

(April 1976)

TOTAL HEALTH CARE PROJECT : 1974-75

REPORT ON

FAMILY HEALTH PROBLEMS IN A RURAL SOCIETY OF
WEST BENGAL

1. Introduction :

On national level social welfare planning measures are currently manifold and with respect to the same serious attention is being laid more and more increasingly upon various health problems of the people at large. Though search for reliable information about national health is continuing from long past, (particularly since the publication of the momentous Report of Bhole Committee in 1946), a new approach has lately been emphasised to tackle health problems of the country. This approach urges that the family as a whole should be the focus of attention in the matter of health and family welfare services and moreover, health activities must also adopt a family rather than an individual approach.

Importance of this approach is, of course, not unknown to those who are professionally concerned with the conditions and processes of both health and disease. That 'family' has to be taken as 'functional unit' in making the facts about the disease more intelligible and its course more manageable has already been strongly pointed out in the international circles of medical profession. As a matter of fact, it has been claimed that better progress in health field depends upon 'clearer conceptions of the identifiable

functional units' which would provide greater knowledge and better control. Since the 'family' happens to be the smallest but certainly not the least important social unit for coping with disease, one cannot miss to concentrate on family - based health information in understanding the nature and magnitude of health problems in general.

There is now emerging within the medical profession a more systematic concern for the personal and social factors in illness and eventually, the need for exploration of some sociological variables in health and disease is becoming urgent. Study of Family -based incidences of disease by social group (community) is expected to provide insights into health problems of the stratified rural society at large. With this objective in view the present report has been written.

Precisely speaking, the report attempts to reveal the following issues:

(a) the nature and magnitude of incidences of disease among the rural as well as semi-urban families residing in a rural society,

(b) the differential incidences of family morbidity among different communities (social groups) of a rural society in contrast to those of a semi-urban society,

(c) the dominant disease-groups which create widely diffused health problems on family level in rural or semi-urban society,

(d) the Family Incidence Rates of the most frequently reported diseases among different rural as well as semi-urban communities (social groups).

2. Material and Method^s

A comprehensive survey on "Basic Health Services" was carried out in 1974-75 in eleven villages and two semi-urban areas (sections of Rajpur municipal town) of Sonarpur P.S. 24-Parganas, West Bengal.

Selection of villages and semi-urban areas was not at random. Rather, selection of the survey area was made with certain purposes. As A.D. Charitable Hospital which is located at Elachi, (a semi-urban section of municipal town of Rajpur,) has been catering medical and hospital needs of the local people since mid -1960 it was felt that a household to household enquiry should be attempted to know the impact area of the Hospital. To what extent the local inhabitants had taken health services from A.D. Hospital? Who were the people who had taken relatively more medical help from the Hospital? What was the morbidity condition in the locale of the Hospital? What forms of treatment the local people lately followed usually to cure diseases? To what level the rural people were conscious to go for modern medicines in tackling health hazards? These are some of the thoughts which prompted the household enquiry in question. Satisfactory evidences were hardly found to meet the initial queries and eventually a pilot but exploratory study to probe into the queries was brought into a resolution. But for such exploratory study eleven villages which are situated within 5 miles radial distance from Elachi (urban section of Rajpur town) and again, which form a compact but continuous area of habitation around Elachi, were chosen. As these villages

were within easy reach of A.D. Hospital of Elachi, it was expected that relevant information which would be available from the rural people would be quite helpful to offer due answers to the initial queries and again, such information would help to plan better action-programmes of health services in complete agreement with local health condition and medical needs. In addition^x, residents of Elachi and those of another semi-urban section of Rajpur town, namely, Jaggadal were also chosen for making a comparative study with rural residents. Health and disease aspects of local society were to be examined in general and accordingly the given sample of rural and semi-urban settlements of Sonarpur P.S. were selected to constitute the area of survey-operation. Selection of villages and semi-urban habitats was purposeful to accomplish the proposed pilot survey. Under the circumstances, it is needless to say that the residents of the selected habitats do not stand to represent the general characteristics of the local residents of 24-Parganas district as a whole.

The survey attempted to make complete enumeration of all households of each village or semi-urban area by canvassing a 'Family Schedule For Basis Health Services'. In this schedule requisite information about the following items was sought from each household, the head of the household being taken generally as reference-point:

- 1) Identification particulars of each area of survey and again, of each household; 2) Demographic particulars of each constituent member of a household, with special reference to religion, marital status,

~~and~~ education status, occupation and vaccination records; 3) Illness suffered by each member of a household within one year prior to the date of enquiry; 4) Concept about occurrence of disease in family, 5) Mode of treatment for each disease of each affected family member; 6) Type of Hospital services taken by the family, with particular reference to A.D. Charitable Hospital (located in Elachi) section of Rajpur town); 7) Particulars of environmental sanitation with specific reference to source of water supply, sullage disposal, disposal of refuse and latrine-facility; and 8) Family Planning activities.

Total number of households which did ultimately furnish satisfactory information about the desired items of query in the areas of survey was 3459. The distribution of sample families by community (social groups) over the sample villages and semi-urban areas of Sonarpur P.S. has been shown in Table A. These 3459 families comprise the basic source of the core materials of all cases of physical sickness. Out of the total families the Hindus stood for 62 percent. The Muslims explained for 35 percent cases, the rest being the Christians.

Head and/or a senior member of the Household was asked to enumerate those diseases--minor or major--from which any member might have suffered during last twelve months from the date of enquiry. Names of the diseases and the affected persons were recorded immediately and subsequently ancillary information about concept and

mode of treatment of each kind of sickness was noted. Though complete reliance was placed on the declared statement about different diseases in a family, yet there was the inescapable effects of recall lapse and unintentional omission of old instances of sickness. Nevertheless, records about a substantial volume of sickness per family could be gathered from the survey. In the field every attempt was made to verify the reported disease by relevant documents. But in many cases such documents were not found. Truly speaking, in a number of cases field investigators had to rely fully on the declared verbal statement of the informants. In spite of such limitations, each and every household under investigation yielded sufficient positive information about diseases of one kind or other.

Incidences and causes of illness of sick members per family were transcribed and then causes of illness were codified as per World Health Organization's (WHO) International Classification of Diseases. In doing so, the nomenclature that has been given by WHO under Tabular List of Inclusion and Four Digit subcategories has been utilized for the present study to classify the reported diseases under appropriate Disease-groups,

A total of 17 disease-groups has been considered to include the reported cases of sickness per family under proper category. After ascertaining the group-position of a disease the place of the family that had reported the disease concerned had been marked against the appropriate broad disease-group. Whatever might be the

frequencies of one or more than one disease in a family occurrences of this or that specific disease had been counted once in determining the position of the family against the disease-group concerned. By this method the position of a family under one or more than one group within seventeen disease-groups had been located.

Family incidence Rates of different disease-groups have been calculated by the following method:

$$100 \times \frac{\text{No. of Families affected by a particular disease-group}}{\text{Total Number of Families}}$$

Family Incidence Rates of different disease-groups have been calculated separately for each village and each semi-urban area as well as for rural and semi-urban areas as a whole.

The seventeen disease-groups (WHO categories) have been abbreviated as follows:

Group I: IPD (Infective and Parasitic Diseases)

Group II: N (Neoplasms)

Group III: ENMD (Endocrine, Nutritional and Metabolic Diseases)

Group IV: DBBO (Diseases of Blood and Blood-forming Organs)

Group V: MD (Mental Disorders)

Groups VI: DNS (Diseases of Nervous System and Sense Organs)

Group VII: DCS (Diseases of Circulatory System)

Group VIII: DRS (Diseases of Respiratory System)

Group IX: DDS (Diseases of Digestive System)

Group X : DUGS (Diseases of Urino-genital System)

Group XI: GPCP (Complications of Pregnancy, Child birth and the Puerperium)

- Group XII: DST (Diseases of Skin and subcutaneous Tissues)
 Group XIII: DMCT (Disease of Musculo-skeletal System and
 Connective Tissues)
 Group XIV: CA (Congenital Anomalies)
 Group XV: DPNM (Certain Disease of Peri-natal Morbidity and
 Mortality)
 Group XVI: SILC (Symptoms and Ill-defined Conditions)
 Group XVII: AGV: (Accidents, Poisonings, and Violence)

On the basis of religion-affiliation of the head of household the household concerned has been classified under three social groups (communities), namely, Hindu, Muslim and Christian. Again, on the basis of community - affiliation the family incidence rates of disease-groups for each broad social group have been calculated to point out differential disease-prevalence and thereby health problems in the given rural or semi-urban society.

The disease-group which has included larger entries of diseases as reported by the given families and thereby has yielded higher Family Incidence Rate has been treated as Dominant disease-group. By this definition four Dominant disease-groups could be identified in the survey area, irrespective of its rural or semi-urban character.

Family-based information about incidences of various types of disease has received principal focus in the course of analysis that has been followed in the present study. Such information has further been examined in terms of community (social group) affiliation of the families.

Table A. Distribution of families by social group (community) over different villages and semi-urban areas surveyed in Sonarpur P.S., 24-Parganas, West Bengal, 1974 - 75

Village / Semi-urban area	Social group (community) affiliation of the family			Total Family
	HINDU	MUSLIM	CHRISTIAN	
(1)	(2)	(3)	(4)	(5)
1. Bonhoogly	305	348	55	708 (24.8)
2. Chowhati	549	13	-	562 (19.7)
3. Dingalpota	155	-	1	156 (5.5)
4. Hogalkuria	128	-	51	179 (6.3)
5. Jagannathpur	15	178	-	193 (6.7)
6. Jayenpur	67	28	1	96 (3.4)
7. Kumarkhali	158	204	-	362 (12.7)
8. Kusumba	6	118	-	124 (4.3)
9. Mischintapur	75	2	-	77 (2.7)
10. Ramchandrapur	143	27	-	170 (5.9)
11. Ukhila	8	221	-	229 (8.0)
ALL VILLAGES	(1609) 53.6	(1139) 39.9	(108) 3.8	2856 (100.0)
1. Elachi	224	69	-	293 (50.3)
2. Jaggadal	289	1	-	290 (49.7)
All Semi-URBAN AREAS	513 (88.0)	70 (12.0)	-	583 (100.0)
ALL AREAS	2122 (61.7)	1209 (35.1)	108 (3.2)	3439 (100.0)

3. Important Findings:

A) In the area of Survey the incidences of Infective and parasitic diseases (IPD) were reported in highest order by the families, irrespective of their rural or semi-urban living. Among the rural families the family incidence rate (FIR) for the disease-group I (IPD) was as high as 60% and interestingly enough, among their semi-urban counterparts such rate was almost of the same order (59%). That high FIR for the disease-group I did vary a little between rural and semi-urban settlements of Sonarpur p.s. was of immediate interest to reflect upon the key-source of health problems in the local society. (Table 1)

When as high as 60% of the total families (3439) of the survey-area declared that one or other kind of disease that has been identified under group I (IPD), prevailed among their constituent members during the reference-period in question, it is not difficult to realise that major health-disturbing force was significantly generated alone by Infective and parasitic diseases. This force was equally penetrating in both rural and urban surrounding of Rajpur town.

In spite of the above general state of development which was associated with ill-effects caused by infective and parasitic diseases on family health, the impact of these diseases was not found to have spread uniformly over the villages under survey. Family incidence rate (FIR) of disease-group I (IPD) happened to fluctuate between as high as 100.0% (village KUSUMBHA) and as low as 26.0% (village CHOWHATI).

Moreover, in another four villages, namely UKHILA (FIR: 99%), Jagannathpur (FIR: 97%), Kumarkhali (FIR: 90%), Ramchandrapur (FIR: 82%), and Nischintapur (FIR: 73%) family incidence rate for disease-group I was definitely of high order. It is, thus, clear that a little more than one-half of the total rural habitats under examination was seriously exposed to damaging effects of various infective and parasitic diseases. Did these villages form any endemic area for infective and parasitic diseases around Rajpur town? Convincing answer to this query may be formulated in the light of the fact that of all rural families (1717) which reported about occurrences of diseases of Group I (IPD), the families (1060) of the said six villages only, taken together, accounted for as good as 62 percent. Such a high rate of incidence of infective and parasitic diseases on family level in a relatively smaller area is a significant pointer to rural health problems at large.

In contrast, relatively a low family incidence rate for infective and parasitic disease-group in village Chowhati was quite a thought-provoking affair. This village sheltered 562 families and of these families only a little more than one-fourth reported illness due to one or more kind of diseases falling under Group I. In village Hogalkuria FIR for disease-group I (IPD) was found to be 37%. Thus the families of these two villages appeared to have suffered relatively less detrimental influence of the principal health-affecting diseases of the area. In the remaining three villages, namely, Bonhoogly, Dingalpota and Jayenpur, the families concerned were affected by the diseases of Group I relatively moderately, FIR being \bar{X} varying from 45%

(Bonhoogly) to 53% (Jayenpur).

As far as the semi-urban areas of Rajpur municipal town is concerned, impact of infective and parasitic diseases on families concerned were not at all insignificant. It is interesting that as high as 67 out 100 families of ELACHI reported sickness due to the said diseases. In spite of the fact that both Elachi and Jagaddal constitute two important sections of the only municipal town (RAJPUR) of Sonarpur P.S., 24-Parganas district, 59 percent of resident-families were as late as ⁱⁿ 1974-75 under the grip of various infective and parasitic diseases.

All the more, over-all FIRs of Disease-group I (IPD) for both rural and semi-urban families of the survey-area were observed to be on matching strength. Does this fact mean that town (urban)-or rural-living on the part of the affected families exercised no ^cdiscriminating influence on infective and parasitic diseases to affect volume of sickness? . In general, it may be observed that the families under study did suffer health-problems very largely due to various infective and parasitic diseases.

B) Next in order of importance the diseases of Respiratory System (DRS: Group VIII) prevailed in the survey-area. But such diseases on family level were reported relatively more in semi-urban areas of Rajpur town. Here out of every 100 families as good as 39 evinced occurrence of one or other kind of disease related to the disease-group VIII. In contrast, the rural families complained about incidences of the diseases of respiratory system in only 29 percent cases.

From this general picture of development it seems that rural, open-air living of the families concerned, had some discriminating role to influence events of illness due to respiratory system-linked diseases. In any case, family health problems created by different diseases of the Group VIII were not insignificant in both rural and semi-urban areas of Sonarpur P.S. and accordingly, appropriate health care measures to prevent and cure such diseases are still needed for the welfare of the local society.

Village Jagannathpur maintained a distinguished position in having relatively the highest family incidence rate for disease-group VIII. In this village as high as 63 out of every 100 families reported one or other kind of disease related to respiratory system. Next was the position of village Nischintapur (FIR: 49%) where about one-half all families suffered health problems due to the diseases of Group VIII. Family incidence rates of the disease-group VIII for the families of four villages, namely, Uchila (35%), Kumarkhali (35%), Chowhati (34%) and Bonhoogly (32%) were noticed to vary within a small range. It appears that the families of these four villages had faced more or less similar experiences of health problems which might have generated by the diseases of respiratory system (Group VIII) in the area.

That the families of each one of these four villages suffered health problems due to respiratory diseases relatively significantly lesser than the families of either village Jagannathpur or Nischintapur is, indeed, an interesting fact. This was more so in the case of the remaining villages. In this respect village Ramchandrapur struck a distinction in presenting family incidence rate of diseases of respiratory system in the lowest order (16 percent). Thus, FIR of

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disease-group VIII (DRS) is observed to vary from a high 63 percent to a low 16 percent. This signifies that the effect of respiratory system-linked diseases was not uniformly present over the villages and thereby the rural families had differential experiences of health problems due to such diseases.

In semi-urban areas of Rajpur town families of BLACHI reported relatively more cases of illness due to respiratory system-linked diseases. Here 42 out of every 100 families had health problems under the influence of respiratory diseases. But in Jagaddal 37 percent of total 290 families declared incidence of one or other disease of Group VIII. It seems that respiratory system-related diseases caused health problems on family level relatively more in Blachi than Jagaddal. The FIRs of disease-group VIII (diseases of Respiratory System) for the town families are found to stand in closer proximity of the FIRs of the same disease-group for the families of villages like Ukhila, Kumarbhali, Chowhati or Bonhoogly. Thus, the families of these particular semi-urban and rural areas of Sonarpur P.S., 24-Parganas district happened to experience similar stress and strain in taking care of their health problems generated by the diseases of respiratory system.

C) Third important disease-group is related to the disease of Skin and subcutaneous tissues (Group XII). In both rural and town areas this disease-group (DST) yielded family incidence rate in almost similar order. In total number of rural families (2856) 22 percent reported occurrence of skin-linked diseases and in town area, on the other hand, 22.5 percent of the total number of 583 families showed cases of illness under similar diseases. Thus, a consistency

between rural and urban rates is observed in the incidences of diseases falling under the disease-group XII. Moreover, it becomes evident that the families of both rural and semi-urban areas of Sonarpur P.S. suffered infective and parasitic diseases in highest order, diseases of respiratory system in higher order, and skin-linked disease in high order. These three disease-groups were, nodoubt, the principal sources of health problems for the families in general. Relative decreasing order of importance of these three disease-groups (I, VIII and XII) was uniformly maintained by both rural and town families. Such state of development in health-area should at once be highlighted.

With respect to this particular disease-group XII (DST) village Kumarkhali occupied a distinguishing place as 40 out of every 100 families residing in the village reported incidences of skin disease of one kind or other. This family incidence rate happend to be 18 points above the over-all rural rate. In the village the diseases of Group I (IPD) and Group XII (DST) were relatively more mentioned by the families concerned. Next was the position of village Nischintapur where the FIR of disease Group XII is observed to be 38 percent. Other family incidence rates of skin-linked diseases which are worth mentioning are 34 percent (village Hogalkuria) and 31 percent (village Kusumba) and 30 percent (village Ukhila). Lowest family incidence rate of the disease-group XII was yielded by village Jagannathour (3 percent). Thus, it is quite clear that the families of the villages under survey did not suffer health strees uniformly under the influence of diseases of skin and subcutaneous tissues (Group XII).

In semi-urban areas ELACHI gave family incidence rate of disease-group XII as 22 percent and the same was slightly higher for Jagaddal (23 percent). These rates are

definitely higher than those obtained for only four villages, namely Chowhati (17%), Dingalpota (13%), Bonhoogly (14%) and Jagannathpur (3%). For the rest of eleven villages the rates were found to be higher than those observed for either of two semi-urban settlements of Rajpur town. In general it may, thus, be thought that the rural families were relatively more exposed to skin-related diseases than town families. Though over-all rates of disease-group XII(DST) did not vary markedly between rural and semi-urban settlements, yet it was the rural families which are found to face health problems due to these skin-diseases more extensively.

D) The last important disease-group (XVI) is a group of all Symptoms and Ill-defined conditions of physical sickness (SILC). Occurrences of such symptoms and ill-defined conditions were extensively frequent in both rural and town families. Physical sickness by a single or multiple causes was reported by the families in very large number of cases, but such sickness could not be identified with any specific disease-group in question. Physical sickness due to a headache, fever, pain, cough, loss of appetite and so on was very, very often mentioned by the families and they have been clustered, as per WHO classification, under one broad disease-group, namely, Symptoms and Ill-defined conditions. It appears that all the families-rural or semi-urban-had the same experiences many of ~~by~~ frequently-occurring minor physical ailments which do not demand generally any serious medical surveillance. These diseases may be taken as household disease of common happening. Eventually family incidence rates of all Symptoms and Ill-defined conditions of physical sickness were as high as 87% in rural and 94% in town areas of Sonarpur P.S., 24-Parganas district.

It is thus clear that in the survey-area predominance of infective and parasitic diseases has to be merited with all seriousness. Then, the health problems generated on family level by diseases of respiratory system need due medical attention. Third important source of health stress in families-rural or urban-was related to occurrences of diseases of skin and subcutaneous tissues. 60 percent of total 3439 families (rural and urban combined) reported incidences of infective and parasitic diseases. Again, 30 percent of these 3439 families complained about physical illness due to attack of various diseases of respiratory system. On the other hand, 22 percent of the same 3439 families yielded information about health hazards due to different diseases of skin and subcutaneous tissues.

E) In the backdrop of this morbidity condition an attempt has been made to sift out the most commonly reported disease or diseases under each one of the above ^{first} three dominant disease-groups. In disease group I (Infective and parasitic diseases) though a number of diseases which was reported on family level, has been included, yet two particular diseases, namely, Dysentery and Diarrhoea were most frequently mentioned by rural and semi-urban families. It has been observed that family incidence rate of disease-group I for rural families as a whole is 60 percent and out of this 60 percent as good as 31 percent reported incidences of dysentery and diarrhoea only. In semi-urban areas of Rajpur town the family incidence rate of infective and parasitic diseases is 59 percent and out of this 59 percent families as good as 19 percent reported about occurrence of dysentery only (Table 2.)

Thus, it is noticed that in the survey area as a whole dysentery as an infective and parasitic disease has been reported mostly. When out of every 100 families as good as seventeen gave declaration that they suffered from a single disease of dysentery, one can visualise what alarming health situation was prevailing in both rural and town areas of Sonarpur P.S. as late as in 1975.

It is interesting to focus that family incidence rate (FIR) of dysentery disease was not of the same order in between village and town areas. FIR of dysentery for semi-urban families was 19 percent against only 16 percent found for rural families. Two semi-urban settlements, namely, ELACHI and Jagaddal, are part and parcel of the municipal town of Rajpur and yet they evinced the disturbing fact that their resident-families suffered health problems due to attack of dysentery relatively more intensively than their counterparts living in rural environment. The semi-urban families did not report diarrhoea to be a most commonly-occurring disease.

Now for the rural area it is observed that in four out of 11 villages of all the infective and parasitic diseases reported on family level, diarrhoea was more often mentioned. These four villages are Hogalkuria, Kumarkhali, Kusumba, and Ukhila. But in the remaining seven villages the disease of dysentery was pointed out most frequently by the families concerned. Diarrhoea-infested families were found relatively highest in village Kusumba where 66 out of 100 families reported this particular infective and parasitic disease. Next was the position of village Kumarkhali where 57% of resident families gave information about diarrhoea. Village Ukhila

and village Hogalkuria presented family incidence rates of the disease of diarrhoea only as 47% and 12% only. Dysentery was not mentioned as a commonly occurring disease by the families of these four villages.

In Kusumba centpercent families were found to have suffered from one or other kind of infective and parasitic disease (Group I), but diarrhoea as a single major disease of Group I was claimed by as high as 66 percent of total families. On the other hand, in village Kumarkhali 90 percent of total resident families reported incidences of diseases of Group I and again, 57 percent of the same families of the village were found to have suffered from diarrhoea as a single source of infective and parasitic diseases. In village Ukhila family incidence rate (FIR) of infective and parasitic disease was 99% and such rate for the disease of diarrhoea only was as good as 47%. For village Hogalkuria FIR of infective and parasitic diseases was relatively lower (37%) and accordingly, FIR of diarrhoea was also very low (12 percent).

To what extent the families of these four villages only could distinguish between an attack of diarrhoea and dysentery could not be ascertained during survey and as such true cases of dysentery might have been underreported. For underreporting or misreporting dysentery as a most commonly reported disease was not obtained among the families of these four villages in sharp ~~contrast~~ contrast to their counterparts living in adjacent seven villages. It seems that many cases of dysentery in these four villages of Kumarkhali, Kusumba, Ukhila and Hogalkuria might g have been reported as cases of diarrhoea only.

Among the remaining seven villages where the families had declared dysentery as the most commonly occurring infective and parasitic disease village Ramchandrapur and village Jagannathpur deserve special attention. In Ramchandrapur 82 out of every 100 resident-families reported one or other kind of infective etc, diseases and of these 100 families as high as 54 percent complained health hazards due to a single infective disease of dysentery . Such a high FIR for dysentery is a significant pointer to the prevailing health condition in the local rural society. On the other hand, 97 percent of total families living in village Jagannathpur had one or other kind of infective and parasitic diseases amongst their constituent members and again, 47 percent of these families reported disease of dysentery only. As a single infective and parasitic disease dysentery happened to create health problems on family level more glaringly in the given two ~~villages~~ of Sonarpur F.S., 24-Parganas district.

In this very respect position of village Nischintapur and village Jayenpur was not at all bright. In the former village 73 out of every 100 families showed incidences of infective and parasitic diseases and of these 100 families as good as 44 reported infection from only dysentery disease. In the latter village family incidence rate of infective etc. diseases was fairly high (53%), such rate for dysentery disease only was very significant (52%). Incidences of dysentery in these two vilâages can not be belittled, rather they should be given importance as seriously as one must offer to village Ramchandrapur or village Jagannathpur.

I In the remaining three villages, namely, Dingalpotra, Chowhati and Danhoogly reporting of only dysentery as a most frequently-occurring infective and parasitic disease was made by the families concerned of each village in lesser volume, family incidence rate being ranging between 20 and 13 percent. It appears that these three villages suffered relatively in lesser order from dysentery induced health problems than the rest of the villages in question. In any case, the very presence of dysentery in seven out of 11 villages under survey is certainly alarming. In conjunction with the incidences of dysentery in semi-urban areas of Sonarpur P.S., these infective and parasitic diseases demand immediately appropriate medical and public health measures for the welfare of the local people.

It may rightly be surmised that environmental sanitation in the local area under study is not satisfactory enough to negate appreciably the wide spread of several kind of infective and parasitic diseases and particularly dysentery and diarrhoea. Family health problems are accordingly not insignificantly voluminous in both rural and semi-urban (town) life. More than one-half of the total families under examination was exposed under several infective and parasitic diseases (especially dysentery) and this single event is strong enough to point out what medical welfare activities are at once to be launched to protect the people from health hazards and family stress.

In the second dominant group of diseases of respiratory system two specific diseases of cold and flu had most frequently been referred to by the families. In semi-urban settlements the disease of cold only was most frequent. Family incidence rate (FIR) of diseases of respiratory diseases (Group VIII) for semi-urban families is found to be 39 percent and for the same families FIR of disease of cold alone was 32 percent. It becomes, thus, evident that in the occurrence of respiratory diseases on family level it was the disease of cold which generated health problems in large majority cases among town families. Any other relatively more serious respiratory diseases like pneumonia, asthma, pleurisy and like so were not reported by most of the families of both semi-urban and rural settlements. Cold happened to be a common household disease in the survey area. Such type of disease was declared relatively more by town-bred families than their rural counterparts (Table 3).

In general, 31 percent of total 3439 families enumerated in Sonarpur P.S. did not complain about physical sickness due to some respiratory diseases. And of these families as good as 19 percent showed incidence of cold only on family level. In town area 32 percent of 583 families reported about the lone disease of cold and in contrast, 17 percent of 2856 rural families recorded about the same disease. The difference between semi-urban and rural rates for the disease of cold should be especially noted. If widespread occurrence of the disease of cold is taken to be any indicator of bodily deficiency in respiratory system, then proper medical attention in this direction is urgently needed for especially the town-bred

families of Rajpur. It is more true for the families of Jagaddal where 33 out of 100 families had trouble of cold-disease. Incidences of the disease of cold were not insignificant in ELACHI (30 percent.)

In the villages, families of Chowhati stood in closer proximity to semi-urban families in having incidences of cold-disease among 32 percent cases. Like Chowhati in another set of five villages, namely, Bonhoogly, Dingalpota, Hogalkuria, Jayenpur, and Ranchandrapur, only the disease of cold had been reported to be the most commonly occurring disease under the disease group VIII. In the remaining five villages the families concerned declared disease of flu as the most commonly occurring disease of respiratory system. Family incidence rate of flu only is observed to be 14 percent in rural areas.

In semi-urban areas the disease of flu was not the most commonly occurring disease. With respect to total 3459 sample families the disease of flu happened to occur in only 11 percent cases.

Among the five fillages where the families had reported 'flu' as the most commonly occurring disease under the disease-group VIII (DRS), village Jagannathpur attracts immediate attention. Here the family incidence rate (FIR) of only 'flu'-disease has been found to be 62.7%. In this village the over-all FIR of diseases of Respiratory system (Group VIII) was 63.2%. Under the situation it becomes clear that the rural families of Jagannathpur suffered almost fully from attack of 'flu'-disease. What was the possible reason for such high rate of 'flu'-disease? A thorough medical probing among the constituent members of the families of the village can only answer the problem.

In this respect next came village Mischintapur where 48 out of 100 families complained about illness due to 'flu'. The over-all family incidence rate of disease of respiratory system was observed to be 49% in this village and the lone disease of 'flu' explained as high as 48% of total cases of respiratory diseases. This state of affair is serious enough to urge for immediate medical intervention. Both Jagannathpur and Mischintapur require special medical attention to root out high incidence rate of 'flu'-disease which posed definitely serious health problems to the local families and their inhabitants.

In the remaining three villages, namely, Ukhila, Kumarkhali and Kusumba, the incidences of 'flu'-disease were not insignificant. In Kumarkhali 33 out of every 100 families reported 'flu' as the most commonly occurring disease, while in Kusumba it was 27%. But in village Ukhila family incidence rate of the disease of flu was slightly higher (35%). Further, in Ukhila FIR of diseases of Respiratory system happened to be 35.4% and 'flu' alone explained for 34.9% of the local families. Thus, it is observed that the villages which were more disturbed by health problems created by the diseases of respiratory system were actually having the particular disease of 'flu' as the most prevailing one among all diseases of the said System.

For the third dominant group of diseases of Skin and subcutaneous tissues (DST) the families of both rural and semi-urban settlements under survey had reported only the disease of 'itch' as the most commonly occurring one. Family incidence rate (FIR) of the disease of 'Itch' only for rural families as a whole was 16 percent. This

rural rate was slightly higher than semi-urban rate (14 percent). In general, the FIRs of diseases of Skin and subcutaneous tissues were not very high in the area of survey (rural FIR: 22.2% and semi-urban FIR: 22.3%). Eventually, the FIRs of the lone disease of 'itch' could not be very impressive. ^{The very} finding of 'itch' as the most commonly occurring skin-linked disease among the families suggests that the diseases of skin might not be a source of serious health problem to the families in question (Table 4)

In the background of the above situation special attention was drawn by two villages, namely, Kumarbhali and Mischintapur. In the former village as good as 40 out of every 100 resident-families reported one or other kind ^{of} Skin-disease and in the latter village 38% of total families evinced the presence of such disease. On the other hand, villages of Mozalkuria and Kusumba occupied the next important position in showing family incidence rates in the order of 34% and 31% respectively. In contrast, village Jagannathpur showed relatively the minimum incidence of skin-linked diseases, FIR being only 3 percent. Apparently it appears that the families of the villages in question had differential experiences about skin-linked diseases. Family incidence rates varied from a high 40 percent to a low 3 percent.

In semi-urban settlements of BLACHI and Jagaddal the families reported occurrence of skin-related morbidity in 22% to 23% cases. This rate was almost similar to the over-all rural as well as semi-urban rates (22%). In any case it becomes clear that not more than one-fourth of total families surveyed faced health stress from skin-linked diseases.

To go into the details of the incidences of different skin-linked diseases on family level it has been found that of all kinds of diseases the disease of 'itch' was referred most frequently by the families. In rural areas out of every 100 families when 22 percent reported skin-related diseases, 16 percent referred to 'itch' only as the most frequent skin-disease. Similarly, in semi-urban areas out of every 100 families when 22 percent showed presence of one or other kind of skin-related disease, 14 percent claimed only 'itch' as the most commonly occurring disease. In this respect, special mention is made for the village Ramchandraur where the families did not refered 'itch' as the most frequently occurring skin-ailment, but the disease of 'dermatitis' was reported. Here out of every 100 families 13 showed the incidences of 'dermatitis' only and 27 reported skin-disease of various types (including 'dermatitis').

For the fourth and last dominant disease-group namely, Symptoms and Ill-defined conditions (Group XVI), it may be pointed out that in the survey area 88 out of every 100 families did experience one or other kind of sickness effected by some physical trouble. Such sickness could not be properly explained by or identified with any organic disorders. Accordingly, it was found that sickness due to 'fever' or 'cough' was very widely mentioned. For this disease-group of Symptoms and Ill-defined conditions of bodily sickness nothing definite can, thus, be pointed out.

So far emphasise has been given on those diseases and disease-groups which were found relatively more dominantly present among the families-rural or urban-of Sonarpur P.S., 24-Parganas district. Eventually useful

knowledge about current diseases and health problems in a society located in a rural environment (not far from the Metropolitan City of Calcutta) can be roped in. Family incidence rates of the most commonly reported diseases as well as the disease-groups can be estimated from the survey findings. Trends of development in health area which were shown by the families under examination are expected to throw light on rural health problems in general. Volume of family sickness per human settlement could be examined from these findings which were, of course, limited by recall lapse, underreporting, misreporting and other circumstantial factors. Health information which is obtained from the present study can hardly be available from other sources.

Incidences of infective and parasitic diseases, diseases of respiratory system or disease of skin and sub-cutaneous tissues have been found to occur more expansively in the survey-area and to call immediate attention to the diseases of these disease-groups only is not to imply that no effort should be made to tackle diseases of the remaining disease-groups under reference. Occurrences of different diseases which have been included in each one of the remaining disease-groups were relatively lesser in magnitude and as such these disease-groups have not been diseussed separately.

Nevertheless, in this respect one important point has to be highlighted. It was found that none of the families in either rural or semi-urban areas had reported any disease which falls, as per WHO classification, under any one of the following disease-groups: (i) Neoplasms (Group II); (ii) Mental disorders (Group V); (iii) diseases

of Urino-genital system (Group X); (IV) Congenital anomalies (group XIV); and (V) diseases of peri-natal morbidity and Mortality (Group XV). These disease-groups go completely unrepresented. Such state of affair is really difficult to explain. Either the families did truly not experience any health hazards due to any disease coming under the above five groups, or these disease-groups had suffered from recall lapse or under-reporting. Third possibility may be that the families concerned did not bother to report those diseases which would come under these five specific groups. But it is certainly significant to note that both rural (2856) and semi-urban (583) families behaved in similar manner in not reporting any disease of any one of these five disease-groups. How such consistent behaviour in between rural and urban families could arise with reference to these five disease-groups only? It seems that only a further probing in-depth can furnish a clue to this query.

Another important issue is revealed by the findings as noted in Table 1, that the family incidence rates of each disease-group for rural and semi-urban families maintain more or less a consistency in most of the cases. Divergences of low order are, of course, not absent between rural and semi-urban rates of (1) Endocrine, Nutritional and Metabolic disease-group (Group III): ENMD); (2) Disease group of Nervous system and sense organs (Group VI) :DMS); (3) Disease group of Digestive system (Group: IX: DDS); and (4) Disease group of the Musculo-skeletal system and connective Tissues (Group : XIII: DMCT). In these disease-groups the semi-urban rates were always higher than the rural rates. But the ~~very~~ over-all family incidence rate of each one of these four disease-groups was initially low either in rural or town area and as such these rates have not been offered that much of importance which was given to those four dominant

disease groups mentioned earlier.

Incidentally, it may be noted that family incidence rate (PIR) of the diseases of Digestive system (Group: IX) was 9 percent in semi-urban areas against 3.5 percent available for rural areas. That semi-urban PIR of disease-group IX was more than double the rural rate is a fact of immediate interest to those who are concerned with medical and public health measures in the local society.

F) Family incidence rates (PIR) of four dominant disease-groups have been examined above in some details with reference to the rural and semi-urban families in question. Now an attempt has been made to classify the families by community (social group)-affiliation, and thereby to study community-wise family incidence rates of the disease-groups concerned. It is presumed that though these communities have different ways of life and living (culture) and different mental disposition towards health care, the families belonging to different communities would be affected alike by the diseases and thereby the stress of health problems.

With respect to the rural areas as a whole family-incidence rate of infective and parasitic diseases (group I) happened to be 60 percent. But among the rural Muslim families as high as 81 out of every 100 cases reported the diseases of the Group I against what was evinced by the Hindu families (48%). ~~Thus,~~ The Christian families reported relatively the lowest rate (34 percent). Thus, of all the rural families the Muslim families were found to have relatively more health problems caused by the infective and parasitic diseases than the non-Muslim families.

Moreover, it is known that the diseases like Dysentery and diarrhoea were the most commonly reported diseases among the rural families and accordingly, it is not difficult to visualise that it was the Muslim families which suffered relatively most from these two particular infective and parasitic diseases in Sonarpur P.S. (Table 6).

That the Muslim families of semi-urban areas suffered also relatively in greater degree from infective and parasitic diseases (Group I) is evident from the fact that 71 out of every 100 Muslim families reported incidences of the given diseases in sharp contrast to 58% only yielded by the Hindu families. Thus, in both rural and town areas of all the three communities the Muslim Community alone showed the highest family incidence rate of the Disease-group I (IPD). On the other hand, it is also observed that the rural Hindu families evinced relatively lower family incidence rate of the Disease-group I than their counterparts living in town area. Community-wise differential rates as available from the findings of Table 6, constitute a significant pointer to understand different levels of development in health conditions among the local dwellers. That volume of sickness per family due to infective and parasitic diseases was more intensive among the Muslims in comparison to the Hindus or the Christians of the survey-area is a capital knowledge. This knowledge would greatly help in the formulation of appropriate strategy of health welfare programmes and actions.

In this respect attention is drawn to the Muslim families of the following villages since all the families of the villages reported to have suffered from one or other kind of infective and parasitic disease (especially, dysentery or diarrhoea): 1) Jagannathpur, (2) Kumarkhali,

3) Kusumba, 4) Ukhila. Family incidence rate was 100% or a very little less than cent percent. Among the Hindu counterparts of these village family incidence rates of infective and parasitic diseases fluctuated between a high 100% (village Kusumba) and a low 67% (village Jagannathpur). Truly speaking, three villages of Kusumba, Kumarkhali and Ukhila seemed to be the worst-affected area as far as intensive occurrences of infective and parasitic diseases were concerned. Irrespective of their community (social group)-wise affiliation, the families of these three villages had to endure the impact of infective and parasitic diseases like dysentery or diarrhoea most intimately as well as extensively.

On the other hand, the Hindu families of the following villages were found to report relatively more cases of infective and parasitic diseases (Group I) than their Muslim counterparts: 1) Nischintapur, and 2) Ranchandrapur. In village Nischintapur the Hindu families yielded relatively higher family incidence rate (73%), the same was only 50% among the Muslim families. In village Ranchandrapur the Hindu rate for the disease-group I was a little higher (83%) than the Muslim rate (78%). The lowest family incidence rate of infective and parasitic diseases (Group I) was evinced by the Hindu families of village Chowhati (25%) and again, by the Muslim families of village Bonhoogly (50%) or village Nischintapur (50%). That the lowest Muslim rate for infective and parasitic diseases was double than the lowest Hindu rate was singularly significant to stress the fact that the Muslim families of the survey-area formed the most extensively affected group to suffer health hazards.

With respect to the second dominant disease-group VIII (Respiratory system-linked diseases) it has been found that 29% of rural families and 39% of semi-urban

families reported such diseases. In rural area among all the families (2856), a sizable magnitude of Muslim families (38%) showed relatively more cases of respiratory system-linked diseases (especially the diseases like cold and flu) than their Hindu (31%) or Christian (13%) counterparts. Like the highest family incidence rate (FIR) of infective and parasitic diseases, here again the Muslim families presented the highest FIR of diseases of respiratory system. But, in this very respect the difference (7.3%) between Muslim and Hindu rates for respiratory system-linked diseases was not as high as was found for the difference (35.8%) between the rates of infective and parasitic diseases. It is significant to note that the Muslim families of the villages under study suffered most from both infective and parasitic diseases and diseases of respiratory system. Next was the position of the Hindu families and the Christian families occupied the third position in order of importance.

On the other hand, among all town families it was the Hindu families which presented highest (FIR) family incidence rate (40%) for the diseases of respiratory system and next was the position of the Christian families (FIR): 39%. Here the town families belonging to the Muslim community evinced the lowest FIR (36%) for diseases of respiratory system. Nevertheless, the range of variation between the given rates was within a narrow limit (40% to 36%). This shows that the semi-urban families, irrespective of their community (social group) affiliation, did suffer on more or less similar level the problems of health which were caused by various diseases or respiratory system (especially by the disease of cold). One point is stressed here that in reporting incidences of diseases of respiratory system the Muslims families occupied the last position in order of importance in contrast to their rural counterparts.

Examining community-wise family incidence rate (FIR) for diseases of respiratory system over the villages it is observed that the Hindus of the following four villages evinced higher FIR than what was shown by their non-Hindu counterparts: (1) Village Chowhati, 2) Village Hogalkuria, 3) Village Kumarkhali, and 4) Village Kusumba. In these villages the Hindu rates varied from a high 50% (Kusumba) to a low 29% (Hogalkuria), where as the Muslim rates fluctuated between as high as 35% (Kumarkhali) and as low as 15% (Chowhati), On the other hand, the Muslims of the following four villages presented higher FIR for diseases of respiratory system than that was offered by their non-Muslim counterparts: 1) Village Bonhoogly, 2) Village Jagannathpur, 3) Village Ramchandrapur, and 4) Village Ukhila. In these four villages the Muslim rates varied from a high 64% (Jagannathpur) to a low 35% (Bonhoogly). But the Hindu rates were from a high 53% (Jagannathpur) to a low 10.5% (Ramchandrapur). over these four villages in question.

Thus, it is clear that in the villages occurrences of diseases of respiratory diseases (especially the diseases like cold and flu) had a wide fluctuations over both Hindu and Muslim families and thereby the families had differential experiences of respiratory system-linked health problems within the close bound of their specific community-enclosure. That the families belonging to different communities (social groups) suffered from respiratory system-linked diseases in unequal magnitude is immediately highlighted. Community-wise variations in the incidences of either infective and parasitic diseases or diseases of respiratory system are quite evident. Such variations have to be given due weightage in any family health welfare plan and /or programme that may be envisaged for the inhabitants of the locality.

With reference to the third dominant disease group (XIII) of skin-related diseases it has already been pointed out that rural and semi-urban family incidence rates varied only very little (22.2%: rural and 22.5%: urban). But in both rural and town areas the Muslim rates for the disease-group XII were definitely higher than the Hindu rates. The rural Muslim rate (25%) was, on the other hand, much lower than the urban Muslim rate (40%). But the Hindus of rural and town areas maintained an equal rate (20%). There is no doubt that the Muslim families suffered in general most from skin-linked diseases, especially from the disease like itch.

It is quite significant that the Muslim rate for skin-linked diseases as found in town areas, was double than that evinced by the Hindu families of the same areas. Why the Muslim families alone of town areas suffered skin-linked diseases in such high degree? Proper medical probe into this specific problem is imperative to have a satisfactory clue. In villages community-wise variation in family incidence rates for skin-related diseases was, of course, of low order. It seems that the Muslim-families of town area had in general been exposed more to physical ailments under influence of skin-linked diseases (especially 'itch') than their Hindu counterparts.

In the following three villages the Muslim families yielded higher family incidence rate (FIR) for skin-linked diseases than the Hindu families: 1) Village Chowhati, 2) Village Kumarkhali, 3) Village Ramchandrapur. The Muslim rates over these four villages varied widely. Village Kumarkhali is especially noted since 51 out of every 100 Muslim families of the village reported such diseases and it was the diseases of 'itch' which

prevailed most. In this village the Hindu families offered NFR for skin-linked diseases as only 26%. In village Chowhati the Muslim rate (46%) was much higher than the Hindu rate (17%), but in village Ranchandrapur the Muslim and the Hindu rates were very close. It appears that the Muslim families of villages Kumarkhali and Chowhati require special medical attention to tackle physical sickness under skin-related diseases.

On the other hand, the Hindu families of the following two villages were found to offer higher family incidence rate for skin-linked disease: 1) Village Hogalkuria and 2) Village Jayenpur. In Hogalkuria when 34 out of 100 Hindu families reported occurrence of skin-related disease (especially 'itch'), 51.5% of the Muslim families had the sufference from the same diseases. Next, in Jayenpur village 29% of total Hindu families evinced skin-linked diseases against 25% of Muslim families. This shows that in these two villages the Hindu and the Muslim families faced on more or less similar level the experiences of health problems generated by various diseases of skin and subcutaneous tissues (Group XII).

In general, it may be stated that the Muslim families of rural areas of Sonarpur P.S., 24-Parganas district, faced health problems under the impact of infective and parasitic disease like dysentery and diarrhoea more than their Hindu or Christian counterparts. This state of affair was also true in the cases of respiratory system-linked diseases like cold and flu or in the cases of skin-linked diseases linked itch. For these three distinct but dominant disease-groups the Muslim families in the given villages evinced always highest family incidence rates. These rural Muslim families were followed next by the rural Hindu families in order of importance. The rural Christian families offered in general the lowest family incidence rates for the said three dominant disease-groups.

Thus, the need for the study of incidences of most frequently occurring diseases in villages by community (social group)-affiliation of the families concerned becomes very much pressing.

Family incidence rates (FIR) of different disease-groups or of the most -frequently reporting diseases under any broad disease-group as have been presented above, require to be evaluated in consonance with what has been obtained for different communities (social groups) of the local stratified society. These two sets of family incidence rates are complementary to each other and a proper investigation of these rates would certainly provide greater insights into the nature and magnitude of the health problems which prevailed lately among the people of the survey area in 24-Parganas district or for that matter of the State. These rates would be some useful indicators in the field of health planning. Priority of medical as well as public health care can be fixed on the basis of higher or lower family incidence rate obtained for a particular disease-group and again, for a particular community (social group). The findings of family health problems as available now, are expected to help the organization of medical help and public health care among the local inhabitants in terms of their geographical location, community affiliation and family incidence rate for different diseases and physical sickness.

4. CONCLUDING OBSERVATIONS:

The present discourse has been made with 'Family Health' as an important goal of approach to ongoing national programmes on public health. Precisely speaking, the role of family (classified by its social affiliation) in national health has been highlighted here. The need of treating the family as a whole as the focus of attention in the matter of health and family welfare services has been stressed and eventually a family rather an individual approach has gained importance in

the analysis of available health data.

Health surveys have already been accepted as some significant tool to generate flow of useful health information. In spite of many limitations the present survey had truly yielded substantial volume of such information which, on the other hand, would help in more than one way the plan and programme of health-services envisaged for the area in question. This information reflects immediately upon family distribution of diseases and the same may be thoroughly utilized to guide forward planning of health services. The present findings of the survey provide comprehensively with the much-needed knowledge about disease prevalence on family level. It is felt that family-based distribution of disease in conjunction with population-based distribution of disease would certainly strengthen the very base of the data on national health. Moreover, these two types of distribution would be complementary to yield better health statistics. Importance of the present discourse has therefore to be merited in the light of the above issues. It is strongly hoped that the present family-based health statistics shall eventually help to inculcate new attitudes to the administration of health services as a whole in the country.

World Health Organization had already stressed seriously upon the need of new approaches in health statistics (WHO Tech. Report. No. 559, 1974). In this new approach emphasis has been laid on new types of health statistics which can no longer be just concerned with the quantity and population distribution of disease. New orientation of attitude towards environmental

factors in disease and health and again, an inclination to see patients as members of family and community groups have lately been urged. Many health indicators are in vogue to-day but those which embrace not only measures of morbidity of the population but also measures of those social (including economic) characteristics that are the determinants of levels of morbidity, are, no doubt, more useful. With reference to particular population groups such useful health indicators are desired to be employed more. The present study has, indeed, taken the patients as members of family and community groups of the locality and proceeded to offer a kind of health statistics which was not concerned with population distribution of disease. To assist in the formulation of health care plans for families and/or communities of a rural society the present study may have a role to play.

Family incidence rates of different diseases in the local communities have been measured to indicate volume of sickness per hundred families. The rates were not uniformly manifested by the communities. There existed noticeable variation in the incidences of different diseases on family as well as community level. Adequate knowledge about such family incidence rates is hardly available. This knowledge may be fruitfully used to develop some health indicators which serve to provide a real guide to the social and medical action plan for the people in question.

The present study reveals that infective and parasitic diseases caused highest family incidence rate in the area and especially the diseases of dysentery

and diarrhoea were more frequent to affect health of the family members. Dominance of these diseases was marked in both villages and town. Rural or urban living of the families has no special discriminating role to play in effecting greater or lesser incidences of infective and parasitic diseases. But within the villages prevalence of such diseases did vary to indicate that some of these were running relatively higher risk of exposure. These villages are Jagannathpur, Kumarkhali, Kusumba, Nischintapur and Ukhila. The families of these villages should get highest priority for proper medical care. To draw attention to these five villages should not imply that other villages do not require such care. Villages in general demand proper medical help for rooting out the diseases once for all. Muslim families of these five villages were, on the other hand, affected relatively more with infective and parasitic diseases like dysentery and diarrhoea. The Muslim community of the area constitutes the focal point for immediate health services.

Family incidence rate of diseases of respiratory system happened to be in second highest order in both rural and semi-urban areas. Of these diseases incidences of cold and flu were most frequently reported on family level. Among the members of the families the diseases of respiratory system ranked second in order of importance. Rural or urban living of the families did matter little to influence higher or lower spread of these diseases among their members. But among the villages there existed variations in family incidence rates for respiratory system-linked diseases. In this respect the families of village

Jagannathpur, village Mischintapur, village Kumarkhali, and village Ukhila may be again referred as relatively more-affected group. In these villages prevalence of the disease of flu was very marked. In the remaining villages the disease of cold was more frequent on family level. Thus, it becomes clear that the local families had mostly either cold or flu as prevailing disease among them and accordingly whatever appropriate medical attention is required to tackle these diseases has to be organised early in the very interest of the progress of local health welfare. One additional point is made here. The town families showed relatively higher incidences of the disease of cold than their rural counterparts and naturally they can not be left behind in the plan and programme of necessary health services for respiratory system-linked diseases.

Diseases of skin and subcutaneous tissues had a place of third importance among the rural or town families. It is pointed out here that of various kind of skin-diseases the families in question reported the disease of itch most frequently. This was true for both rural and semi-urban settlements. It seems that skin-linked diseases were not posing as a potent source of any serious health problems to the local families. With their existing way of life and living under tropical condition the members of the families are expected to suffer from 'itch' and remedy for which needs generally no serious medical surveillance. In spite of this fact the families of the following villages may need proper medical care for curing trouble of 'itch': 1) Kumarkhali, 2) Mischintapur, 3) Hogalkuria, and 4) Kusumba. In these villages 30 to 40% of families reported physical sickness due to 'itch'. In town area the families affected with skin-disease like 'itch' was of course, not high.

Family incidence rates of disease-group other than the above three dominant groups were low and as such no detailed discussion has been made here . But these rates should not be overlooked, since they indicate to what extent the members of the families-rural or urban-were exposed to various kinds of physical illness and morbidity condition. Here attention is especially drawn to the family incidence rates for (a) diseases of digestive system, and 2) diseases of muculo-skeletal system. Both the rates were decidedly higher in town area and this indicates that town families need greater medical care to tackle their health problems generated by the diseases of these two disease-groups (IX and XIII) only.

In human society the family remains ever to be a part of the individual and the individual is an integral part of the family . And as such any sick person is never alone in his/her suffering and no diseased person is an isolated individual. In this social situation whatever assesment of health condition on the strength of individual sick person may be made, the same can hardly depict family centered dimension of health problems. In any attempt for forward planning for health services in any population group as has lately been urged by the World Health Organization, adequate knowledge about Family Health problems is sine qua non. In this direction the present study indicates a useful methodology in examining the role of family in community and /or national health.

W. B. Sankar
19-4-76

FAMILY PLANNING FOUNDATION

To

~~to Mr. P. M. H.~~ Mr. P. M. H.

The attached is sent for the following action-Please

For information

Your recommendations

For instructions

For action

Put up relevant papers

For approval

For comments

Let's discuss ✓

For Signature

Prepare draft note

Action as discussed

Draft attached

Prepare draft reply

Note and return

For dictation

Reply on my behalf

Note and file

As indicated below

discuss
9/11
Action 9/11 or 10/11

Date

2/1/22

From

an

TOTAL HEALTH CARE PROJECT 1974-1975
REPORT ON
FAMILY HEALTH PROBLEMS IN A RURAL SOCIETY OF
WEST BENGAL

1. Introduction

On national level social welfare planning measures are currently manifold and with respect to the same serious attention is being laid more and more increasingly upon various health problems of the people at large. Though search for reliable information about national health is continuing from long past (particularly since the publication of the momentous Report of Bhore Committee in 1946), a new approach has lately been emphasised to tackle health problems of the country. This approach urges that the family as a whole should be the focus of attention in the matter of health and family welfare services and moreover, health activities must also adopt a family rather than an individual approach.

Importance of this approach is, of course, not unknown to those who are professionally concerned with the conditions and processes of both health and disease. That 'family' has to be taken as a 'functional unit' in making the facts about the disease more intelligible and its course more manageable has already been strongly pointed out in the international circles of medical profession. As a matter of fact, it has been claimed that better progress in health field depends upon 'clearer conceptions of the identifiable functional units' which would provide greater knowledge and better control. Since the 'family' happens to be the smallest but certainly not the least important social unit for coping with disease, one cannot miss to concentrate on family-based health information in understanding the nature and magnitude of health problems in general.

There is now emerging within the medical profession a more systematic concern for the personal and social factors in illness and eventually, the need for exploration of some sociological variables in health and disease is becoming urgent. Study of Family-based incidences of disease by social group (community) is expected to provide insights into health problems of the stratified rural society at large. With this objective in view the present report has been written.

Precisely speaking, the report attempts to reveal the following issues:

- (a) the nature and magnitude of incidences of diseases among the rural as well as semi-urban families residing in a rural society,
- (b) the differential incidences of family morbidity among different communities (social groups) of a rural society in contrast to those of a semi-urban society,
- (c) the dominant disease-groups which create widely diffused health problems on family level in rural or semi-urban society,
- (d) the Family Incidence Rates of the most frequently reported diseases among different rural as well as semi-urban communities (social groups).

2. Material and Method

A comprehensive survey on "Basic Health Services" was carried out in 1974-1975 in eleven villages and two semi-urban areas (sections of Rajpur municipal town) of Sonarpur P.S. 24-Paraganas, West Bengal.

Selection of villages and semi-urban areas was not at random. Rather, selection of the survey area was made with certain purposes. As A.D. Charitable Hospital which is located at Elachi, (a semi-urban section of municipal town of Rajpur,) has been catering medical and hospital needs of the local people since mid-1960 it was felt that a household to household enquiry should be attempted to know the impact area of the Hospital. To what extent the local inhabitants had taken health services from A.D. Hospital? Who were the people who had taken relatively more medical help from the Hospital? What was the morbidity condition in the locale of the Hospital? What forms of treatment the local people lately followed usually to cure diseases? To what level the rural people were conscious to go for modern medicines in tackling health hazards? These are some of the thoughts which prompted the household enquiry in question. Satisfactory evidences were hardly found to meet the initial queries and eventually a pilot but exploratory study to probe into the queries was brought into a resolution. But for such exploratory study eleven villages which are situated within 5 miles radial distance from Elachi (urban section of Rajpur town) and again, which form a compact but continuous area of habitation around Elachi, were chosen. As these villages were within easy reach of A.D. Hospital of Elachi, it was expected that relevant information which would be available from the rural people would be quite helpful to offer due answers to the initial queries

and again, such information would help to plan better action-programmes of health services in complete agreement with local health condition and medical needs. In addition, residents of Elachi and those of another semi-urban section of Rajpur town, namely, Jaggadal were also chosen for making a comparative study with rural residents. Health and disease aspects of local society were to be examined in general and accordingly the given sample of rural and semi-urban settlements of Sonarpur P.S. were selected to constitute the area of survey-operation. Selection of villages and semi-urban habitats was purposeful to accomplish the proposed pilot survey. Under the circumstances, it is needless to say that the residents of the selected habitats do not stand to represent the general characteristics of the local residents of 24-Parganas district as a whole.

The survey attempted to make complete enumeration of all households of each village or semi-urban area by canvassing a 'Family Schedule For Basic Health Services'. In this schedule requisite information about the following items was sought from each household, the head of the household being taken generally as reference-point:

- 1) Identification particulars of each area of survey and again, of each household;
- 2) Demographic particulars of each constituent member of a household, with special reference to religion, marital status, education status, occupation and vaccination records;
- 3) Illness suffered by each member of a household within one year prior to the date of enquiry;
- 4) Concept about occurrence of disease in family,
- 5) Mode of treatment for each disease of each affected family member;
- 6) Type of Hospital services taken by the family, with particular reference to A.D. Charitable Hospital (located in Elachi section of Rajpur town);
- 7) Particulars of environmental sanitation with specific reference to source of water supply, sullage disposal, disposal of refuse and latrine-facility; and
- 8) Family Planning activities.

Total number of households which did ultimately furnish satisfactory information about the desired items of query in

the areas of survey was 3439. The distribution of sample families by community (social groups) over the sample villages and semi-urban areas of Sonarpur P.S. has been shown in Table A. These 3439 families comprise the basic source of the core materials of all cases of physical sickness. Out of the total families the Hindus stood for 62 per cent. The Muslims explained for 35 per cent cases, the rest being the Christians.

Head and/or a senior member of the Household was asked to enumerate those diseases - minor or major - from which any member might have suffered during last twelve months from the date of enquiry. Names of the diseases and the affected persons were recorded immediately and subsequently ancillary information about concept and mode of treatment of each kind of sickness was noted. Though complete reliance was placed on the declared statement about different diseases in a family, yet there was the inescapable effects of recall lapse and unintentional omission of old instances of sickness. Nevertheless, records about a substantial volume of sickness per family could be gathered from the survey. In the field every attempt was made to verify the reported disease by relevant documents. But in many cases such documents were not found. Truly speaking, in a number of cases field investigators had to rely fully on the declared verbal statement of the informants. In spite of such limitations, each and every household under investigation yielded sufficient positive information about diseases of one kind or other.

Incidences and causes of illness of sick members per family were transcribed and then causes of illness were codified as per World Health Organization's (WHO) International Classification of Diseases. In doing so, the nomenclature that has been given by WHO under Tabular list of Inclusion and Four Digit subcategories has been utilized for the present study to classify the reported diseases under appropriate Disease-groups.

A total of 17 disease-groups has been considered to include the reported cases of sickness per family under proper category. After ascertaining the group-position of a disease the place of the family that had reported the disease concerned had been marked against the appropriate broad disease-group. Whatever might be the frequencies of one or more than one disease in a family occurrences of this or that specific disease had been counted once in determining the position of the family against the disease-group concerned. By this method the position of a family under one or more than one group within seventeen disease-groups has been located.

Family incidence Rates of different disease-groups have been calculated by the following method:

$$100 \times \frac{\text{No. of families affected by a particular disease-group}}{\text{Total Number of Families}}$$

Family Incidence Rates of different disease-groups have been calculated separately for each village and each semi-urban area as well as for rural and semi-urban areas as a whole.

The seventeen disease-groups (WHO categories) have been abbreviated as follows:

- Group I: IPD (Infective and Parasitic Diseases)
- Group II: N (Neoplasms)
- Group III: ENMD (Endocrine, Nutritional and Metabolic Diseases)
- Group IV: DBBO (Diseases of Blood and Blood-forming Organs)
- Group V: MD (Mental Disease)
- Group VI: DNS (Diseases of Nervous System and Sense Organs)
- Group VII: DCS (Diseases of Circulatory System)
- Group VIII: DRS (Diseases of the Respiratory System)
- Group IX: DDS (Diseases of the Digestive System)
- Group X: DUGS (Diseases of Urino-genital System)
- Group XI: CFCP (Complications of Pregnancy, Child Birth and the Puerperium)
- Group XII: DST (Diseases of Skin and subcutaneous Tissues)
- Group XIII: DMCT (Disease of Musculo-skeletal System and Connective Tissues)
- Group XIV: CA (Congenital Anomalies)
- Group XV: DPNM (Certain Disease of Peri-natal Morbidity and Mortality)
- Group XVI: SIIC (Symptoms and Ill-defined Conditions)
- Group XVII: ACV: (Accidents, poisonings, and Violence)

On the basis of religion-affiliation of the head of household the household concerned has been classified under three social groups (communities) -----

Christian. Again, on the basis of community - affiliation the family incidence rates of disease-groups for each broad social group have been calculated to point out differential disease-prevalence and thereby health problems in the given rural or semi-urban society.

The disease-group which has included larger entries of diseases as reported by the given families and thereby has yielded higher Family Incidence Rate has been treated as Dominant disease-group. By this definition four Dominant disease-groups could be identified in the survey area, irrespective of its rural or semi-urban character.

Family-based information about incidences of various types of disease has received principal focus in the course of analysis that has been followed in the present study. Such information has further been examined in terms of community (social group) affiliation of the families.

ble A. Distribution of families by social group (community) over different villages and semi-urban areas surveyed in Sonarpur P.S., 24-Parganas, West Bengal, 1974-1975.

Village/Semi-Urban Area	Social Group (Community) affiliation of the family			Total Family
	HINDU	MUSLIM	CHRISTIAN	
(1)	(2)	(3)	(4)	(5)
Bohoogly	305	348	55	708 (24.8)
Chowhati	549	13	-	562 (19.7)
Dingalpota	155	-	1	156 (5.5)
Hogalkuria	128	-	51	179 (6.3)
Jagannathpur	15	178	-	193 (6.7)
Jayenpur	67	28	1	96 (3.4)
Kumarkhali	158	204	-	362 (12.7)
Kusumba	6	118	-	124 (4.3)
Nischintapur	75	2	-	77 (2.7)
Ramchandrapur	143	27	-	170 (5.9)
Ukhila	8	221	-	229 (8.0)
ALL VILLAGES	(1609) (53.6)	(1139) (39.9)	(108) (3.8)	2856 (100.0)
Elachi	224	69	-	293 (50.3)
Jeggadal	289	1	-	290 (49.7)
ALL SEMI-URBAN AREAS	513 (88.0)	70 (12.0)	- -	583 (100.0)
ALL AREAS	2122 (61.7)	1209 (35.1)	108 (3.2)	3439 (100.0)

3. Important Findings

A) In the area of Survey the incidences of Infective and parasitic diseases (IPD) were reported in highest order by the families, irrespective of their rural or semi-urban living. Among the rural families the family incidence rate (FIR) for the disease-group I (IPD) was as high as 60% and interestingly enough, among their semi-urban counterparts such rate was almost of the same order (59%). That high FIR for the disease-group I did vary a little between rural and semi-urban settlements of Sonarpur P.S. was of immediate interest to reflect upon the key-source of health problems in the local society. (Table 1).

When as high as 60% of the total families (3439) of the survey-area declared that one or other kind of disease that has been identified under group I (IPD), prevailed among their constituent members during the reference-period in question, it is difficult to realise that major health-disturbing force was significantly generated alone by Infective and parasitic diseases. This force was equally penetrating in both rural and urban surrounding of Rajpur town.

In spite of the above general state of development which was associated with ill-effects caused by infective and parasitic diseases on family health, the impact of these diseases were not found to have spread uniformly over the villages under survey. Family incidence rate (FRI) of disease-group I (IPD) happened to fluctuate between as high as 100.0% (village KUSUMBA) and as low as 26.0% (village CHOWHATI). Moreover, in another four villages, namely UKHILA (FIR: 99%), Jagannathpur (FIR: 97%), Kumarkhali (FIR: 90%), Ramchandrapur (FIR: 82%), and Nischintapur (FIR: 73%) family incidence rate for disease-group I was definitely of high order. It is, thus, clear that a little more than one-half of the total rural habitats under examination was seriously exposed to damaging effects of various infective and parasitic diseases. Did these villages form any endemic area for infective and parasitic diseases around Rajpur town? Convincing answer to this query may be formulated in the light of the fact that of all rural families (1717) which reported about occurrences of diseases of Group I (IPD), the families (1060) of the said six villages only, taken together, accounted for as good as 62 per cent. Such a high rate of incidence of infective and parasitic diseases on family level in a relatively smaller area is a significant pointer to rural health problems at large.

In contrast, relatively a low family incidence rate for infective and parasitic disease-group in village Chowhati was quite a thought-provoking affair. This village sheltered

562 families and of these families only a little more than one-fourth reported illness due to one or more kind of diseases falling under Group I. In village Hogalkuria FIR for disease-group I (IPD) was found to be 37%. Thus the families of these two villages appeared to have suffered relatively less detrimental influence of the principal health-affecting diseases of the area. In the remaining three villages, namely, Bonhoogly, Dingalpota and Jayenpur, the families concerned were affected by the diseases of Group I relatively moderately, FIR being X varying from 45% (Bonhoogly) to 53% (Jayenpur).

As far as the semi-urban areas of Rajpur municipal town is concerned, impact of infective and parasitic diseases on families concerned were not at all insignificant. It is interesting that as high as 67 out of 100 families of Plachi reported sickness due to the said diseases. In spite of the fact that both Plachi and Jagaddal constitute two important sections of the only municipal town (RAJPUR) of Sonarpur P.S. 24-Parganas district, 59 per cent of resident-families were as late as in 1974-75 under the grip of various infective and parasitic diseases.

All the more, over-all FIRs of Disease-Group I (IPD) for both rural and semi-urban families of the survey-area were observed to be on matching strength. Does this fact mean that town (urban or rural) living on the part of the affected on families exercised no discriminating influence on infective and parasitic diseases to affect volume of sickness? In general, it may be observed that the families under study did suffer health-problems very largely due to various infective and parasitic diseases.

B) Next in order of importance the diseases of Respiratory System (DRS: Group VIII) prevailed in the survey-area. But such diseases on family level were reported relatively more in semi-urban areas of Rajpur town. Here out of every 100 families as good as 39 evinced occurrence of one or other kind of disease related to the disease-group VIII. In contrast, the rural families complained about incidence of the diseases of respiratory system in only 29 per cent cases. From this general picture of development it seems that rural, open-air living of the families concerned, had some discriminating role to influence events of illness due to respiratory system-linked diseases. In any case, family health problems created by different diseases of the Group VIII were not insignificant in both rural and semi-urban areas of Sonarpur P.S. and accordingly, appropriate health care measures to prevent and cure diseases are still needed for the welfare of the local society.

Village Jagannathpur maintained a distinguished position in having relatively the highest family incidence rate for disease-group VIII. In this village as high as 63 out of every 100 families reported one or other kind of disease related to respiratory system. Next was the position of village Nischintapur (FIR: 49%) where about one-half all families suffered health problems due to the disease-group VIII. Family incidence rates of the disease-group VII for the families of four villages, namely, Ukhila (35%), Kumarkhali (35%), Chowhati (34%) and Bonhoogly (32%) were noticed to vary within a small range. It appears that the families of these four villages had faced more or less similar experiences of health problems which might have generated by the diseases of respiratory system (Group VIII) in the area.

That the families of each one of these four villages suffered health problems due to respiratory diseases relatively significantly lesser than the families of either village Jagannathpur or Nischintapur is, indeed, an interesting fact. This was more so in the case of the remaining villages. In this respect village Panchandrapur struck a distinction in presenting family incidence rate of diseases of respiratory system in the lowest order (16 per cent). Thus, FIR of disease-group VIII (DRS) is observed to vary from a high 63 per cent to a low 16 per cent. This signifies that the effect of respiratory system-linked diseases was not uniformly present over the villages and thereby the rural families had differential experiences of health problems due to such diseases.

In semi-urban areas of Rajpur town families of ELACHI reported relatively more cases of illness due to respiratory system-linked diseases. Here 42 out of every 100 families had health problems under the influence of respiratory diseases. But in Jaggadal 37 per cent of total 290 families declared incidence of one or other disease of Group VIII. It seems that respiratory system-related diseases caused health problems on family level relatively more in Elachi than Jaggadal. The FIRs of disease-group VIII (diseases of Respiratory System) for the town families are found to stand in closer proximity of the FIRs of the same disease-group for the families of villages like Ukhila, Kumarkhali, Chowhati, or Bonhoogly. Thus, the families of these particular semi-urban and rural areas of Sonarpur P.S., 24-Parganas district happened to experience similar stress and strain in taking care of their health problems generated by the diseases of respiratory system.

c) Third important disease-group is related to the disease of Skin and subcutaneous tissues (Group XII). In both rural and town areas this disease-group (DST) yielded family incidence rate in almost similar order. In total number of rural families (2856) 22 per cent reported occurrence of skin-linked diseases and in town area, on the other hand, 22.5 per cent of the total number of 583

families showed cases of illness under similar diseases. Thus, a consistency between rural and urban rates is observed in the incidences of diseases falling under the disease-group XII. Moreover, it becomes evident that the families of both rural and semi-urban areas of Sonarpur P.S. suffered infective and parasitic diseases in highest order, diseases of respiratory system in higher order, and skin-linked disease in high order. These three disease-groups were, no doubt, the principal sources of health problems for the families in general. Relative decreasing order of importance of these three disease-groups (I, VIII and XII) was uniformly maintained by both rural and town families. Such state of development in health-area should at once be highlighted.

With respect to this particular disease-group XII (DST) village Kumarkhali occupied a distinguishing place as 46 out of every 100 families residing in the village reported incidences of skin disease of one kind or other. This family incidence rate happened to be 18 points above the over-all rural rate. In the village the disease of Group I (IPD) and Group XII (DST) were relatively more mentioned by the families concerned. Next was the position of village Nischintapur where the FIR of disease Group XII is observed to be 38 per cent. Other family incidence rates of skin-linked diseases which are worth mentioning are 34 per cent (village Hogalkuria) and 31 per cent (village Kusumba) and 30 per cent (village Ukhila). Lowest family incidence rate of the disease-group XII was yielded by village Jagannathpur (3 per cent). Thus, it is quite clear that the families of the villages under survey did not suffer health stress uniformly under the influence of diseases of skin and subcutaneous tissues (Group XII).

In semi-urban areas ELACHI gave family incidence rate of disease-group XII as 22 per cent and the same was slightly higher for Jagaddal (23 per cent). These rates are definitely higher than those obtained for only four villages, namely Chowhati, (17%), Dingalpota (13%), Bonhoogly (14%) and Jagannathpur (3%). For the rest of eleven villages the rates were found to be higher than those observed for either of two semi-urban settlements of Rajpur town. In general it may, thus, be thought that the rural families were relatively more exposed to skin-related diseases than town families. Though over-all rates of disease-group XII (DST) did not vary markedly between rural and semi-urban settlements, yet it was the rural families which are found to face health problems due to these skin-diseases more extensively.

D) The last important disease-group (XVI) is a group of all Symptoms and Ill-defined conditions of physical sickness (SILC).

Occurrences of such symptoms and ill-defined conditions were extensively frequent in both rural and town families. Physical sickness by a single or multiple causes was reported by the families in very large number of cases, but such sickness could not be identified with any specific disease-group in question. Physical sickness due to headache, fever, pain, cough, loss of appetite and so on was very, very often mentioned by the families and they have been clustered, as per WHO classification, under one broad disease-group, namely, Symptoms and Ill-defined conditions. It appears that all the families-rural or semi-urban had the same experiences of many by frequently-occurring minor physical ailments which do not demand generally any serious medical surveillance. These diseases may be taken as household disease of common happening. Eventually family incidence rates of all Symptoms and Ill-defined conditions of physical sickness were as high as 87% in rural and 94% in town areas of Sonarpur P.S., 24-Parganas district.

It is thus clear that in survey-area predominance of infective and parasitic diseases had to be merited with all seriousness. Then, the health problems generated on family level by diseases of respiratory system need due medical attention. Third important source of health stress in families rural or urban was related to occurrences of diseases of skin and subcutaneous tissues. 60 per cent of total 3439 families (rural and urban combined) reported incidences of infective and parasitic diseases. Again, 30 per cent of these 3439 families complained about physical illness due to attack of various diseases of respiratory system. On the other hand, 22 per cent of the same 3439 families yielded information about health hazards due to different diseases of skin and subcutaneous tissues.

E) In the backdrop of this morbidity condition an attempt has been made to sift out the most commonly reported disease or diseases under each one of the above first three dominant disease-groups. In disease group I (Infective and parasitic diseases) though a number of diseases which was reported on family level, has been included, yet two particular diseases, namely, Dysentery and Diarrhoea were most frequently mentioned by rural and semi-urban families. It has been observed that family incidence rate of disease-group I for rural families as a whole is 60 per cent and out of this 60 per cent as good as 31 per cent reported incidences of dysentery and diarrhoea only. In semi-urban areas of Rajpur town the family incidence rate of infective and parasitic diseases is 59 per cent and out of this 59 per cent families as good as 19 per cent reported about occurrence of dysentery only (Table 2.)

Thus, it is noticed that in survey area as a whole dysentery

as an infective and parasitic disease has been reported mostly. When out of every 100 families as good as seventeen gave declaration that they suffered from a single disease of dysentery, one can visualise what alarming health situation was prevailing in both rural and town areas of Sonarpur P.S. as late as in 1975.

It is interesting to focus that family incidence rate (FIR) of dysentery disease was not of the same order in between village and town areas. FIR of dysentery for semi-urban families was 19 per cent against only 16 per cent found for rural families. Two semi-urban settlements, namely, ELACHI and JACADBAL, are part and parcel of the municipal town of Rajpur and yet they evinced the disturbing fact that their resident-families suffered health problems due to attack of dysentery relatively more intensively than their counterparts living in rural environment. The semi-urban families did not report diarrhoea to be a most commonly-occurring disease.

Now for the rural area it is observed that in four out of 11 villages of all the infective and parasitic diseases reported on family level, diarrhoea was more often mentioned. These four villages are Hogalkuria, Kumarkhali, Kusumba, and Ukhila. But in the remaining seven villages the disease of dysentery was pointed out most frequently by the families concerned. Diarrhoea-infested families were found relatively highest in village Kusumba where 66 out of 100 families reported this particular infective and parasitic disease. Next was the position of village Kumarkhali where 57% of resident families gave information about diarrhoea. Village Ukhila and village Hogalkuria presented family incidence rates of the disease of diarrhoea only as 47% and 12% only. Dysentery was not mentioned as a commonly occurring disease by the families of these four villages.

In Kusumba cent per cent families were found to have suffered from one or other kind of infective and parasitic disease (Group I), but diarrhoea as a single major disease of Group I was claimed by a high as 66 per cent of total families. On the other hand, in village Kumarkhali 90 per cent of total resident families reported incidences of diseases of Group I and again, 57 per cent of the same families of the village were found to have suffered from diarrhoea as a single source of infective and parasitic diseases. In village Ukhila family incidence rate (FIR) of infective and parasitic disease was 90% and such rate for the disease of diarrhoea only was as good as 47%. For village Hogalkuria FIR of infective and parasitic diseases was relatively lower (37%) and accordingly, FIR of diarrhoea was also very low (12 per cent).

To what extent the families of these four villages only could distinguish between an attack of diarrhoea and dysentery could not be ascertained during survey and as such true cases of dysentery might have been under reported. For under reporting or misreporting dysentery as a most commonly reported disease was not obtained, among the families of these four villages in

sharp contrast to their counterparts living in adjacent seven villages. It seems that many cases of dysentery in these four villages of Kumarkhali, Kusumba, Ukhila, and Hogalkuria might have been reported as cases of diarrhoea only.

Among the remaining seven villages where the families had declared dysentery as the most commonly occurring infective and parasitic disease village Ramchandrapur and village Jagannathpur deserve special attention. In Ramchandrapur 82 out of every 100 resident-families reported one or other kind of infective disease etc, diseases and of these 100 families as high as 54 per cent complained health hazards due to a single infective disease of dysentery. Such a high FIR for dysentery is a significant pointer to the prevailing health condition in the local rural society. On the other hand, 97 per cent of total families living in village Jagannathpur had one or other kind of infective and parasitic diseases amongst their constituent members and again, 47 per cent of these families reported disease of dysentery only. As a single infective and parasitic disease dysentery happened to create health problems on family level more glaringly in the given two villages of Sonarpur P.S., 24-Farganas district.

In this very respect position of village Nischintapur and village Jayenpur was not all bright. In the former village 73 out of every 100 families showed incidences of infective and parasitic diseases and of these 100 families as good as 44 reported infection from only dysentery disease. In the latter village family incidence rate of infective etc, disease was fairly high (53%), such rate for dysentery disease only was very significant (32%). Incidences of dysentery in these two villages can not be belittled, rather they should be given importance as seriously as one must offer to village Ramchandrapur or village Jagannathpur.

In the remaining three villages, namely, Dingalota, Chowhati and Banghoogly reporting of only dysentery as a most frequently-occurring infective and parasitic disease was made by the families concerned of each village in lesser volume, family incidence rate being ranging between 20 and 13 per cent. It appears that these three villages suffered relatively in lesser order from dysentery induced health problems than the rest of the villages in question. In any case, the very presence of dysentery in seven out of 11 villages under survey is certainly alarming. In conjunction with the incidences of dysentery in semi-urban areas of Sonarpur P.S., these infective and parasitic diseases demand immediately appropriate medical and public health measures for the welfare of the local people.

It may rightly be surmised that environmental sanitation in the local area under study is not satisfactory enough to negate appreciably the wide spread of several kinds of infective and parasitic diseases and particularly dysentery and diarrhoea. Family health problems are accordingly not insignificantly voluminous in both rural and semi-urban (town) life. More than one-half of the total families under examination was exposed under several infective and parasitic diseases (especially dysentery) and this single event is strong enough to point out what medical welfare activities are to be launched at once to protect the people from health hazards and family stress.

In the second dominant group of diseases of respiratory system two specific diseases of cold and flu had most frequently been referred to by the families. In semi-urban settlements the disease of cold only was most frequent. Family incidence rate (PIR) of diseases of respiratory diseases (Group VIII) for semi-urban families is found to be 39 per cent and for the same families PIR of disease of cold alone was 32 per cent. It becomes, thus, evident that in the occurrence of respiratory diseases on family level it was the disease of cold which generated health problems in large majority cases among town families. Any other relatively more serious respiratory diseases like pneumonia, asthma, pleurisy and like so were not reported by most of the families of both semi-urban and rural settlements. Cold happened to be a common household disease in the survey area. Such type of disease was declared relatively more by town-bred families than their rural counterparts (Table 3.)

In general, 31 per cent of total 3439 families enumerated in Sonarpur P.S. did complain about physical sickness due to some respiratory diseases. And of these families as good as 19 per cent showed incidence of cold only on family level. In town area 32 per cent of 583 families reported about the lone disease of cold and in contrast, 17 per cent of 2856 rural families recorded about the same disease. The difference between semi-urban and rural rates for the disease of cold should be especially noted. If widespread occurrence of the disease of cold is taken to be any indicator of bodily deficiency in respiratory system, then proper medical attention in this direction is urgently needed for especially the town-bred families of Rajpur. It is more true for the families of Jagaddal where 33 out of 100 families had trouble of cold-disease. Incidences of the disease of cold were not insignificant in ELACHI (30 per cent).

In the villages, families of Chowhati stood in closer

proximity to semi-urban families in having incidences of cold-disease among 32 per cent cases. Like Chowhati in another set of five villages, namely, Bonhoogly, Dingalnota, Hogalkuria, Jayapur and Ramchandrapur, only the disease of cold had been reported to be the most commonly occurring disease under the disease group VIII. In the remaining five villages the families concerned declared disease of flu as the most commonly occurring disease of respiratory system. Family incidence rate of flu only is observed to be 14 per cent in rural areas.

In semi-urban areas the disease of flu was not the most commonly occurring disease. With respect to total 3439 sample families the disease of flu happened to occur in only 11 per cent cases.

Among the five villages where the families had reported 'flu' as the most commonly occurring disease under the disease group VIII (DRS), village Jagannathpur attracts immediate attention. Here the family incidence rate (FIR) of only 'flu'-disease has been found to be 62.7%. In this village the over-all FIR of diseases of Respiratory system (Group VIII) was 63.2%. Under the situation it becomes clear that the rural families of Jagannathpur suffered almost fully from attack of 'flu'-disease. What was the possible reason for such high rate of 'flu'-disease? A thorough medical probing among the constituent members of the families of the village can only answer the problem.

In this respect next came village Nischintapur where 48 out of 100 families complained about illness due to 'flu'. The over-all family incidence rate of disease of respiratory system was observed to be 49% in this village and the lone disease of 'flu' explained as high as 48% of total cases of respiratory diseases. This state of affair is serious enough to urge for immediate medical intervention. Both Jagannathpur and Nischintapur require special medical attention to root out high incidence rate of 'flu'-disease which posed definitely serious health problems to the local families and their inhabitants.

In the remaining three villages, namely, Ukhila, Kumarkhali and Kusunaba, the incidences of 'flu'-disease were not insignificant. In Kumarkhali 33 out of every 100 families reported 'flu' as the most commonly occurring disease, while in Kusunaba it was 27%. But in village Ukhila family incidence rate of the disease of flu was slightly higher (35%). Further, in Ukhila FIR of diseases of Respiratory system happened to be 35.4% and 'flu' alone explained for 34.9% of the local families. Thus, it is

observed that the villages which were more disturbed by health problems created by the diseases of respiratory system were actually having the particular disease of 'flu' as the most prevailing one among all diseases of the said system.

For the third dominant group of diseases of Skin and subcutaneous tissues (DST) the families of both rural and semi-urban settlements under survey had reported only the disease of 'itch' as the most commonly occurring one. Family incidence rate (FIR) of the disease of 'itch' only for rural families as a whole was 16 per cent. This rural rate was slightly higher than semi-urban rate (14 per cent). In general, the FIRs of diseases of Skin and subcutaneous tissues were not very high in the area of survey (rural FIR: 22.2% and semipurban FIR: 22.3%). Eventually, the FIRs of the lone disease of 'itch' could not be very impressive. The finding of 'itch' as the most commonly occurring skin-linked disease among the families suggests that the diseases of skin might not be a source of serious health problem to the families in question (Table 4).

In the background of the above situation special attention was drawn by two villages, namely, Kumarkhali and Nischintapur. In the former village as good as 40 out of every 100 resident-families reported one or other kind of skin-disease and in the latter village 38% of total families evinced the presence of such disease. On the other hand, villages of Hogalkuria and Kusumba occupied the next important position in showing family incidence rates in the order of 34% and 31% respectively. In contrast, village Jagannathpur showed relatively the minimum incidence of skin-linked diseases, FIR being only 3 per cent. Apparently it appears that the families of the villages in question had differential experiences about skin-linked diseases. Family incidence rates varied from a high 40 per cent to a low 3 per cent.

In semi-urban settlements of ELACHI and JAGADDAL the families reported occurrence of skin-related morbidity in 22% to 23% cases. This rate was almost similar to the over-all rural as well as semi-urban rates (22%). In any case it becomes clear that not more than one-fourth of total families surveyed faced health stress from skin-linked diseases.

To go into the details of the incidences of different skin-linked diseases on family level it has been found that of all kinds of diseases the disease of 'itch' was referred most frequently by the families. In rural areas out of every 100 families, when 22 per cent reported skin-related diseases, 16 per cent referred to 'itch' only as the most frequent skin-disease. Similarly, in semi-urban areas out of every 100 families when 22 per cent showed presence of one or other kind

of skin-related disease, 14 per cent claimed only 'itch' as the most commonly occurring disease. In this respect, special mention is made for the village Ramchandrapur where the families did not refer 'itch' as the most frequently occurring skin-ailment, but the disease of 'dermatitis' was reported. Here out of every 100 families 13 showed the incidences of 'dermatitis' only and 27 reported skin-disease of various types (including 'dermatitis').

For the fourth and last dominant disease-group namely, Symptoms and Ill-defined conditions (Group XVI), it may be pointed out that in the survey area 38 out of every 100 families did experience one or other kind of sickness effected by some physical trouble. Such sickness could not be properly explained by or identified with any organic disorders. Accordingly, it was found that sickness due to 'fever' or 'cough' was very widely mentioned. For this disease-group of Symptoms and Ill-defined conditions of bodily sickness nothing definite can, thus, be pointed out.

So far emphasis has been given on those diseases and disease-groups which were found relatively more dominantly present among the families-rural or urban of Sonarpur P.S., 24-Parganas district. Eventually useful knowledge about current diseases and health problems in a society located in a rural environment (not far from the Metropolitan City of Calcutta) can be roped in. Family incidence rates of the most commonly reported diseases as well as the disease-groups can be estimated from the survey findings. Trends of development in health area which were shown by the families under examination are expected to throw light on rural health problems in general. Volume of family sickness per human settlement could be examined from these findings which were, of course, limited by recall lapse, under reporting, mis reporting and other circumstantial factors. Health information which is obtained from the present study can hardly be available from other sources.

Incidences of infective and parasitic diseases, diseases of respiratory system or disease of skin and sub-cutaneous tissues have been found to occur more extensively in the survey-area and to call immediate attention to the diseases of these disease-groups only is not to imply that no effort should be made to tackle diseases of the remaining disease-groups under reference. Occurrences of different diseases which have been included in each one of the remaining disease-groups were relatively lesser in magnitude and as such these disease-groups have not been discussed separately.

Nevertheless, in this respect one important point has to be highlighted. It was found that none of the families in either rural or semi-urban areas had reported any disease which falls, as per WHO classification, under any one of the following disease-groups: (i) Neoplasms (Group II); (ii) Mental disorders (Group V); (iii) diseases of Urino-genital system (Group X); (iv) Congenital anomalies (Group XIV); and (v) diseases of peri-natal morbidity and mortality (Group XV). These disease-groups go completely unrepresented. Such state of affairs is really difficult to explain. Either the families did truly not experience any health hazards due to any disease coming under the above five groups, or these disease-groups had suffered from recall lapse or under-reporting. Third possibility may be that the families concerned did not bother to report those diseases which would come under these five specific groups. But it is certainly significant to note that both rural (2856) and semi-urban (583) families behaved in similar manner in not reporting any disease of any one of these five disease-groups. How such consistent behaviour in between rural and urban families could arise with reference to these five disease-groups only? It seems that only a further probing in-depth can furnish a clue to this query.

Another important issue is revealed by the findings as noted in Table 1, that the family incidence rates of each disease-group for rural and semi-urban families maintain more or less a consistency in most of the cases. Divergences of low order are, of course, not absent between rural and semi-urban rates of (1) Endocrine, Nutritional and Metabolic disease-group (Group III) (ENMD); (2) Disease group of Nervous system and sense organs (Group VI) (DNS); (3) Disease group of Digestive system (Group IX) (DDS); and (4) Disease group of the Musculo-skeletal system and connective tissues (Group XIII) (DMCT). In these disease-groups the semi-urban rates were always higher than the rural rates. But the over-all family incidence rate of each one of these four disease-groups was initially low either in rural or town area and as such these rates have not been offered that much of importance which was given to those four dominant disease groups mentioned earlier.

Incidentally, it may be noted that family incidence rate (FIR) of the diseases of Digestive system (Group IX) was 9 per cent in semi-urban areas against 3.5 per cent available for rural areas. That semi-urban FIR of disease-group IX was more than double the rural rate is a fact of immediate interest to those who are concerned with medical and public health measures in the local society.

F) Family incidence rates (FIR) of four dominant disease-groups

have been examined above in some detail with reference to the rural and semi-urban families in question. Now an attempt has been made to classify the families by community (social group) affiliation and thereby to study community-wise family incidence rates of the disease-groups concerned. It is presumed that though these communities have different ways of life and living (culture) and different mental disposition towards health care, the families belonging to different communities would be affected alike by the diseases and thereby the stress of health problems.

With respect to the rural areas as a whole family-incidence rate of infective and parasitic diseases (group I) happened to be 60 per cent. But among the rural Muslim families as high as 81 out of every 100 cases reported the diseases of the Group I against what was evinced by the Hindu families (48%). The Christian families reported relatively the lowest rate (34%). Thus, of all the rural families the Muslim families were found to have relatively more health problems caused by the infective and parasitic diseases than the non-Muslim families.

Moreover, it is known that the diseases like Dysentery and Diarrhoea were the most commonly reported diseases among the rural families and accordingly, it is not difficult to visualise that it was the Muslim families which suffered relatively most from these two particular infective and parasitic diseases in Sonarpur P.S. (Table 6).

That the Muslim families of semi-urban areas suffered also relatively in greater degree from infective and parasitic diseases (Group I) is evident from the fact that 71 out of every 100 Muslim families reported incidences of the given diseases in sharp contrast to 58% only yielded by the Hindu families. Thus, in both rural and town areas of all the three communities the Muslim community alone showed the highest incidence rate of the Disease-group I (IPD). On the other hand, it is also observed that the rural Hindu families evinced relatively lower family incidence rate of the Disease-group I than their counterparts living in town area. Community-wise differential rates as available from the findings of Table 6, constitute a significant pointer to understand different levels of development in health conditions among the local dwellers. That volume of sickness per family due to infective and parasitic diseases was more intensive among the Muslims in comparison to the Hindus or the Christians of the survey-area is a capital knowledge. This knowledge would greatly help in the formulation of appropriate strategy of health welfare programmes and actions.

In this respect attention is drawn to the Muslim families

of the following villages since all the families of the villages reported to have suffered from one or other kind of infective and parasitic disease (especially, dysentery or diarrhoea): (1) Jagannathpur, (2) Kumarkhali, (3) Kusumba, (4) Ukhila. Family incidence rate was 100% or a very little less than cent per cent. Among the Hindu counterparts of these village family of infective and parasitic diseases fluctuated between a high 100% (village Kusumba) and a low 67% (village Jagannathpur). Truly speaking, three villages of Kusumba, Kumarkhali and Ukhila seemed to be the worst-affected areas as far as intensive occurrences of infective and parasitic diseases were concerned. Irrespective of their community (social group)-wise affiliation, the families of these three villages had to endure the impact of infective and parasitic diseases like dysentery or diarrhoea most intimately as well as extensively.

On the other hand, the Hindu families of the following villages were found to report relatively more cases of infective and parasitic diseases (Group I) than their Muslim counterparts: (1) Mischintapur, and (2) Ramchandrapur. In village Mischintapur the Hindu families yielded relatively higher family incidence rate (73%), the same was only 50% among the Muslim families. In village Ramchandrapur the Hindu rate for the disease-group I was a little higher (83%) than the Muslim rate (78%). The lowest family incidence rate of infective and parasitic diseases (Group I) was evinced by the Hindu families of village Chowhati (25%) and again, by the Muslim families of village Bonhoogly (50%) or village Mischintapur (50%). That the lowest Muslim rate for infective and parasitic diseases was double than the lowest Hindu rate was singularly significant to stress the fact that the Muslim families of the survey-area formed the most extensively affected group to suffer health hazards.

With respect to the second dominant disease-group VIII (Respiratory system-linked diseases) it has been found that 29% of rural families and 39% of semi-urban families reported such diseases. In rural area among all the families (2856), a sizeable magnitude of Muslim families (38%) showed relatively more cases of respiratory system-linked diseases (especially the diseases like cold and flu,) than their Hindu (31%) or Christian (13%) counterparts. Like the highest family incidence rate (FIR) of infective and parasitic diseases, here again the Muslim families presented the highest FIR of diseases or respiratory system. But, in this very respect the difference (7.3%) between Muslim and Hindu rates for respiratory system-linked diseases was not as high as was found for the difference (33.8%) between the rates of infective and parasitic diseases. It is significant to note that the Muslim families of the villages under study suffered most from both infective and parasitic diseases and diseases of respiratory system. Next was the position of the

Hindu families and the Christian families occupied the third position in order of importance.

On the other hand, among all town families it was the Hindu families which presented highest (FIR) family incidence rate (40%) for the diseases of respiratory system and next was the position of the Christian families (FIR) (39%). Here the town families belonging to the Muslim community evinced the lowest FIR (36%) for diseases of respiratory system. Nevertheless, the range of variation between the given rates was within a narrow limit (40% to 36%). This shows that the semi-urban families, irrespective of their community (social group) affiliation, did suffer on more or less similar level the problems of health which were caused by various diseases or respiratory system (especially by the disease of cold). One point is stressed here that in reporting incidences of diseases of respiratory system the Muslim families occupied the last position in order of importance in contrast to their rural counterparts.

Examining community-wise family incidence rate (FIR) for diseases of respiratory system over the villages it is observed that the Hindus of the following four villages evinced higher FIR than what was shown by their non-Hindu counterparts: (1) village Chowhati, (2) Village Hogalkuria, (3) Village Kumarkhali, and (4) Village Kusumba. In these villages the Hindu rates varied from a high 50% (Kusumba) to a low 29% (Hogalkuria), where as the Muslim rates fluctuated between as high as 35% (Kumarkhali) and as low as 15% (Chowhati), on the other hand, the Muslims of the following four villages presented higher FIR for diseases of respiratory system than that was offered by their non-Muslim counterparts: (1) Village Bonhoogly, (2) Village Jagannathpur, (3) Village Ramchandrapur, and (4) Village Ukhila. In these four villages the Muslim rates varied from a high 64% (Jagannathpur) to a low 35% (Bonhoogly). But the Hindu rates were from a high 53% (Jagannathpur) to a low 10.5% (Ramchandrapur). Over these four villages in question.

Thus, it is clear that in the villages occurrences of diseases of respiratory diseases (especially the diseases like cold and flu) had a wide fluctuations over both Hindu and Muslim families and thereby the families had differential experiences of respiratory system-linked health problems within the close bound of their specific community-enclosure. That the families belonging to different communities (social groups) suffered from respiratory system-linked diseases in unequal magnitude is immediately highlighted. Community-wise variations in the incidences of either infective and parasitic diseases or diseases of respiratory system are quite evident. Such variations have

to be given due weightage in any family health welfare plan and/or programme that may be envisaged for the inhabitants of the locality.

With reference to the third dominant disease group XII of skin-related diseases it has already been pointed out that rural and semi-urban family incidence rates varied only very little (22.2%:rural and 22.5%: urban). But in both rural and town areas the Muslim rates for the disease-group XII were definitely higher than the Hindu rates. The rural Muslim rate (25%) was, on the other, hand much lower than that of the urban Muslim rate (40%). But the Hindus of rural and town areas maintained an equal rate (20%). There is no doubt that the Muslim families suffered in general most from skin-linked diseases, especially from the disease like itch.

It is quite significant that the Muslim rate for skin-linked diseases as found in town areas, was double than that evinced by the Hindu families of the same area. Why the Muslim families alone of town areas suffered skin-linked diseases in such high degrees? Proper medical probe into this specific problem is imperative to have a satisfactory clue. In villages community-wise variation in family incidence rates for skin-related diseases was, of course, of low order. It seems that the Muslim families of town area had in general been exposed more to physical ailments under influence of skin-linked diseases (especially 'itch') than their Hindu counterparts.

In the following three villages the Muslim families yielded higher family incidence rate (FIR) for skin-linked diseases than the Hindu families: (1) Village Chowhati, (2) Village Kumarkhali, (3) Village Ramchandrapur. The Muslim rates over these four villages varied widely. Village Kumarkhali is especially noted since 51 out of every 100 Muslim families of the village reported such diseases and it was the diseases of 'itch' which prevailed most. In this village the Hindu families offered FIR for skin-linked diseases as only 26%. In village Chowhati the Muslim rate (46%) was much higher than the Hindu rate (17%), but in village Ramchandrapur the Muslim and the Hindu rates were very close. It appears that the Muslim families of villages Kumarkhali and Chowhati require special medical attention to tackle physical sickness under skin-related diseases.

On the other hand, the Hindu families of the following two villages were found to offer higher family incidence rate for skin-linked disease: (1) Village Hogalkuria and (2) Village Jayenpur. In Hogalkuria when 34 out of 100 Hindu families reported occurrence of skin-related disease (especially 'itch'), 31.5% of the Muslim families had the sufference from the same

diseases. Next, in Jayenpur village 29% of total Hindu families evinced skin-linked diseases against 25% of Muslim families. This shows that in these two villages the Hindu and the Muslim families faced on more or less similar level the experiences of health problems generated by various diseases of skin and subcutaneous tissues (Group XII).

In general, it may be stated that the Muslim families of rural areas of Sonarpur P.S., 24-Parganas district, faced health problems under the impact of infective and parasitic disease like dysentery and diarrhoea more than their Hindu or Christian counterparts. This state of affairs was also true in the cases of respiratory system-linked diseases like cold and flu or in the cases of skin-linked diseases linked itch. For these three distinct but dominant disease-groups the Muslim families in the given villages evinced always highest family incidence rates. These rural Muslim families were followed next by the rural Hindu families in order of importance. The rural Christian families offered in general the lowest family incidence rates for the said three dominant disease-groups. Thus, the need for the study of incidences of most frequently occurring diseases in villages by community (social group)-affiliation of the families concerned becomes very much pressing.

Family incidence rates (FIR) of different disease-groups or of the most frequently reporting diseases under any broad disease-group as have been presented above, require to be evaluated in consonance with what has been obtained for different communities (social groups) of the local stratified society. These two sets of family incidence rates are complementary to each other and a proper investigation of these rates would certainly provide greater insights into the nature and magnitude of the health problems which prevailed lately among the people of the survey area in 24-Parganas district or for that matter of the State. These rates would be some useful indicators in the field of health planning. Priority of medical as well as public health care can be fixed on the basis of higher or lower family incidence rate obtained for a particular disease-group and again, for a particular community (social group). The findings of family health problems as available now, are expected to help the organization of medical help and public health care among the local inhabitants in terms of their geographical location, community affiliation and family incidence rate for different diseases and physical sickness.

4. Concluding observations

The present discourse has been made with 'Family Health' as an important goal of approach to ongoing national programmes

on public health. Precisely speaking, the role of family (classified by its social affiliation) in national health has been highlighted here. The need of treating the family as a whole as the focus of attention in the matter of health and family welfare services has been stressed and eventually a family rather an individual approach has gained importance in the analysis of available health data.

Health surveys have already been accepted as some significant tool to generate flow of useful health information. In spite of many limitations the present survey had truly yielded substantial volume of such information which, on the other hand, would help in more than one way the plan and programme of health-services envisaged for the area in question. This information reflects immediately upon family distribution of diseases and the same may be thoroughly utilized to guide forward planning of health services. The present findings of the survey provide comprehensively with the much-needed knowledge about disease prevalence on family level. It is felt that family-based distribution of disease in conjunction with population-based distribution of disease would certainly strengthen the very base of the data on national health. Moreover, these two types of distribution would be complementary to yield better health statistics. Importance of the present discourse had therefore to be merited in the light of the above issued. It is strongly hoped that the present family-based health statistics shall eventually help to inculcate new attitudes to the administration of health services as a whole in the country.

World Health Organization had already stressed seriously upon the need for new approaches in health statistics (WHO Tech. Report. No.559, 1974). In this new approach emphasis has been laid on new types of health statistics which can no longer be just concerned with the quantity and population distribution of disease. New orientation of attitude towards environmental factors in disease and health and again, an inclination to see patients as members of family and community groups have lately been urged. Many health indicators are in vogue today but those which embrace not only measures of morbidity of the population but also measures of those social (including economic) characteristics that are the detremnants of levels of morbidity are, no doubt, more useful. With reference to particular population groups such useful health indicators are desired to be employed more. The present study has, indeed, taken the patients as members of family and community groups of the locality and proceeded to offer a kind of health statistics which was not concerned with population distribution of disease. To assist in the formulation of health care plans for families and/or communities of a rural society the present study may have a role to play.

Family incidence rates of different diseases in the local communities have been measured to indicate volume of sickness per hundred families. The rates were not uniformly manifested by the communities. There existed noticeable variation in the incidences of different diseases on family as well as community level. Adequate knowledge on family incidence rates is hardly available. This knowledge may be fruitfully used to develop some health indicators which serve to provide a real guide to the social and medical action plan for the people in question.

The present study reveals that infective and parasitic diseases caused highest family incidence rate in the area and especially the diseases of dysentery and diarrhoea were more frequent to affect health of the family members. Dominance of these diseases was marked in both villages and town. Rural or urban living of the families has no special discriminating role to play in effecting greater or lesser incidences of infective and parasitic diseases. But within the villages prevalence of such diseases did vary to indicate that some of these were running relatively higher risk of exposure. These villages are Jagannathpur, Kumarkhali, Kusumba, Nischintapur and Ukhila. The families of these villages should get highest priority for proper medical care. To draw attention to these five villages should not imply that other villages do not require such care. Villages in general demand proper medical help for rooting out the diseases once and for all. Muslim families of these five villages were, on the other hand, affected relatively more with infective and parasitic diseases like dysentery and diarrhoea. The Muslim community of the area constitutes the focal point for immediate health services.

Family incidence rate of diseases of respiratory system happened to be in second highest order in both rural and semi urban areas. Of these diseases incidences of cold and flu were most frequently reported on family level. Among the members of the families the diseases of respiratory system ranked second in order of importance. Rural or urban living of the families did matter little to influence higher or lower spread of these diseases among their members. But among the villages there existed variations in family incidence rates for respiratory system-linked diseases. In this respect the families of village Jagannathpur, village Nischintapur, village Kumarkhali, and village Ukhila may be again referred as a relatively more affected group. In these villages prevalence of the disease of flu was very marked. In the remaining villages the disease of cold was more frequent on family level. Thus, it becomes clear that the local families had mostly either cold or flu as prevailing disease among them and accordingly whatever appropriate medical attention is required to tackle these diseases

has to be organised early in the very interest of the progress of local health welfare. One additional point is made here. The town families showed relatively higher incidences of the disease of cold than their rural counterparts and naturally they can not be left behind in the plan and programme of necessary health services for respiratory system-linked diseases.

Diseases of skin and subcutaneous tissues had a place of third importance among the rural or town families. It is pointed out here that of various kind of skin-diseases the families in question reported the disease of itch most frequently. This was true for both rural and semi-urban settlements. It seems that skin-linked diseases were not posing as a potent source of any serious health problems to the local families. With their existing way of life and living under tropical condition the members of the families are expected to suffer from 'itch' and remedy for which needs generally no serious medical surveillance. In spite of this fact the families of the following villages may need proper medical care for curing trouble 'itch': 1) Kumarkhali, 2) Mischintapur, 3) Hogalkuria, and 4) Kusumba. In these villages 30 to 40% of families reported physical sickness due to 'itch'. In town area the families affected with skin-disease like 'itch' was of course, not high.

Family incidence rates of disease-group other than the above three dominant groups were low and as such no detailed discussion has been made here. But these rates should not be overlooked, since they indicate to what extent the members of the families rural or urban were exposed to various kinds of physical illness and morbidity condition. Here attention is especially drawn to the family incidence rates for (a) diseases of digestive system, and (b) diseases of musculo-skeletal system. Both the rates were decidedly higher in town areas and this indicates that town families need greater medical care to tackle their health problems generated by the diseases of these two disease-groups (IX and XIII) only.

In human society the family remains ever to be a part of the individual and the individual is an integral part of the family. And as such any sick person is never alone in his/her suffering and no diseased person is an isolated individual. In this social situation whatever assessment of health condition on the strength of individual sick persons may be made, the same can hardly depict family centered dimension of health problems. In any attempt for forward planning for health services in any population group as has lately been urged by the World Health Organisation, adequate knowledge about Family Health problems is sine qua non. In this direction the present study indicates a useful methodology in examining the role of family in community and/or national health.

TABLE 1 Family Incidence Rate* of different Disease-groups for the Families surveyed in villages and semi-urban areas of Sonarpur P.S., 24-Parganas, West Bengal, 1974-75

Disease-group(WHO categories)	Rural area (name of the Village)											All Rural areas	Semi-Urban area		All Semi-Urban areas
	Bon-hooghly	Chow-hati	Ding-alpota	Hogal-kuria	Jagan-nath-pur	Jayen-pur	Kuma-rkhali	Kur-unba	Nisc-hintg-pur	Ram-chen-drapur	Ukh-ila		ELA - CH1	DDAL	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
I. IPD	44.8	26.0	48.7	37.4	97.4	53.1	89.8	100.0	72.7	82.3	99.1	60.1	67.6	50.7	59.2
II. N	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
III. ENMD	1.9	1.3	0.6	0	0	0	0	0	0	2.3	0	0.9	1.4	2.1	1.7
IV. DBBO	1.7	0.9	0	0	0	1.0	0	0	0	0	0	0	0	0	0.4
V. MD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
VI. DVS	1.4	1.4	3.2	0	0	13.5	0	0	0	4.7	0	1.5	2.4	1.7	2.1
VII. DGS	2.9	2.1	0.6	3.3	0	4.2	0	0	0	4.7	0	6.2	7.5	4.5	6.0
VIII. DMS	31.9	33.8	28.8	27.7	63.2	20.8	35.1	29.0	49.3	15.9	35.4	29.2	41.6	36.9	39.3
IX. DDS	4.7	4.5	4.5	2.8	0	3.1	0	15.3	0	5.3	0	3.5	9.5	7.6	8.6
X. DUGS	1.7	0.7	1.9	0	0	2.1	0	0	0	0.6	0	0.8	1.0	0.7	0.9
XI. CFCP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XII. DST	14.1	17.3	12.8	33.5	3.1	27.1	40.1	30.6	37.7	27.0	29.7	22.2	22.2	22.8	22.5
XIII. DCT	1.4	4.6	3.2	0	0	0	0	0	0	9.4	0	2.0	5.8	3.8	4.8
XIV. CA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XV. DPMH	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
XVISILC	92.1	83.7	94.2	85.5	45.6	94.8	88.1	86.5	100.0	83.5	99.6	86.8	100.0	89.3	94.2
XVII. ACV	0.3	1.4	0	0	0	1.0	0	0	0	1.2	0	0.4	1.7	1.0	1.4
No. of Families surveyed	708	562	156	179	193	96	362	124	77	170	229	2856	293	290	583

Disease-groups:

I. IPD: Infective and Parasitic Diseases (code 000-136)

II. N: Neoplasms (140-239)

III. ENMD: Endocrine, Nutritional, and Metabolic Diseases (240-279)

Table 1.

DISEASE - GROUPS

- IV. DBBO : Diseases of Blood and Blood forming organs (280-289)
- V. MD : Mental Disorders (290-315)
- VI. DNS : Diseases of Nervous System and Sense Organs (320-389)
- VII. DCS : Diseases of Circulatory System (390-458)
- VIII. DRS : Diseases of Respiratory System (460-519)
- IX. DDS : Diseases of Digestive System (520-577)
- X. DUGS : Diseases of Urino-Genital System (580-629)
- XI. CFCP : Complications of Pregnancy, Child birth and the Puerperium (630-687)
- XII. DST : Diseases of Skin and sub-cutaneous tissues (680-709)
- XIII. DMCT : Diseases of the Musculo-skeletal System and connective tissues (710-738)
- XIV. CA : Congenital Anomalies (740-759)
- XV. DPM : Certain Diseases of peri-natal morbidity and Mortality (760-779)
- XVI. SILC : Symptoms and Ill-defined conditions (780-796)
- XVII. ACV : Accidents, poisonings and violence (800-999)

* Family Incidence Rate = $\frac{100 \times \text{number of families affected by the particular disease group}}{\text{Total number of families}}$

Total number of families

TABLE 2

Family Incidence Rate of one of Four Cominant Disease-groups and the most frequently reported diseased per disease-group in villages and semi-urban areas of Sonarpur P.S., 24-Parangas, West Bengal, 1972-1975

Rural (R) Semi-Urban (U) area	Rate of Family Incidence Infective and Parasitic diseases-Group I	Most frequently reported diseases of the Group I	
(1)	(2)	<u>Dysentery</u> (3)	<u>Diarrhoea</u> (4)
1. Bonhoogly (R) (No. of Families: 708)	44.8	15.1	-
2. Chowhati (R) (No of families: 562)	26.0	13.2	-
3. Dingalpota (R) (No. of families 156)	48.7	20.0	-
4. Hogalkuria (R) (No of families 179)	37.4	-	11.7
5. Jagannatapur (R) (No of families: 193)	97.4	47.1	-
6. Jayenpur (R) (No. of Families: 96)	53.1	32.3	-
7. Kumarkhali (R) (No. of Families: 362)	89.8	-	57.4
8. Kusumba (R) (No. of Families: 124)	100.0	-	66.1
9. Nischintapur (R) (No. of families: 77)	72.7	44.1	-
10. Ramchandrapur (R) (No. of Families: 170)	82.3	53.5	-
11. Ukhila (R) No. of families: 229)	99.1	-	47.2
All Rural Areas (No. of Families: 2856)	60.1	16.4	14.7
1. Elachi (U) No. of Families: (293)	67.6	15.2	-
2. Jagaddal (U) No. of Families: (290)	50.7	23.2	-
All Semi-Urban Areas No. of Families: (583)	59.2	19.2	-
All Areas (Rural + Semi-Urban) No. of Families: (3439)	59.9	16.9	12.2

TABLE 3

Family Incidence Rate of one Four Dominant Disease - groups and the most frequently reported diseased per disease-group in villages and semi-urban areas of Sonarpur P.S., 24-Parangas, West Bengal, 1974-1975

Rural/ Semi-Urban area	Fa Diseases of Respiratory system (VIII)	Family Incidence Rate of	
		Most frequently reported disease of the Group VIII	
(1)	(2)	<u>Cold</u> (3)	<u>Flu</u> (4)
1. Bohoogly	31.9	26.8	-
2. Chowhati	33.8	31.8	-
3. Dingalpota	28.8	26.3	-
4. Hogalkuria	27.4	23.5	-
5. Jagannathpur	63.2	-	62.7
6. Jayenpur	20.8	7.3	-
7. Kumarkhali	35.1	-	32.6
8. Kusumba	29.0	-	26.6
9. Nischintapur	49.3	-	48.0
10. Ramchandrapur	15.9	12.9	-
11. Ukilia	35.4	-	34.9
ALL RURAL AREAS	29.2	16.8	13.6
1. Elachi	41.6	29.7	-
2. Jagaddal	36.9	33.4	-
ALL SEMI-URBAN AREAS	39.3	31.6	-
ALL AREAS	30.9	19.3	11.3

TABLE 4

Family Incidence Rate of one of Four Dominant Disease-groups and the most frequently reported disease per disease-group in villages and semi-urban areas of Sonarpur P.S.; 24-Parganas, W. Bengal 1974-1975

Rural/ Semi-urban area	Diseases of Skin and sub cutaneous Tissues (XII)	Family Incidence Rate of	
		Most frequently reported disease of the Group XII	
(1)	(2)	Itch	SK.disease of dermatitis
		(3)	(4)
1. Bonhoogly	14.1	5.6	-
2. Chowhati	17.3	10.5	-
3. Dingolpota	12.8	10.9	-
4. Hogalkuria	33.5	27.4	-
5. Jagannathpur	3.1	2.6	-
6. Jayenpur	27.1	27.1	-
7. Kukarkhali	40.1	40.0	-
8. Kusumba	30.6	27.4	-
9. Nischintapur	37.7	32.5	-
10. Ramchandrapur	27.0	27.0	12.9
11. Ukhila	29.7	29.7	?
ALL RURAL AREAS	22.2	16.2	0.8
1. Elachi	22.2*	-	-
2. Jagaddal	22.8	11.4	-
ALL SEMI URBAN AREAS	22.3	14.4	0.6

* In Elachi Skin disease of Abscess was reported most frequently. (Fam. Inc. Rate: 3.4)

TABLE 5

Family Incidence Rate of one of Four Dominant Disease-groups and the most frequently reported disease per disease-group in villages and semi-urban areas of Sonarpur P.S.; 24-Pargana, W. Bengal, 1974-1975

Rural semi-urban area	<u>Symptoms and ill-defined conditions(XVI)</u>	<u>Family Incidence Rate of</u>	
		Most frequently reported disease of the Group XVI <u>Cough</u>	<u>Fever</u>
(1)	(2)	(3)	(4)
1. Bonhoogly	92.1	-	90.7
2. Chowhati	83.7	-	80.1
3. Dingolpota	94.2	46.8	-
4. Hogalkuria	85.5	-	75.4
5. Nagannathpur	45.6	-	27.5
6. Jayenpur	94.8	-	66.7
7. Kumarkhali	88.1	75.4	-
8. Kusumba	86.3	6.4	-
9. Mischintapur	100.0	71.4	-
10. Ramachandrapur	83.5	-	-
11. Ukhila	99.6	93.0	-
ALL RURAL AREAS	86.8	24.3	51.5
1. Elachi	100.0	-	65.5
2. Jagaddal	88.3	-	77.6
ALL SEMI URBAN AREAS	94.2	-	71.5
ALL AREAS	88.1	18.9	54.9

extra

BLACHI - PAIKPARA (WARD XIV)

	Hindu	Muslim	Total
N E E L L R E C E I V E D			

Area : 995 Sq.Miles
 Population : 1813
 Under : Rajpur Municipality.
 Post Office : Narendrapur.
 P.S. : Sonarpur.
 West Bengal.

Sl.No. :	1	:	2
1. :	Muslim	1. :	336
2. :	Ghosh	2. :	75
3. :	Paddaraj	3. :	625
4. :	Bihari	4. :	110
5. :	Kayesta	5. :	104
6. :	Oria	6. :	46
7. :	Paul	7. :	85
8. :	Brahman	8. :	105
9. :	Other (Nepali, Belaspuri, etc)	9. :	327
T o t a l		:	1813

Population chart of the Selected Villages.

1. Elachi - Paikpara	1.	1313
2. Jagaddal	2.	2194
3. South Jagaddal	3.	3805
4. Poleghat	4.	3150
5. Ramchandrapur Dinghatpota	5.	2000
6. Bonhoogly	6.	3000
7. Llkhila	7.	2142
8. Jaganathpur - Nichintapur	8.	1897
9. Kumrakhali	9.	3624

Sl.No.:	Names of the Village leaders.	Age :	Occupation
1.	Sri Gopal Ch. Ghosh	52	Business
2.	" Ananda Mohan Chatterjee	40	Teacher (Service)
3.	" Anil Kumar Das	53	Business
4.	" Santosh Ku. Chatterjee	50	Business
5.	" Sambhu Chatterjee	55	Business

Sl.No.:	Name of Remarkable Places (Elachi - Paikpara)
1.	Sitala Mondir
2.	Gazi baba than
3.	Ganga Mala
4.	Matri Mandir
5.	Amiya Charitable Hospital
6.	Elachi & Ramchandrapur Milen Sangha and Free Primary School (V. B. F. P. School)
7.	Elachi Dighi
8.	Bibi Marzid

PAST & PRESENT HISTORY.

Elachi - Paikpara is a Village (Ward) under the guidance of Rajpur Municipality. It is situated at a distance of Four miles from the Rajpur Municipality.

Coming in contact with the inhabitants of the village or ward (Elachi-Paikpara I came to learn that this village or ward was covered with thick bushes and jungles fifteen years ago. Then the number of population was not remarkable. Cultivation was their only occupation. They produced Paddy, wheat, jute, and jobs. Cows, sheeps, buffaloes and dogs were their domestic pets. Most of them were illiterate. There were no remarkable School and dispensary. As communication bus route was there.

But after the development of this area the number of population of Elachi-Paikpara increased rapidly. Now there was no sign of bushes and thickets at all in this area. Now different kinds of castes are permanently living here, which have been mentioned in Table No. '2'.

Now doctors are available here to stand by the people of this village with their medicine. A permanent twelve beded hospital is here.

Direct communication has been arranged in between Rajpur and Calcutta. There are Rickshawas and Trucks in its surroundings. By the side of this village there runs the high way of Rajpur and Calcutta over which trucks and buses are always plying. By the side of this village a dead ganges is here.

There are some kinds of social associations in this village in the shape of clubs, Mandir, Masjid etc. to make life more beautiful.

People : The locality is very large. Now its population is vast. I have studied the people and found several castes living in the locality. Paddaraj is dominant group of this village.

The people of this place are very simple in their dresses. Most of the villagers of this village wear only a piece of cloth, lungi and dhuti. The female members wear Shari and blouse. Generally the school going children wear shorts and bush shirts.

Huts, Lanes and bye-lanes: Most of the villagers are very poor. There are some pucca buildings in the village. Most of the villagers live in simple huts and cottages whose walls are made of mud. The roof of the huts and cottages are covered by straws. The huts are arranged in a line by the side of the pucca roads. Almost all the huts of this village are situated in a regular series. Most of the huts do not have windows. The doors of the huts are very small.

Village economy : I should like to discuss economic condition of the villagers.

There are three kinds of villagers in this village. (1) Land holders, (2) Service holders, (3) Day labourers. Land holders are not poor, they are rich people and service holders are middle group, they neither poor nor rich but combination of both. But the day labourers are very very poor, they are in large number, most of the villagers are belonging in this Group. They go without any particular occupation. Most of the people are halfed and have to starve.

Faith on
God and
Alla :

All villagers have faith on God or Alla.

A Gazi baba Marzid is here, it is very famous to all the villagers. Its maduli is very remarkable to the patients of Rackta Amasaya, Mali etc. All castes are equally treated in the Gazi Baba Marzid.

Sources of
water and
the condi-
tion of
Lavatory
or Latrine :

Tube wells, little ponds (Doba) and Ganganali are the main sources of water of these villagers. Most of the villagers have their own purchased tube-wells and little ponds (doba). Most of the villagers bath in these ponds and utilise their tube-wells for the purpose of drinking water.

Besides these, there are some government's tube-wells in this village. According to population these are not sufficient.

Coming in contact with the villagers of the village or ward (Elachi) I came to learn that the Lavatory or Latrine is very insufficient according to total families of this village.

There are two kinds of Lavatories and Latrines in this area, one is Pacca (Building), 2nd is kacha (hole). In every educated or literate families have their own pacca lavatory or latrine. They and their children utilise it. Some families, literate and illiterate both utilise or use the kacha lavatory or latrine. But most of the villagers (illiterate) use they use the paddy fields, nearest field, etc. and their children the village road, they are habituated.

extra

Table 1.

DISEASE - GROUPS

- IV. DBBO : Diseases of Blood and Blood forming organs (280-289)
- V. MD : Mental Disorders (290-315)
- VI. DNS : Diseases of Nervous System and Sense Organs (320-389)
- VII. DCS : Diseases of Circulatory System (390-458)
- VIII. DRS : Diseases of Respiratory System (460-519)
- IX. DDS : Diseases of Digestive System (520-577)
- X. DUGS : Diseases of Urino-Genital System (580-629)
- XI. CrCP : Complications of pregnancy, Child birth and the Puerperium (630-687)
- XII. DST : Diseases of Skin and sub-cutaneous tissues (680-709)
- XIII. DMCT : Diseases of the Musculo-skeletal System and connective tissues (710-738)
- XIV. CA : Congenital Anomalies (740-759)
- XV. DPM : Certain Diseases of peri-natal morbidity and Mortality (760-779)
- XVI. SILC : Symptoms and Ill-defined conditions (780-796)
- XVII. ACV : Accidents, poisonings and violence (800-999)

* Family Incidence Rate = $100 \times \frac{\text{number of families affected by the particular disease group}}{\text{Total number of families}}$

TABLE 2

Family Incidence Rate of one of Four Cominant Disease-groups and the most frequently reported diseased per disease-group in villages and semi-urban areas of Sonarpur P.S., 24-Parangas, West Bengal, 1974-1975

Rural (R) Semi-Urban (U) area	Rate of Family Incidence Infective and Parasitic diseases-Group I	Most frequently reported diseases of the Group I	
	(2)	<u>Dysentery</u>	<u>Diarrhoea</u>
(1)	(2)	(3)	(4)
1. Bonhoogly (R) (No. of families: 708)	44.8	15.1	-
2. Chowhati (R) (No of families: 562)	26.0	13.2	-
3. Dingalpota (R) (No. of families 156)	48.7	20.0	-
4. Hogalkuria (R) (No of families 179)	37.4	-	11.7
5. Jagannathpur (R) (No of families: 193)	97.4	47.1	-
6. Jayenpur (R) (No. of families: 96)	53.1	32.3	-
7. Kumarkhali (R) (No. of families: 362)	89.8	-	57.4
8. Kusumba (R) (No. of families: 124)	100.0	-	66.1
9. Nischintapur (R) (No. of families: 77)	72.7	44.1	-
10. Ramchandrapur (R) (No. of Families: 170)	82.3	53.5	-
11. Ukhila (R) No. of families: 229)	99.1	-	47.2
<hr/>			
All Rural Areas (No. of Families:(2856)	60.1	16.4	14.7
<hr/>			
1. Elachi (U) No. of Families: (293)	67.6	15.2	-
2. Jagaddal (U) No. of Families: (290)	50.7	23.2	-
<hr/>			
All Semi-Urban Areas No. of Families: (583)	59.2	19.2	-
<hr/>			
All Areas (Rural + Semi-Urban) No. of Families: (3439)	59.9	16.9	12.2
<hr/>			

TABLE 3

Family Incidence Rate of one Four Dominant Disease - groups and the most frequently reported diseased per disease-group in villages and semi-urban areas of Sonarpur P.S., 24-Parangas, West Bengal, 1974-1975

Rural/ Semi-Urban area	Family Incidence Rate of Diseases of Respiratory system (VIII)	Most frequently reported disease of the Group VIII	
		<u>Cold</u> (3)	<u>Flu</u> (4)
(1)	(2)	(3)	(4)
1. Bohoogly	31.9	26.8	-
2. Chowhati	33.8	31.8	-
3. Dingalpota	28.8	26.3	-
4. Hogalkuria	27.4	23.5	-
5. Jagannathpur	63.2	-	62.7
6. Jayenpur	20.8	7.3	-
7. Kumarkhali	35.1	-	32.6
8. Kusumba	29.0	-	26.6
9. Nischintapur	49.3	-	48.0
10. Ramchandrapur	15.9	12.9	-
11. Ukilia	35.4	-	34.9
ALL RURAL AREAS	29.2	16.8	13.6
1. Elachi	41.6	29.7	-
2. Jagaddal	36.9	33.4	-
ALL SEMI-URBAN AREAS	39.3	31.6	-
ALL AREAS	30.9	19.3	11.3

TABLE 4

Family Incidence Rate of one of Four Dominant Disease-groups and the most frequently reported disease per disease-group in villages and semi-urban areas of Sonarpur P.S.; 24-Parganas, W. Bengal 1974-1975

Rural/ Semi-urban area	Diseases of <u>Skin and sub cutaneous Tissues</u> (XII)	Family Incidence Rate of Most frequently reported disease of the Group XII	
		<u>Itch</u>	<u>SK.disease of dermatitis</u>
(1)	(2)	(3)	(4)
1. Bonhoogly	14.1	5.6	-
2. Chowhati	17.3	10.5	-
3. Dingolpota	12.8	10.9	-
4. Hogalkuria	33.5	27.4	-
5. Jagannathpur	3.1	2.6	-
6. Jayenpur	27.1	27.1	-
7. Kukarkhali	40.1	40.0	-
8. Kusumba	30.6	27.4	-
9. Nischintapur	37.7	32.5	-
20. Ramchandrapur	27.0	27.0	12.9
11. Ukhila	29.7	29.7	?
<hr/>			
ALL RURAL AREAS	22.2	16.2	0.8
<hr/>			
1. Elachi	22.2*	-	-
2. Jagaddal	22.8	11.4	-
<hr/>			
ALL SEMI URBAN AREAS	22.3	14.4	0.6
<hr/>			

* In Elachi Skin disease of Abscess was reported most frequently. (Fam. Inc. Rate: 3.4)

TABLE 5

Family Incidence Rate of one of Four Dominant Disease-groups and the most frequently reported disease per disease-group in villages and semi-urban areas of Sonarpur P.S.; 24-Pargana, W. Bengal, 1974-1975

Rural semi-urban area	<u>Symptoms and</u> ill-defined conditions(XVI)	<u>Family Incidence Rate of</u>	
		Most frequently reported disease of the Group XVI <u>Cough</u>	<u>Fever</u>
(1)	(2)	(3)	(4)
1. Bonhoogly	92.1	-	90.7
2. Chownati	83.7	-	80.1
3. Dingolpota	94.2	46.8	-
4. Hogalkuria	85.5	-	75.4
5. Bagannathpur	45.6	-	27.5
6. Jayenpur	94.8	-	66.7
7. Kumarkhali	88.1	75.4	-
8. Kusumba	86.3	6.4	-
9. Nischintapur	100.0	71.4	-
10. Ramachandrapur	83.5	-	-
11. Ukhila	99.6	93.0	-
ALL RURAL AREAS	86.8	24.3	51.5
1. Elachi	100.0	-	65.5
2. Jagaddal	88.3	-	77.6
ALL SEMI URBAN AREAS	94.2	-	71.5
ALL AREAS	88.1	18.9	54.9

TABLE 6

Socila Group (community)-wise Family Incidence Rqte of different Disease-groups
for the families surveyed in villages and semi-urban areas, W. Bengal 1974

Social group (community)	DISEASE-GROUP (WHO CATEGORIES)												TOTAL Families
	I	III	IV	VI	VII	VIII	IX	X	XII	XIII	XVI	XVII	
	<u>1. Village Bonhooogly</u>												
	(2)												(3)
Hindu	40.3	1.6	1.3	1.0	3.6	29.8	5.3	1.6	14.1	0.3	91.2	0.7	305 (100.0)
Muslim	49.7	2.0	2.3	1.4	2.6	35.6	4.3	1.4	14.4	2.3	93.1	.0	348 (100.0)
Christian	38.6	2.3	4.1 0	2.0	2.3	20.4	4.1	4.1	13.2	2.3	91.3	.0	55 (100.0)
All Groups	44.8	1.9	1.7 7	1.42	.9	31.9	4.7	1.7	14.1	1.4	92.1	0.3	708 (100.0)
	<u>2. Village Chowhati</u>												
Hindu	25.2	1.3	0.9	1.5	2.2	34.3	4.6	0.7	16.6	4.8	84.7	1.4	549 (100.0)
Muslim	61.5	0	0	0	0	15.4	0	0	46.1	0	84.6	0	13 (100.0)
All Groups	26.0	1.3	0.9	1.4	2.1	33.8	4.5	0.7	17.3	4.6	83.7	1.4	562 (100.0)
	<u>3. Village Dingalpota</u>												
Hindu	48.7	0.6	0	3.2	0.6	28.8	4.5	1.9	12.8	3.2	94.2	0	155*(100.0)
	* 1 Christian family was also found in the village												
	<u>4. Village Hogalkuria</u>												
Hindu	39.8	0	0	0	3.1	28.9	2.3	0	34.4	0	83.1	0	128 (100.0)
Christian	31.5	0	0	0	4.1	23.7	4.1	0	31.5	0	86.4	0	51(100.0)
All Groups	37.4	0	0	0	3.3	27.4	2.8	0	33.5	0	85.5	0	179 (100.0)
	<u>5. Village Jagannathpur</u>												
Hindu	66.7	0	0	0	0	53.3	0	0	6.7	0	100.0	0	15 (100.0)
Muslim	100.0	0	0	0	0	64.0	0	0	2.8	0	41.0	0	178 (100.0)
All Groups	97.4	0	0	0	0	63.2	0	0	3.1	0	45.6	0	193 (100.0)

TABLE 6 (contd.)

DISEASE-GROUP (WHO CATEGORIES)

Social Group (community)	I	III	IV	VI	VII	VIII	IX	X	XII	XIII	XVI	XVII	TOTAL Families
<u>6. Village Javenpur</u>													
(1)													(2)
Hindu	49.5	0	1.7	4.7	6.2	28.6	4.7	0	28.6	0	95.7	1.7	67 (100.0)
Muslim	64.3	0	0	35.7	0	0	0	3.6	25.0	0	96.4	0	28 (100.0)
Christian		0	0	0	0	100.0	0	100.0	0	0	0	0	1 (100.0)
All Groups	53.1	0	1.0	13.5	4.2	20.8	3.1	2.1	27.1	0	94.8	1.0	96 (100.0)
<u>7. Village Kumarknali</u>													
Hindu	88.6	0	0	0	0	35.4	0	0	25.9	0	88.6	0	158 (100.0)
Muslim	90.7	0	0	0	0	34.8	0	0	51.0	0	87.7	0	204 (100.0)
All Groups	88.8 89.7	0	0	0	0	35.1 35.1	0	0	40.1	0	88.1	0	362 (100.0)
<u>8. Village Kusumba</u>													
Hindu	100.0	0	0	0	0	50.0	16.7	0	0	0	100.0	0	6 (100.0)
Muslim	100.0	0	0	0	0	28.0	15.2	0	32.2	0	85.6	0	118 (100.0)
All Groups	100.0	0	0	0	0	29.0	15.3	0	30.6	0	86.3	0	124 (100.0)
<u>9. Village Nischintapur</u>													
Hindu	73.3	0	0	0	0	49.3	0	0	36.0	0	100.0	0	75 (100.0)
Muslim	50.0	0	0	0	0	50.0	0	0	100.0	0	100.0	0	2 (100.0)
All Groups	72.7	0	0	0	0	49.3	0	0	37.7	0	100.0	0	77 (100.0)
<u>10. Village Ramchandrapur</u>													
Hindu	83.2	2.1	0	2.1	2.8	10.5	5.6	0.7	26.6	9.1	84.6	0	143 (100.0)
Muslim	78.0	3.9	0	18.7	15.0	44.6	3.9	0	29.8	11.3	78.0	7.6	27 (100.0)
All groups	82.3	2.3	0	4.7	4.7	15.9	5.3	0.6	27.9	9.4	83.5	1.2	170 (100.0)

TABLE 6 (contd.)

DISEASE-GROUP (WHO CATEGORIES)

c

Social Group (community (1)	I	III	IV	VI	VII	VIII	IX	X	XII	XIII	XVI	XVII	TOTAL Families
<u>11. Village Ukhila</u>													
(2)													
Hindu	87.5	.0	0	0	0	12.5	0	0	0	0	100.0	0	8 (100.0)
Muslim	99.5	0	0	0	0	36.2	0	0	30.0	0	99.0	0	221 (100.0)
All Groups	99.1	0	0	0	0	35.4	0	0	29.7	0	99.6	0	229 (100.0)
<u>All Villages (Rural)</u>													
Hindu	47.1	0.4	0.6	1.4	2.2	31.1	3.9	0.8	20.1	2.8	88.7	0.7	1609 (100.0)
Muslim	80.9	0.7	0.7	1.7	1.1	38.4	3.0	0.5	25.3	1.0	84.1	0.4	1139 (100.0)
Christian	34.3	0.9	0	1.8	2.8	13.0	3.7	2.8	21.3	0.9	88.0	0	108 (100.0)
All Groups	60.1	0.9	0.6 1.9	1.5 6.8	6.2	29.2	3.5	0.8	22.2	2.0	86.8	0.4	2856 (100.0)
<u>12. Semi-urban Jagaddal</u>													
Hindu	51.2	2.1	0.4	1.7	4.5	37.0	7.6	0.7	22.8	3.8	88.2	1.0	289* (100.0)
*1 Muslim family was also found													
<u>13. Semi-urban Elachi</u>													
Hindu	66.0	1.3	0.5	1.8	8.9	43.3	10.3	0.9	16.5	6.3	100.0	1.8	224 (100.0)
Muslim	72.5	1.4	0	4.3	2.9	36.2	7.2	1.4	40.6	4.3	100.0	1.7	69 (100.0)
All Groups	67.6	1.4	0.3	2.4	7.5	41.6	9.6	1.0	22.2	5.8	100.0	1.7	293 (100.0)
<u>All Semi-urban areas (urban)</u>													
Hindu	57.7	1.8	0.4	1.7	6.4	39.8	8.8	0.8	20.1	4.9	93.4	1.4	513 (100.0)
Muslim	71.4	1.4	0	4.3	2.8	35.7	7.1	1.4	40.0	4.3	100.0	1.4	70 (100.0)
All Groups	59.2	1.7	0.4	2.1	6.0	39.3	8.6	0.9	22.5	4.8	94.2	1.4	583 (100.0)

APPENDIX A

1. TOTAL HEALTH CARE PROJECT
2. Sponsored by Banerjee Charitable Trust, Calcutta
3. Family Planning Foundation, New Delhi
4. PRELIMINARY CENSUS
5. Narendrapur, wr parganas, West Benga.
6. Tribe/Caste
7. Religion
8. House {
 { Owned
 { Rented
9. village :
10. Municipal/Panchayat
11. T. L. No.
12. Police Station
13. District
14. House No.
15. Family No.
16. Sl. No.
17. Name of Individual
18. Sex
19. Age
20. Year of Birth
21. Relation with Household
22. Place of Birth
23. Marital Status : Codes : UM for unmarried; M for married; W for Widowed
 D for divorced
24. EDUCATION {
 { Illiterate
 { Literate
 { Standard
25. Occupational Status : Codes : E for Farmer; ED for Earning Department;
 D for Dependant
26. OCCUPATION : {
 { Main
 { Subsidiary
27. REMARKS
28. Recorder :
29. Date :

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17. Name of Individual
18. Sex
19. Age
20. Year of Birth
21. Relation with Household
22. Place of Birth
23. Marital Status : Codes : UN for unmarried; M for married; W for Widowed
D for divorced
24. EDUCATION { Illiterate
Literate
Standard
25. Occupational Status : Codes : E for Farmer; ED for Earning Department;
D for Dependant
26. OCCUPATION : { Main
Subsidiary
27. REMARKS
28. Recorder :
29. Date :

Tribe/Caste :

Religion :

House

Owned :

Rented :

Appendix A
TOTAL HEALTH CARE PROJECT

SPONSORED JOINTLY BY

BANERJEE CHARITABLE TRUST, CALCUTTA

FAMILY PLANNING FOUNDATION, NEW DELHI

PRELIMINARY CENSUS

NARENDRAPUR, 24 PARGANAS

WEST BENGAL

Village :

Municipal/Panchayet :

T. L. No. :

Police Station :

District :

556.

House No. :

Family No. :

Sl. No.	NAME OF INDIVIDUAL	Sex	Age	Year of Birth	Relation with Household	Place of Birth	*Marital Status	EDUCATION			**Occupational Status	OCCUPATION		REMARKS
								Illiterate	Literate	Standard		Main	Subsidiary	
1														
2														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														
19														
20														

*Codes : UM for Unmarried

M for Married

W for Widowed

**Codes : E for Earner

ED for Earning Dependand

D for Dependand

Recorder :

Date :

APPENDIX B

1. FAMILY SCHEDULE FOR BASIC HEALTH SERVICES
2. Name of the Hamlet
3. Door No.
4. Religion & Community
5. P. No.
6. Name of Panchayat
7. Block
8. Date of Survey
9. Type of House : Pucca/Kutchra/Hut
10. Own House/Rented
11. Name of the Owner
12. Electrified : Yes/No.
13. Schedule No.
14. Name of Family Members
15. Relationship
16. Year of Birth
17. Sex
18. Marital Status
19. Education Status
20. Occupation
21. Residential status
22. ~~Scar Marks of Pox Marks~~

- | | | | |
|-------------|---|---|-------|
| | { | Scar Marks of Pox marks | |
| | { | | P.V. |
| 22. NSEP | { | Date of vaccination | R.V. |
| | { | Date | |
| | { | | P.V. |
| | { | Verification result | R.V. |
| | { | | Date |
| | { | | |
| 23. BCG | { | If already vaccinated when | |
| | { | If not, date of Vaccination | |
| | { | | |
| | { | Whether children under 5 years had D.T.P. | |
| 24. DTP | { | If not date of immunization | { I |
| | | | { II |
| | | | { III |
| 25. Remarks | | | |

FAMILY PLANNING

1. No.
2. Eligible couple (Serial No. of Husband & Wife)
3. No. of living children including those living elsewhere { M
F
4. Youngest child { Age
Sex
5. Date of nature of termination of last conception
6. Whether husband or wife uses any F.P. method after last live birth
7. If yes what F.P. Method used and when did he/she first start using it after last live birth ? Where did he/she take it ? or if 'N' reasons.

8. ACTIVITIES CARRIED OUT
- { (Type of services : 1. Education activities
2. Supply of contraceptives
3. I.U.C.D.
4. Tubectomy
5. Vasectomy
6. Follow up

{ II Round Date
{ III Round Date
{ IV Round Date

9. Remarks

HOSPITAL SERVICES AND CONCEPT ABOUT DISEASES & TREATMENT

1. Round
2. Date of visit
3. What is the concept about occurrence of diseases in family { God-sent ?
} Other occult reason ?
} Scientific, e.g. intemperate habits, insanitary environments, infection etc. etc.

--: 3 :-

4. Do they go to the Hospital for treatment ? If, Yes { ADH
Other Hospital
Private Practitioner
5. If No. what form of treatment do they seek { Occult
Homeo Ayrvedic
Local Herbal
6. A D H { How long visiting
What result
Has it changed their concept about health

ENVIRONMENTAL SANITATION

1. PARTICULARS : I Source of water supply
II Sullage disposal
III Disposal of Refuse from House
IV Latrine in the House
2. EXISTING CONDITIONS : Within the house/public source
Type Overhead tank with tap/distribution tap
Bore well/Open draw well/Other (Specify)
Soak pit/kitchen garden/Cess pool/Street drain
open stagnation/No Stagnation.
Method of disposal (Specify)
Yes/No. If yes, type of latrine: Flush out/other
Is the latrine in use
If unused reasons for it
Is there Space for latrine construction: Yes/No
If yes, willingness to construct latrine: Yes/No
If there is service type, willingness for its conversion
3. II Round
4. ACTION TAKEN & RESULT III Round
5. IV Round
6. Signature of Worker

APPENDIX B

1. FAMILY SCHEDULE FOR BASIC HEALTH SERVICES
2. Name of the Hamlet
3. Door No.
4. Religion & Community
5. P. No.
6. Name of Panchayat
7. Block
8. Date of Survey
9. Type of House : Pucca/Kutcha/Hut
10. Own House/Rented
11. Name of the Owner
12. Electrified : Yes/No.
13. Schedule No.
14. Name of Family Members
15. Relationship
16. Year of Birth
17. Sex
18. Marital Status
19. Education Status
20. Occupation
21. Residential status
- ~~22. Scar Marks of Pox Marks~~

- | | | | |
|-------------|---|---|----------------------|
| | } | Scar Marks of Pox marks | |
| 22. NSEP | } | Date of vaccination | P.V.
R.V. |
| | } | Verification result | P.V.
R.V.
Date |
| 23. BCG | { | If already vaccinated when | |
| | } | If not, date of Vaccination | |
| 24. DTP | } | Whether children under 5 years had D.T.P. | |
| | } | If not date of immunization | { I
II
III |
| 25. Remarks | | | |

FAMILY PLANNING

1. No.
2. Eligible couple (Serial No. of Husband & Wife)
3. No. of living children including those living elsewhere } M
F
4. Youngest child { Age
Sex
5. Date of nature of termination of last conception
6. Whether husband or wife uses any F.P. method after last live birth
7. If yes what F.P. Method used and when did he/she first start using it after last live birth ? Where did he/she take it ? or if 'N' reasons.

8. ACTIVITIES CARRIED OUT
- | | |
|---------------------|-----------------------------|
| (Type of services : | 1. Education activities |
| | 2. Supply of contraceptives |
| | 3. I.U.C.D. |
| | 4. Tubectomy |
| | 5. Vasectomy |
| | 6. Follow up |
- II Round Date
- III Round Date
- IV Round Date

9. Remarks

HOSPITAL SERVICES AND CONCEPT ABOUT DISEASES & TREATMENT

1. Round
 2. Date of visit
 3. What is the concept about occurrence of diseases in family
- | | |
|---|---|
| { | God-sent ? |
| | Other occult reason ? |
| | Scientific, e.g. intemperate habits, insanitary environments, infection etc. etc. |

4. Do they go to the Hospital for treatment ? If, Yes { ADH
Other Hospital
Private Practitioner
5. If No, what form of treatment do they seek { Occult
Homeo Ayrvedic
Local Herbal
6. A D H { How long visiting
What result
Has it changed their concept about health

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II Sullage disposal
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IV Latrine in the House
2. EXISTING CONDITIONS : Within the house/public source
Type Overhead tank with tap/distribution tap
Bore well/Open draw well/Other (Specify)
Soak pit/kitchen garden/Cess pool/Street drain
open stagnation/No Stagnation.
Method of disposal (Specify)
Yes/No. If yes, type of latrine: Flush out/other
Is the latrine in use
If unused reasons for it
Is there Space for latrine construction: Yes/No
If yes, willingness to construct latrine: Yes/No
If there is service type, willingness for its conversion
3. II Round
4. ACTION TAKEN & RESULT III Round
5. IV Round
6. Signature of Worker

APPENDIX B

1. FAMILY SCHEDULE FOR BASIC HEALTH SERVICES
2. Name of the Hamlet
3. Door No.
4. Religion & Community
5. P. No.
6. Name of Panchayat
7. Block
8. Date of Survey
9. Type of House : Pucca/Kutchra/Mud
10. Own House/Rented
11. Name of the Owner
12. Electrified : Yes/No.
13. Schedule No.
14. Name of Family Members
15. Relationship
16. Year of Birth
17. Sex
18. Marital Status
19. Education Status
20. Occupation
21. Residential status
- ~~22. Scar Marks of Pox Marks~~

- | | | |
|-------------|---|------------------|
| | Scar Marks of Pox marks | |
| 22. NSEP | Date of vaccination | P.V.
R.V. |
| | Date | P.V.
R.V. |
| | Verification result | R.V.
Date |
| 23. BCG | If already vaccinated when | |
| | If not, date of Vaccination | |
| 24. DTP | Whether children under 5 years had D.T.P. | |
| | If not date of immunization | { I
II
III |
| 25. Remarks | | |

FAMILY PLANNING

1. No.
2. Eligible couple (Serial No. of Husband & Wife)
3. No. of living children including those living elsewhere { M
F }
4. Youngest child { Age
Sex }
5. Date of nature of termination of last conception
6. Whether husband or wife uses any F.P. method after last live birth
7. If yes what F.P. Method used and when did he/she first start using it after last live birth ? Where did he/she take it ? or if 'N' reasons.

8. ACTIVITIES CARRIED OUT
- | | |
|---------------------|-----------------------------|
| (Type of services : | 1. Education activities |
| | 2. Supply of contraceptives |
| | 3. I.U.C.D. |
| | 4. Tubectomy |
| | 5. Vasectomy |
| 6. Follow up | |
- II Round Date
- III Round Date
- IV Round Date

9. Remarks

HOSPITAL SERVICES AND CONCEPT ABOUT DISEASES & TREATMENT

1. Round
2. Date of visit
3. What is the concept about occurrence of diseases in family { God-sent ?
Other occult reason ?
Scientific, e.g. intemperate habits, insanitary environments, infection etc. etc.

4. Do they go to the Hospital for treatment ? If, Yes {
ADH
Other Hospital
Private Practitioner
5. If No. what form of treatment do they seek {
Occult
Homeo Ayurvedic
Local Herbal
6. A D H {
How long visiting
What result
Has it changed their concept about health

ENVIRONMENTAL SANITATION

1. PARTICULARS : I Source of water supply
II Sullage disposal
III Disposal of Refuse from House
IV Latrine in the House
2. EXISTING CONDITIONS : Within the house/public source
Type Overhead tank with tap/distribution tap
Bore well/Open draw well/Other (Specify)
- Soak pit/kitchen garden/Cess pool/Street drain
open stagnation/No Stagnation.
- Method of disposal (Specify)
- Yes/No. If yes, type of latrine: Flush out/other
Is the latrine in use
If unused reasons for it
Is there Space for latrine construction: Yes/No
If yes, willingness to construct latrine: Yes/No
If there is service type, willingness for its conversion
3. II Round
4. ACTION TAKEN & RESULT III Round
5. IV Round
6. Signature of Worker

APPENDIX D

1. FAMILY SCHEDULE FOR BASIC HEALTH SERVICES
2. Name of the Hamlet
3. Door No.
4. Religion & Community
5. P. No.
6. Name of Panchayat
7. Block
8. Date of Survey
9. Type of House : Pucca/Kutchra/Hut
10. Own House/Rented
11. Name of the Owner
12. Electrified : Yes/No.
13. Schedule No.
14. Name of Family Members
15. Relationship
16. Year of Birth
17. Sex
18. Marital Status
19. Education Status
20. Occupation
21. Residential status

~~22. Scar Marks of Pox Marks~~

- | | | |
|-------------|---|------|
| | Scar Marks of Pox marks | |
| 22. NSEP | | P.V. |
| | Date of vaccination | R.V. |
| | Date | |
| | Verification result | P.V. |
| | | R.V. |
| | | Date |
| 23. BCG | { If already vaccinated when | |
| | { If not, date of Vaccination | |
| 24. DTP | { Whether children under 5 years had D.T.P. | |
| | { If not date of immunization | I |
| | | II |
| | | III |
| 25. Remarks | | |

FAMILY PLANNING

1. No.
2. Eligible couple (Serial No. of Husband & Wife)
3. No. of living children including those living elsewhere { M
F
4. Youngest child { Age
Sex
5. Date of nature of termination of last conception
6. Whether husband or wife uses any F.P. method after last live birth
7. If yes what F.P. Method used and when did he/she first start using it after last live birth? Where did he/she take it? or if 'N' reasons.

8. ACTIVITIES CARRIED OUT

- (Type of services :
1. Education activities
 2. Supply of contraceptives
 3. I.U.C.D.
 4. Tubectomy
 5. Vasectomy
 6. Follow up
- II Round Date
III Round Date
IV Round Date

9. Remarks

HOSPITAL SERVICES AND CONCEPT ABOUT DISEASES & TREATMENT

1. Round
2. Date of visit
3. What is the concept about occurrence of diseases in family { God-sent ?
Other occult reason ?
Scientific, e.g. intemperate habits, insanitary environments, infection etc. etc.

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ADH
Other Hospital
Private Practitioner
5. If No. what form of treatment do they seek {
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Homeo Ayurvedic
Local Herbal
6. A D H {
How long visiting
What result
Has it changed their concept about health

ENVIRONMENTAL SANITATION

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2. EXISTING CONDITIONS : Within the house/public source
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Bore well/Open draw well/Other (Specify)
Soak pit/kitchen garden/Cess pool/Street drain
open stagnation/No Stagnation.
Method of disposal (Specify)
Yes/No. If yes, type of latrine: Flush out/other
Is the latrine in use
If unused reasons for it
Is there Space for latrine construction: Yes/No
If yes, willingness to construct latrine: Yes/No
If there is service type, willingness for its conversion
3. II Round
4. ACTION TAKEN & RESULT III Round
5. IV Round
6. Signature of Worker

FAMILY SCHEDULE FOR BASIC HEALTH SERVICES

Name of the Hamlet Name of Panchayat Block Date of Survey Schedule No.
 Door No. M. No. Type of House : Pucca / Kutcha / Hut. Own House / Rented Electrified : Yes / No.
 Religion & Community Name of the Other

Name of Family Members	Relationship	Year of Birth	Sex	Marital Status	Education Status	Occupation	Residential Status	N S E P						B C G		D T P			Remarks.			
								Scar Marks or Pox Marks.	Date of Vaccination		Verification Result		If already vaccinated	If not, date of Vaccination	Whether Children under 5 Yrs had D.T.P.	If not date of Immunization						
									P.V.	R.V.	Date	P.V.				R.V.	I	II		III		

FAMILY PLANNING

No.	Eligible Couple (Serial No. of Husband & Wife.)	No. of living children including those living elsewhere		Youngest Child		Date and nature of termination of last Conception	Whether husband or wife uses any F.P. method after last live birth	If yes what F.P. Method used and when did he/she first start using it after last live birth ? Where did he/she take it ? or if 'no' reasons.	Type of Services	ACTIVITIES CARRIED OUT				Remarks
		M	F	Age	Sex					II Round Date	III Round Date	IV Round Date		
									1 Educational activities					
									2 Supply of contraceptives					
									3 I. U. C. D.					
									4 Tubectomy					
									5 Vasectomy					
									6 Follow up.					

Operationalisation of the Scheme

extra

The Scheme got ^{of} a good start by being launched by no less a person than the Governor of West Bengal. It was decided that the population covered by the scheme would be 22,000 spread over 13-14 villages and that ~~time~~ to start with the trust agreed to requisition the services of ~~appoint~~ a Professor of Social Anthropology in conducting the baseline survey, so that changes later in the ~~attitude~~ health status of the people due to various services provided by the project could be identified in the process of evaluation.

• At the same time the normal work of the hospital and ^{its programme of} voluntary sterilization was continued to maintain a close contact with the community and give the ^{survey} field workers a professional back up service. ~~The survey took an unexpectedly long time since it became more anthropological rather than health oriented~~

• By the time the project got all its ^{additional} ~~stuff~~ what was expected to take place be completed in a few ^{months} ~~weeks~~ time - got rather prolonged due to ~~unavoidable circumstances and~~ the survey pulled on for over 1½ years. By the time the data was analysed - ~~the~~ emergency was declared and

Report on Total Health Care Project
Narendrapur, Calcutta

A Case Study: in Project Management

1. Preamble.
2. Background
 - a. Foundation's interest
 - b. Aniya Debi Charitable Hospital
 - c. Selection of Project.
3. ~~the~~ Plan of Action - initial.
 - b. plan of Action - professional context
4. Problems Faced by Project.
5. Evaluating process - thru available statistics
6. Planning Alternatives
7. Assessing additional resources
- 8.

(1)

The Family Planning Foundation has for a long time had Family Planning Through Integrated Health Care as one of its priority areas for research. It ~~has~~ ^{was} ~~been~~ felt that there was a need for a well tested and documented project experience of developing a Family planning programme as part of a Mother and child care extension programme of a small hospital. The Narangul experiment has shown the interrelatedness ^{and mutually supporting role} of child care services, maternal health services, family planning and nutrition but a more realistic demonstration of this approach was considered worthwhile especially if it could emanate from a small voluntary hospital ^{and spread} ~~into~~ ^{to extend} its rural environs. The private or voluntary nature of the hospital set up was considered crucial since this process needed ~~flexibility~~, innovation and a sensitivity to local socio-economic, cultural and political forces and ~~and~~ an ability to tap the ~~maximum possible resources of the community,~~ work and react creatively ^{with} ~~to~~ these ~~forces~~.

(2) The Amiya Debi Charitable ~~Hospital~~ Trust was established in 1966 by Dr. Maxwella Terun Banerjee - ^{one of the} ~~among the~~ foremost gynecologists and ~~anesthetist~~ ^{anesthetist} respectively of Calcutta and his wife Dr. Mrs. Banerjee a well known anesthesiologist.

The Trust is run by a Management Committee, the chairman of which is Mr. ^{C.R.} Irani Managing Director of Statesman. The Trust established the Amiya Debi Charitable Hospital at Narendrapur, 9 miles from Calcutta.

(1)

The Family Planning Foundation has for a long time had Family Planning Through Integrated Health Care as one of its priority areas for research. It ~~has~~ ^{was} ~~been~~ felt that there was a need for a well tested and documented project experience of developing a Family planning programme as part of a Mother and child care extension programme of a small hospital. The Narangul experiment has shown the interrelatedness ^{and mutually supporting role} of child care services, maternal health services, family planning and nutrition but a more realistic demonstration of this approach was considered worthwhile, especially if it could emanate from a small voluntary hospital ^{and spread} ^{into} ^{to} ^{extend} its rural environs. The private or voluntary nature of the hospital set up was considered crucial since this process needed ~~flexibility~~, innovation and a sensitivity to local socio-economic, cultural and political forces and ~~and~~ an ability to tap the maximum possible resources of the community, work and react creatively ^{with} ~~to~~ these ~~forces~~.

(2) The Amiya Debi Charitable ~~Hospital~~ Trust was established in 1966 by Dr. Maxilla Torun Banerjee - ^{one of the} ~~among the~~ foremost gynecologists and ~~ancestral~~ ^{ancestral} respectively of Calcutta and his wife Dr. Mrs. Banerjee a well known anaesthesiologist.

The Trust is run by a Management Committee, the chairman of which is Mr. ^{C.R.} Irani Managing Director of Statesman. The Trust established the Amiya Debi Charitable Hospital at Narendrapur, 9 miles from Calcutta.

in May 1969. This was a 12-bedded rural hospital ^{on 3 bighas of land of an} unostentatious, single storied and white washed building consisting of two consulting rooms, a small air conditioned operation theatre, an outpatients section, an inpatient section, a store and other basic facilities. The clientele of the hospital come from the neighbouring villages - about 10 mile radius around the hospital. The population of this area is mixed - Hindu and Muslim. The Hospital has visiting specialists including a gynecologist, anaesthetist, skin specialist and chest specialist. On its permanent staff it has a trained staff nurse, pharmacist, compounder, general duty attendants, sweepers and Ayah. The hospital is clean and well equipped and it apparently has a high degree of acceptance by the local people because of the quality of medical care and service. The following table shows the phenomenal increase in patient load of this hospital from 1969-72.

Table-I

Annual patient Load

Year	Number
1969	1194
1970	9537
1971	11891
1972	15444

Two eye camps were also organised by the trust in the early years and a system of referral of ~~some~~ cases requiring specialised attention to larger Calcutta hospitals was also evolved. All expenses were borne by the trust and medicines and other medical help is provided free of cost to the villagers.

③. Selection of Project

The Amiya Debi Charitable Trust after ~~years~~ ~~of service~~ was keen to extend its services to ~~the neighbouring villages through~~ ~~as by~~ the was keen to promote the national effort and the state govt effort in Family Planning by promoting female sterilization in the area and for doing this it was felt that female sterilization should be offered as a part of a package of services to the mothers in the area so that their decision to accept a permanent method would arise from a feeling of security about their own health condition and that of their young children. Thus an integrated health package was hypothesised as being more useful ~~and~~ in promoting the acceptance of voluntary sterilization and attempts were ~~to~~ initiated to identify resources for the reorientation of the curative work of the hospital..

* The Family Planning Foundation ^{got to hear} ~~which soon~~ ~~about this project~~ and soon became interested ~~became interested~~

• in developing a Total Health Care project in the area. with ~~two~~ ~~objective~~

a) To ~~have~~ ~~an~~ ~~integrated~~ ~~health~~ ~~care~~ ~~project~~ with ~~critical~~ ~~inputs~~ ~~of~~ ~~Family~~ ~~Planning~~.

b) To work out the ~~quantity~~ ~~and~~ ~~nature~~ ~~of~~ ~~inputs~~ ~~for~~ ~~such~~ ~~an~~ ~~integrated~~ ~~health~~ ~~scheme~~.

It was ^{particularly} ^{interested} in the organisation.

a) ~~Because~~ because here was an opportunity to galvanise social service minded citizens in the area to be involved in health programmes

b) The area of ~~coverage~~ ~~was~~ ~~not~~ ^{had} with a mixed Hindu-Muslim population and though it ~~is~~ ~~rural~~ it apparently had come under a

Strong urban influence.

① A scheme was presented for
Objectives some period

The main objective was to demonstrate that it was possible to have an integrated health care project with critical inputs of family planning through the infrastructure of a private hospital with a strong community base. The idea was to work out the quantum and nature of inputs of ~~these~~ integrated health care consisting of curative and preventive health care, family planning, nutrition, maternal and child health and MTP. The basic idea was to demonstrate the concept of integrated health care through galvanising private effort.

Methodology

It was planned that the project would be divided into three phases.

Phase One - A survey of the area with a view to

- determine the socio-economic and demographic profile of the population
- identify priorities in health and family planning needs
- Meaningfully identify all infrastructural support that could be utilised or tapped from Government and other agencies for the project

Phase Two - Use findings of Phase one to determine the nature and content of a demonstration programme of integrated health care

Phase Three - Active Demonstration of the project with a view to show its efficiency and as well as its ability to get people involved in the support of their own health care

out the baseline survey. A team of field workers^{and statisticians} were also appointed to ~~help~~^{assist} him in carrying out the survey. Suitable accommodation was provided for the staff and their records.

A proforma (A) ^(appendix) for getting the Preliminary Census was drawn up.

After consultation with the Technical expert sent by the Foundation it was decided the census proforma was inadequate for ~~get~~ collection of data required for planning of the health programme and another proforma (appendix B) - a family schedule for Basic health services was drawn up.

After standardising the method of survey and training the team in the field the survey was undertaken. On completion of the preliminary survey the Research Scientist prepared ~~the reports~~ ^{the} follow-up that were found to be too anthropologically oriented. Ref Table II.

The Foundation arranged that ^{some members of} the Survey team would be sent to Gandhigram, Rural Institute of Health and Family Planning to get an orientation on planning a rural survey designed to get data relevant for health planning. This programme was arranged and successfully completed from 2nd - 8th August 1973.

What was expected to be completed in a few months however was prolonged for more than a year and inordinate delays in analysis ^{of the survey data} made the problem worse. ~~The first and only report of the second survey~~

The following reports were submitted after the analysis of the Family Schedule

Table II - Total Health Case project

Reports

Submitted.

1. Total Health

Based on Preliminary Census

1. Report on Socio-demographic Survey Feb 1975
2. Some aspects of natality by social groups Feb 1975
3. Bisocial profiles of Small Families March 1975

ing reports

Report on Family Health Problems in a rural society - April 1976

(Sonarpur P.S., 24 Parganas district, West Bengal)
(Appendix C & Tables)

Report of Family Planning Activities September 1976
(in 11 villages and 2 semi-urban settlements of Sonarpur P.S.)

REPRESENTING THE UNSEEN:
SYMBOLISM IN SOUTH INDIAN FOLK HEALING

ABSTRACT

The paper is about linguistic / cultural representation of the 'unseen' in folk healing tradition in a south Indian village. The word *kaatthu* is used to refer to a range of causal agents, medium as well as to the ailments caused by these agents. Within the folk healing tradition it has a unified essential underlying meaning: something invisible that afflicts people - children, women, men and even an unborn foetus. It reveals how this society grapples with representing reality and the limitation of language for such representation as well as construction of folk medical knowledge in the society.

The specific intended meaning of the term *kaatthu* unfolds in actual usage with reference to the context - the context accompanying physical symptoms, mental state of mind of person afflicted with *kaatthu*, age and sex of the person and the entire cultural milieu in which the language is generated and used. For an outsider it may be difficult to relate the 'order of words' and the 'order of things' to derive the meaning. The referral link between the two is neither explicit nor uniform across all contexts.

Kaatthu as a cause of and as a basis for typology of ailments straddles across both material-rational and magico-religious realms. The physical qualities of wind, wind as a medium carrying the unseen germs as well as the un-seeable malevolent spirits, which lurk in dark abodes of emptiness are represented as *kaatthu*. It represents both the causal agent and the medium: the wind and the germs, the malevolent force and darkness. It also refers to a range of physical ailments, mental temperaments caused by these causal factors.

Dealing with this complex symbolic construction throws up a number of interesting themes to explore. Firstly, the very complexity of this conception - *Kaatthu*. Secondly, the problem of representing and translating reality across culture - from the field to the ethnographic notes. And, thirdly to understand organisation of folk medical knowledge revealed through such conceptual categories. The paper aims to explore some of these issues. It is largely based on fieldwork done in a village in Coimbatore district.

Dear Dr. Nalini

I would be presenting on Contraceptive use and women's status in Tamil Nadu. I am in the middle of heavy teaching session. I am not sure how much I would be able to write by the middle of Feb. I would try to the best possible.

I would Ramila Bisht to get in touch with you if she is still planning to participate.

With warm regards

Nakkeeran

PRESS RELEASE

Oct. 16, 2000

We, the undersigned, women's organisations and health activists express our dismay, concern and protest at the present trend of population policies in the country which are self contradictory and profoundly anti-women. There are two issues involved both linked to each other. Firstly, the macro policy framework which is defined by the National Population Policy 2000, and secondly, the contraceptive policy which concerns the introduction of different types of contraceptives in the Government sponsored family planning programme. At the outset, contrary to motivated propaganda against our position, we would like to categorically state that we advocate family planning in the interests of the poor and women in particular based on voluntary choice. **We firmly believe that women should have the right to decide the number of children they want and access to safe and affordable contraception.** We believe that women want and need safe contraceptive choices which are user controlled and which carry no risks to their health. We intend to meet the Union Health Minister with our concerns and depending on his response, launch a countrywide campaign on the issues involved.

Contraceptive Policy

In their bid to meet population targets under the World Bank tutelage, and as part of the 'liberalization' policies, the Indian authorities have in the past few years relaxed Drug regulations in order to expedite the introduction of long acting, invasive, hazardous contraceptives into India. Unchecked over-the-counter sales, misinformed doctors and inadequate Post Marketing Studies are the harsh realities of this strategy which is poised to subject millions of Indian women to contraceptives such as the injectables and subdermal implants, that will cause irreversible damage to their and their progeny's health. The injectable contraceptive Depo-Provera was approved for marketing in India in 1993 without the mandatory phase 3 trials. This has marked a big victory for the parent company Upjohn, the American multinational, who has gained access to the second largest market without having to prove safety.

Women's groups, health groups and human rights groups throughout the country have opposed the introduction of this injectable given the potential for abuse, inadequacy of research and the lack of accountability of pharmaceutical agencies. Conclusion from analysis of major studies from all over the world now compels us to call for a complete ban of injectable contraceptives from both the public (national family planning programme) and the private sector (including the NGOs) in the country. In no case they should become a part of the Family Planning Programme.

Depo-Provera has been indicted for causing a climacteric-like syndrome (pre-mature menopause), irreversible atrophy of the ovaries and endometrium (inner lining of uterus) leading to permanent sterility, deaths due to spontaneous formation of clots inside blood vessels (thrombo-embolism), two fold increase in acquiring HIV infection from an infected partner as well as increased transmission from an infected woman to a non-infected partner, a ten-fold increase in the birth of a Down Syndrome baby in women users, and increased chances of death in children born to women users. Increase in the risk of breast

cancer, cervical cancer including carcinoma-in-situ. in sub-groups of women are other life-threatening risks with Depo-Provera.

Upjohn company has deliberately suppressed and/or underplayed many of these serious life threatening complications thereby misleading both the Drugs Controller of India and the medical community. Many of these studies have been funded by Upjohn or directly carried out by their bio-statistical division. Given the large body of scientific information that already exists, going through the motions of another study as has been done as part of the post marketing surveillance, a study that has flouted all ethical and epidemiological norms, is an attempt to further mislead and misinform the concerned authorities.

We condemn this deliberate misrepresentation of information as unethical and strongly urge the Indian government to ensure that such hazardous drugs are not brought into the country. In addition to all the dangers mentioned above, the existing health infrastructure is not capable of providing the counselling and follow up that is mandatory for such long acting contraceptives We warn the Government against introducing either Depo Provera or Net-en, in any form into the family planning programme.

Population policies

The Government of India had announced its Population Policy 2000 recently, as well as set up a Population Control Commission. We believe this is a waste of public money and will serve no useful purpose. Whereas in response to the widespread opposition from different quarters, including women's organisations, the population policy 2000 gives up the earlier thrust on coercive disincentive policies, the Government still has an ambiguous and self contradictory stand towards disincentives. For example the Bill to prevent those with more than two children from standing for elections remains on the Government agenda. Equally disturbing is the trend of State Governments to announce population policies which are based on a system of disincentives which can only be termed as draconian. It would appear that in the era of liberalisation State Governments are directly negotiating with international funding agencies for loans which, as in the past, may include conditionalities for population control at any cost. For example the Maharashtra Government has announced that it will deprive the third child of rations through the PDS. This when children have been dying of malnutrition in the State. In Rajasthan, Madhya Pradesh and UP, the Governments have announced similar disincentives including denial of access to Government schemes, Government loans, Government jobs—in other words punishing the poor for their poverty. All the above State Governments along with Haryana and Delhi have also passed legislation denying the right to those with more than two children to stand for elections to panchayats and local bodies. Thus the Government has a self contradictory policy—it talks of target free- no disincentives regime—while at the same time it encourages State Governments to go ahead with such draconian measures. Either there is a national approach or there is not—in which case let the Population Commission be immediately wound up.

Signatories:

All India Democratic Women's Association, Sama, Jagori, Medico Friends Circle, Magic lantern Foundation, Nirantar, Shodhini Network, Action India, Locost (Baroda), Drug Action Forum (Karnataka), Saheli, Delhi Science Forum, Centre of Social Medicine and Community JNU, Lawyers Collective, FORCES, RAHI, CREA, Ankur, Women's Rights Initiative, MARG, TARSHI, Pratidhi, Human Rights Law Network, Guild Of Service, Centre for Social Research, AIWC, Navjyoti Delhi Police, Angaja Foundation

Brinda Kame

AIDWA

Kalpna C

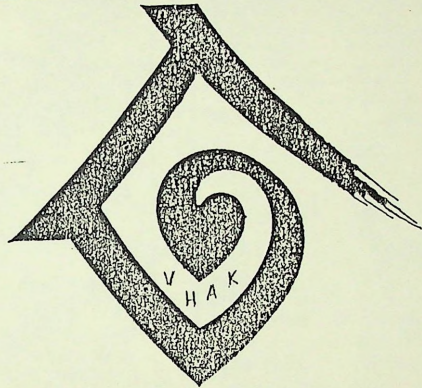
JAGORI

Jarajini

Sama

SATYANMATA

MEDICO FRIENDS CIRCLE



1994

*International
Year of the
Family*



*A heart sheltered by a roof,
linked by another heart, to symbolize life and love
in a home where one finds warmth, caring,
security, togetherness, tolerance and acceptance –
that is the symbolism conveyed by the emblem of
the International Year of the Family (IYF), 1994.
The open design is meant to indicate continuity
with a hint of uncertainty. The brushstroke, with its
open line roof, completes an abstract symbol
representing the complexity of the family.*

Proclamation of IYF

1. The United Nations General Assembly, in its resolution 44/82 of 8 December 1989, proclaimed 1994 as the International Year of the Family. The theme of the Year is "Family: Resources and Responsibilities in a Changing World".
2. In proclaiming the Year, the Assembly decided that the major activities—for its observance should be concentrated at the local, regional and national levels, assisted by the United Nations system. It designated the United Nations Commission for Social Development as the preparatory body and the Economic and Social Council as the coordinating body for the Year.

This document is based upon:

1994 International Year of the Family,
"Building the Smallest Democracy at the Heart
of Society" United Nations, Vienna, 1991.

CHECKLIST of activities for an effective
International Year of the Family 1994
The Vienna Non Governmental Organizations
(NGO) Committee on the Family, Vienna, 1990.

Available in alternate media upon request

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O BJECTIVES

The objectives of IYF are to stimulate local, national and international actions as part of a sustained long-term effort to:

- (a) increase awareness of family issues among Governments as well as in the private sector. IYF would serve to highlight the importance of families; attain a better understanding of their functions and problems; promote knowledge of the economic, social and demographic processes affecting families and their members; and focus attention upon the rights and responsibilities of all family members;
- (b) encourage national institutions to formulate, implement and monitor policies in respect to families;
- (c) stimulate efforts to respond to problems affecting, and affected by, the situation of families;
- (d) enhance the effectiveness of local, regional and national efforts to carry out specific programs concerning families by generating new activities and strengthening existing ones;
- (e) improve the collaboration among national and international non-governmental organizations in support of multi-sectoral activities;
- (f) build upon the results of international activities concerning women, children, youth, the aged, the disabled as well as other major events of concern to the family or its individual members.

*Building on earlier
International Years*

- | | |
|------|--------------------------|
| 1975 | Women |
| 1979 | Children |
| 1981 | Disabled Persons |
| 1985 | Youth |
| 1987 | Shelter for the Homeless |
| 1990 | Literacy |
| 1993 | Aboriginal Peoples |

PRINCIPLES

The following principles underlie the IYF proclamation:

A.

The family constitutes the basic unit of society and therefore warrants special attention. Hence, the widest possible protection and assistance should be accorded to families so that they may fully assume their responsibilities within the community, pursuant to the provisions of the Universal Declaration of Human Rights, the International Covenants on Human Rights, the Declaration on Social Progress and Development; and the Convention on the Elimination of All Forms of Discrimination against Women.

B.

Families assume diverse forms and functions from one country to another, and within each national society. These express the diversity of individual preferences and societal conditions. Consequently, the International Year of the Family encompasses and addresses the needs of all families.

- C. Activities for IYF will seek to promote the basic human rights and fundamental freedoms accorded to all individuals by the set of internationally agreed instruments formulated under the aegis of the United Nations, whatever the status of each individual within the family, and whatever the form and condition of that family.

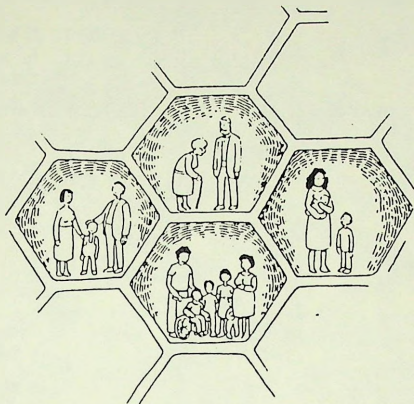
D.

Policies will aim at fostering equality between women and men within families and to bring about a fuller sharing of domestic responsibilities and employment opportunities.



E.

Activities for IYF will be undertaken at all levels – local, national, regional and international; however, their primary focus will be at the local and national levels.



F. Programs should support families in carrying out their functions, rather than provide substitutes for such functions. They should promote the inherent strengths of families, including their great capacity for self-reliance, and stimulate self-sustaining activities on their behalf. They should give expression to an integrated perspective of families, their members, community and society.



G. IYF will constitute an event within a continuing process. Measures will be needed to ensure appropriate evaluation of progress made and obstacles encountered both prior to and during IYF, in order to ensure its success and adequate follow-up.

National Coordinating Organization

The national coordinating organization is a high-profile, influential organization representing government, NGOs and the private sector. Mechanisms from previous International Years will help this organization to plan, encourage and coordinate IYF activities.

NGO Support

To ensure crucial NGO involvement and support for IYF, NGOs should be well-represented in the national coordinating organization. Communication between NGOs and government agencies should be encouraged and NGOs' expertise recognized and utilized.

Role of the Private Sector

Family ties impact on the private sector through employee productivity and community stability. The Private sector could spread information through its communication networks, subsidize useful family services and provide financial support for IYF programs.

COMMUNICATION



- Dialogue and communication with local and grass-root level
- Active partnership between government and volunteer organizations, business and labour

INFORMATION



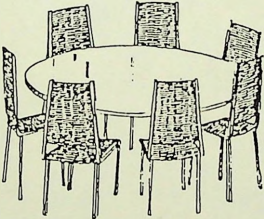
Public awareness of the IYF and circulation of information on international legal instruments and conventions relevant to family members

RESEARCH



- Review legislation to clarify impact on families
- Encourage academic research on family matters

AN AGENDA FOR EVERYONE

<p>1 GOVERNMENTS</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Promote IYF with a solid action plan <input checked="" type="checkbox"/> Integrate findings of former Years into IYF's action plan <input checked="" type="checkbox"/> Create an environment that promotes the family <input checked="" type="checkbox"/> Understand that socio-economic decisions affect families <input checked="" type="checkbox"/> Create programs to strengthen the family as a focal point for social development <input checked="" type="checkbox"/> Consider how misuse of resources and of the environment affects present and future families 	<p>2 VOLUNTARY ORGANIZATIONS</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Organize discussions on family living involving fathers and other male family members <input checked="" type="checkbox"/> Promote mutual help in times of need <input checked="" type="checkbox"/> Train and support parents for self-help groups <input checked="" type="checkbox"/> Facilitate job access for disadvantaged groups like the young, women, and disabled persons <input checked="" type="checkbox"/> Improve access to family services <input checked="" type="checkbox"/> Create social and recreational opportunities for families in the neighbourhood 	<p>3 NGOs</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Encourage member participation in IYF <input checked="" type="checkbox"/> Organize a "Day for the Family" <input checked="" type="checkbox"/> Support activities which may improve family life <input checked="" type="checkbox"/> Act as resource centre for information on aspects of social development and work conditions which affect families <input checked="" type="checkbox"/> Evaluate the organization's objectives in relation to the needs of families and communities
<p>4 MEDIA/OPINION LEADERS</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Create a positive family atmosphere in the media <input checked="" type="checkbox"/> Promote awareness of family concerns and issues <input checked="" type="checkbox"/> Focus on destructive effects of substance abuse on families and on preventive family measures <input checked="" type="checkbox"/> Produce special family inserts, pages, programs, films <input checked="" type="checkbox"/> Encourage a pro-family climate in paintings, music, sculpture, literature <input checked="" type="checkbox"/> Ensure that IYF focuses on the needs of families in industrialized and in developing countries 		<p>5 SOCIAL SERVICES</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Improve family health and well-being <input checked="" type="checkbox"/> Promote communication and non-violent problem-solving <input checked="" type="checkbox"/> Use the "Families help families" model to deal with social problems <input checked="" type="checkbox"/> Support the elderly living in the community <input checked="" type="checkbox"/> Strengthen the self-care ability of families <input checked="" type="checkbox"/> Assess social security measures to ensure their adequacy for healthy family life
<p>6 FAMILY ORGANIZATIONS</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Monitor government activities on basic social services <input checked="" type="checkbox"/> Support all families in difficult circumstances <input checked="" type="checkbox"/> Include in the "Rights of the family" the rights of women victims of domestic and social violence <input checked="" type="checkbox"/> Campaign for the rights of the child, in particular the right to a permanent substitute family and to the child's heritage <input checked="" type="checkbox"/> Develop awareness of the diversity of family structures and functions and of the diversity of roles within the family 	<p>7 EDUCATIONAL/RESEARCH</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Involve families in all educational plans <input checked="" type="checkbox"/> Use educational network to discuss family needs <input checked="" type="checkbox"/> Encourage family-centred activities in health and education, taking into account single-parent families <input checked="" type="checkbox"/> Provide special education sessions for families with special needs <input checked="" type="checkbox"/> Encourage research on the role of families in various cultural and social contexts 	<p>8 FAMILIES</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Develop family councils to make decisions <input checked="" type="checkbox"/> Respect the capacities, dignity and needs of all family members <input checked="" type="checkbox"/> Stress the responsibilities of all with regard to the children and disadvantaged members of the family <input checked="" type="checkbox"/> Enhance the feeling of togetherness through gatherings, shared meals and leisure activities <input checked="" type="checkbox"/> Motivate all family members to share effectively all household and other responsibilities

THE FAMILY with its diverse forms and functions, is a positive and essential unit in society, to be appreciated, to be supported and to be protected.

Matriarchal
Family

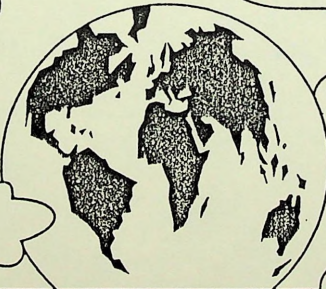
Extended
Family

Modified-Extended
Family

Conjugal
Family

Single-Parent
Family

Nuclear
Family



Patrilineal
Family

The VOLUNTARY HEALTH ASSOCIATION OF KARNATAKA (VHAK) is a secular, non-profit federation of over 156 Voluntary Organisation in Karnataka, working in the field of health and community development. VHAK strives to make health a reality for all, the people of Karnataka especially the unreached and to the needy.

VHAK fulfills these objectives primarily through health Education and Training and by providing information to the target groups. VHAK provides platform for all the Vol-agencies to come together and explore the possibilities of strengthening the Health Care delivery system through Workshops/Seminars/Dialogues for improving the quality and services of health care.

VHAK campaigns on relevant and important health issues to ensures that a people oriented health policy is brought about and effectively implemented. VHAK also works to sensitise the larger public towards a scientific attitude on health.

VHAK.

ಕರ್ನಾಟಕ ಆರೋಗ್ಯ ಸಂಘದ ಕೆನಡಾ ಶಾಖೆ
 ನಂ. 60, ರಾಜ್ ಪೇಜೆ, ಕೆ.ಆರ್. ಸಾಹೇಬ ರಸ್ತೆ,
 ಅರಸೀಕೆರೆ, ಬೆಂಗಳೂರು-560 008.

Introduction

Strengthening families as basic units of society

Far from being static, families are dynamic units engaged in an intertwined process of individual and group development. They can be viewed from three different perspectives. First, a family can be seen as a biological unit whose members are linked together by blood ties; this relationship is often institutionalized through marriage or sanctioned by an equivalent relationship and describes the kinship between mothers, fathers and their children. Secondly, a family can be seen as a social unit consisting of a number of people, who usually live together in the same household and share different developmental tasks and social functions. Thirdly, a family can be seen as a psychological unit defined around the personal feelings and emotional bonds of its members. In a psychological conception of families, children who have moved out, or even dead parents, may still be considered part of the family.

In many parts of the world, owing to various social, political and economic changes, families are undergoing tremendous stresses that weaken their ability to care for their members. There is a global recognition of the need for societies to support families in their important functions. The International Covenant on Economic, Social and Cultural Rights (General Assembly resolution 2200 A (XXI), annex), in article 10, provides that "the widest possible protection and assistance should be accorded to the family, which is the natural and fundamental group unit of society, particularly for its establishment and while it is responsible for the care and education of dependent children".

Families require a comprehensive and, at the same time, synthesizing social policy approach, as they provide the fullest reflection, at the grass-roots level, of the strengths and weaknesses of a country's social welfare environment.

Objectives of the International Year of the Family

The General Assembly, in its resolution 44/82, proclaimed 1994 as the International Year of the Family (IYF). The objectives of IYF are to stimulate local, national and international actions as the starting-point of a sustained long-term effort:

- (a) To increase awareness of family issues among Governments as well as in the private sector;
- (b) To strengthen national institutions to formulate, implement and monitor policies in respect of families;
- (c) To stimulate efforts to respond to problems affecting, and affected by, the situation of families;
- (d) To enhance the effectiveness of local, national and regional efforts to carry out specific programmes concerning families;
- (e) To improve the collaboration between national and international organizations in support of multisectoral activities;
- (f) To build upon the results of international activities concerning women, children, youth, the aged and the disabled, as well as of other major events of concern to the family or its individual members.

Information material

In addition to a quarterly bulletin (*The Family*) and an *Occasional Papers Series* on family issues (currently available only in English), the IYF secretariat has published a brochure in English, French and Spanish and posters in the six official languages of the United Nations. Guidelines on the use of the IYF logo are also available in the six official languages. Other useful materials are listed in annex I.

Voluntary Fund for the International Year of the Family

Limited financial support for IYF and its family-specific activities is available from the Voluntary Fund for IYF. The Fund will support operational elements of the programme for IYF, particularly in the developing countries, and promote research studies and the exchange of information on family issues. Project proposals elaborating the objectives, activities, intended beneficiaries, budget and amount of support requested may be submitted to the IYF secretariat. Pledges of contributions to the Fund, as well as requests for funding for IYF-specific projects can be sent to the Coordinator for IYF.

Contributions to the Fund, with an indication that they are for the *Voluntary Fund for IYF*, can be deposited in:

- United Nations General Trust Funds Account (No. 015-004473) at the Chemical Bank, New York 10017, United States of America, or
- United Nations Contributions and Revenue-Producing Income (Dollar) Account (No. 0112-75005/00) at the Creditanstalt-Bankverein, Schottengasse 6, A-1010 Vienna, Austria.

National focal points for the International Year of the Family

Governments have been asked to identify an agency and contact person to serve as a focal point to liaise with the IYF secretariat in preparing for IYF. With the assistance of the focal point, information from the IYF secretariat can be distributed to all the governmental and non-governmental organizations and other groups involved within each country. In some cases, countries may wish to appoint a focal point before a formal national coordinating committee is established to ensure a regular communication flow. It is important that the focal point subsequently joins the formal national coordinating committee to ensure continuity, although this is not always the case.

National coordinating committees

Governments are invited to establish a national coordinating mechanism of persons with an interest in the family, such as a national coordinating committee for IYF, to plan, stimulate and coordinate activities by governmental and non-governmental agencies. Governments are requested to inform the IYF secretariat of the steps being taken to establish these coordinating committees and of any plans to maintain or disband the national focal point.

In establishing a coordinating mechanism, Governments may draw on their experience in the coordination of other international years, such as the International Women's Year (1975), the International Year of the Child (1979), the International Year of Disabled Persons (1981) or the International Youth Year: Participation, Development, Peace (1985).

In order to accomplish its objectives, a national coordinating mechanism for IYF should have adequate political influence and high public visibility. Some Governments have nominated the President of the Republic, the First Lady, or some other eminent person as the chairperson or the honorary president of the national coordinating committee.

Many Governments find it useful to nominate a large coordinating body of members with diverse influence and resources. In this kind of coordinating committee, the coordinating and advisory functions are emphasized. It is also advisable to appoint a small working subcommittee from among the members of the coordinating body to ensure the efficiency of the preparatory work. Another approach is to limit the membership of the coordinating committee and to establish several working subcommittees for specific purposes.

Functions of a national coordinating committee

Some of the functions of a national coordinating committee are described below.

Coordination of local and national activities

In order to use its resources effectively, the committee should act as a coordinating body for all governmental and non-governmental activities related to IYF. It should also serve as an information source for all activities at the local and national levels. An attempt should be made to coordinate, or facilitate the coordination of, activities of all other groups at a local level who are working on IYF.

The relationship with local coordinating bodies should include a strong two-way communication flow to boost the information provision and reporting functions of the national coordinating committees. National coordinating committees should also promote the exchange of information between local organizers and groups to avoid duplication of effort and to enrich the overall field of activity.

Promotion of IYF

The committee should provide an effective channel for the promotion of IYF at the local and national levels, involving both governmental and non-governmental organizations. It should generate and support activities for IYF and sensitize public opinion on family-related issues and problems, which will necessitate a strong partnership between the national coordinating committee and the national media.

Elaboration of a national programme

The committee should elaborate and implement a national programme for the preparations for, and observance of, IYF, including suggestions for the improvement of the situation of families, and setting of priorities, as well as an agenda for action.

Review of the situation of families and family policy

On the national and local levels, there is a need to review and assess the situation of families, identifying specific issues and problems. Also, family policies should be monitored and evaluated, including various governmental and non-governmental programmes of direct and indirect concern to families.

Research on the family

The committee should promote, coordinate and, if possible, undertake research on the family. It would be beneficial if the committee or another suitable body could serve as a depository for national information and data relating to the family.

Incorporation of programmes for the family into national development strategies

For a long-lasting effect, it is critical to develop strategies to incorporate new or existing family programmes into national development plans. This process may require more time than is available for the preparations for IYF in 1994, but it should be begun as part of the effort to develop long-range plans to strengthen and support families. This process is elaborated in more detail in the sections below.

Coordination of national and local activities

Involving all interested parties

To ensure the widest possible participation and impact, it would be advisable to invite all interested parties to be involved in the preparations for and observance of IYF. According to regional and national circumstances, these might include:

- (a) Governmental bodies dealing with social affairs, health, education, housing, employment or other areas of concern for families;
- (b) Non-governmental organizations active in the fields of family, children, youth, women, men, the elderly and the disabled, as well as any other associations interested in family affairs;
- (c) Private-sector groups with an interest in supporting family ties, or in providing services for families as customers, clients or employees.

Working groups may be established for specific purposes, such as preparing a publication or organizing an event. These groups should report to the coordinating committee to ensure an efficient division of labour and flow of information.

Facilitating the exchange of information

The national coordinating committee has a pivotal function in ensuring a regular flow of information on IYF to, from and between interested participants.

This process also encompasses providing regular reports on national activities to the IYF secretariat and, in turn, receiving and disseminating information on activities in other countries.

National coordinating committees will generally require enough logistical and operational support to collect, store and disseminate information from and to the international, national and local levels.

Promotion of the International Year of the Family

One of the primary tasks of the coordinating committee is to plan the phases and ways in which the public should be informed of IYF and sensitized to family questions. The experiences derived from earlier international years might prove helpful. A high level of visibility is needed to attain the goals of IYF and a substantial preparatory process is needed to publicize the activities planned during IYF.

In addition, the committee should be prepared to devote time to planning promotional and awareness-raising campaigns. Separate approaches may be required; for example, to raise awareness of unique family issues at the national level or of the importance of families to the national society as distinct from the objective of raising awareness of IYF as an international event. Special efforts may be required to ensure that information on IYF is accessible to all groups in the national society, which may mean, for example, making material available in the language of minority populations, in Braille or as cassettes.

It may also be important to assess the current state of public information and opinion on families, including the identification of popular misconceptions and stereotypes.

Sensitizing public opinion might be undertaken in phases. The first phase might be to alert the media of the proclamation of IYF and to seek their expertise and cooperation. National, regional and local media, in the form of television, radio, newspapers or journals, have a wide public exposure and provide useful channels for information dissemination.

The second phase might be to seek the cooperation of different organizations, associations, schools, libraries and other interest groups in distributing information as well as in collecting it, for example in the form of questionnaires.

The third phase might be the implementation phase in which forums for public discussion might be established and information disseminated. Information on family policies, problems concerning families, IYF events and other materials should be distributed widely. A most important target group would be decision makers, both at the local and national levels.

Elaboration of a national programme

For effective planning, it is advisable to make a step-by-step agenda with a timetable and clearly state the organs and persons responsible for each item. The items could be divided, for example, into three categories: (a) existing programmes; (b) special events or short-term projects; (c) new initiatives.

In elaborating a national programme, it is also advisable to distinguish between short-term goals (increasing awareness of family issues by organizing events, disseminating information) and long-term goals (reviewing, restructuring or enhancing existing programmes and initiating new ones) to formulate and implement policies in respect of families. Both tasks are demanding and necessitate planning and the setting of priorities. Ensuring complementarity and continuity in drawing up the short-, medium- and long-term agenda is an important aspect of such planning.

Local and national target areas

In addition to the global objectives of IYF set out in the introduction above, national goals that are specific to local cultures and concerns are envisaged for each country and each region. The concept of the family differs in each culture and the needs and problems of families may vary substantially even within the same country.

In order to select target areas, it may be important to identify:

- (a) Different types of family found in society;
- (b) Sources of information on families;
- (c) Sufficiency of information on families;
- (d) Type of misinformation or assumptions existing regarding families;
- (e) Forms of support that families need;
- (f) Whether laws concerning families are consistent with the International Covenants on Human Rights, the Convention on the Elimination of All Forms of Discrimination against Women (General Assembly resolution 34/180, annex) or the Convention on the Rights of the Child (General Assembly resolution 44/25);
- (g) Availability of appropriate subsidies or reductions in favour of families;
- (h) Sufficiency and appropriateness of non-financial programmes to support families;
- (i) Whether existing programmes and services are complementary, harmonized and coordinated;
- (j) Appropriate mix of services;

- (k) Problems in the delivery and administration of existing services;
- (l) Kind of services or training needed to strengthen and support the functions of families;
- (m) Most urgent needs to be met;
- (n) Major obstacles (economic, legal, social, historical, institutional, psychological) against progress;
- (o) Changes that have been introduced, and whether similar services could be developed, or more innovative and appropriate ways of proceeding;
- (p) Best mechanisms for designing and testing new approaches;
- (q) Persons, groups and organizations needed for cooperation;
- (r) Most effective combination of existing resources.

In order to accomplish the national objectives, both short-term and long-term actions are likely to be needed. All the activities of IYF should be complementary and contribute to attaining the selected goals.

Setting priorities for short-term goals

The most important short-term goal would be to create and increase awareness of the importance of families to social progress and development. The situations and needs of families should be widely discussed and information on family issues should be gathered and disseminated widely. Besides substantive activities, promotional activities should be considered; for example, organizing special days and events for families; involving children and the public in various contests and innovative activities (selling posters, badges, easy-to-read materials etc.); and encouraging municipal and village authorities to organize special events.

Depending on local needs or traditions, activities to meet short-term goals might include some of those listed below (see also annexes II and III):

Arranging events

- Organizing congresses, seminars, meetings and discussions on family issues
- Organizing special "family days" (when family members might visit the workplace, participate in festivities and have free access to amusement parks etc.) or family reunion days (when families are encouraged to get together)
- Organizing demonstrations on behalf of families, or whatever seems innovative and suitable to create a positive atmosphere towards families

Disseminating information

- Issuing booklets, brochures, articles, posters, postcards, badges etc.
- Cooperating with the mass media on issues concerning families and family policies
- Holding meetings with parents and "open house" in different social services centres and offices dealing with family affairs
- Involving employers in the publicizing of family services or policies of benefit to employees

Activating discussion

- Arranging public polls, inquiries, votes on different family subjects such as the roles of spouses, parents, siblings and children, and the relationships between in-laws
- Organizing children's competitions in drawing, essay-writing etc.

- Holding debates and public discussions
- Producing a television series on family matters

The priority of activities as well as their timing needs careful consideration. If the coordinating committee is able to set up working groups or cooperate with special interest groups, considerably more could be accomplished than if the committee alone were responsible. There are usually numerous professional associations and groups that might be interested and to which some of the tasks could be delegated. Similarly, it is important to identify resources that exist to support activities of all types and at all levels, and to canvass these resources. One way of giving the widest possible visibility to IYF is to incorporate a family theme in the existing programmes and future activities of all interested organizations.

Setting priorities for long-term goals

Beyond the activities prior to and during 1994, the ultimate objective for IYF is to improve the situation of families permanently and to strengthen their ability to fulfil their functions, which requires careful and long-term planning. One of the most important prerequisites for effective long-term planning would be a report on the current status of families. This state-of-the-family report could be prepared by holding a series of expert group meetings culminating in a national conference at which recommendations and conclusions would be developed. These could then be published and distributed to legislators, policy makers, practitioners and researchers to be used as a basis for long-term planning. A longer term approach might involve establishing a national research programme on family issues.

It is proposed that the goals and target areas should concentrate on supporting families and their proper functioning rather than on examining symptoms of malfunctioning; for instance, programmes should be oriented towards enriching spousal relationships rather than towards diminishing the amount of divorces. Goals should also be concrete enough to allow for an evaluation to determine if they were reached or not. (Examples: update the Marriage Act to provide for more equality between spouses; lengthen parental leave, and make it applicable and feasible for fathers as well; establish day-care centres for the children of shift workers; provide courses on "Responsible fatherhood" and "Home economics"; develop a curriculum and centres devoted to the prevention of family violence; introduce curricula on "Preparation for family life".)

Review of the situation of families and family policy

In order to decide on the priorities for long-term goals, an overview of the situation of families is needed. One useful model for determining the long-term needs of families would be to consider if the functions of families are being sufficiently strengthened and supported. Some functions of a family are that it:

- Establishes emotional, social and economic bonds between spouses;
- Provides a framework for procreation and sexual relations between spouses;
- Gives a name and status to family members, especially to children;
- Provides for basic care of children and, in many cultures, of aged and disabled relatives;
- Facilitates the socialization and education of children (and parents);
- Protects family members;
- Offers emotional care, affection and recreation to its members;
- Provides services and resources for its members.

The functions of the family and ways of supporting them are set out in annex IV.

On the national level, it should be determined whether or not each function is being supported effectively by such means as: (a) family policies and legislation; (b) benefits and subsidies; and (c) services and training.

Different sub-themes for IYF could be developed from the issues highlighted below, following an identification of the most urgent needs of families in the community concerned.

Establishing emotional, social and economic bonds between spouses

Marriage and equivalent relationships give the two partners a new role in the new family: that of being a spouse. Constant efforts throughout the years are usually required to develop a warm and well-functioning spousal relationship, whether it is established through traditional rituals, formalized marriage or cohabitation.

In some countries, the legal age of marriage for females is as low as 12 or 14 years; sometimes minimum legal ages are not enforced. Only 22 countries have granted equal rights to both sexes in matters of marriage, divorce and family property.

Examples of issues needing reconsideration

LAWS AND POLICIES. Do the existing marriage laws protect children from having to contract a marriage early in life? Do the laws grant equal rights to both sexes, especially in matters of marriage, divorce, inheritance and family property? Is there any need to sensitize public opinion to the roles of spouses?

BENEFITS. Do benefits or tax reductions support the institution of marriage? Do such benefits promote equality between spouses?

SERVICES. Is sufficient guidance given in selecting a partner? Do young people receive enough information on family issues or education on family life? Is there a need for programmes on enriching spousal relationships or for divorce mediation?

Providing a framework for procreation and sexual relations between spouses

The maintenance of appropriate levels of population renewal is crucial to the survival of any society. The health of children is directly affected by their mothers' health and nutrition during pregnancy and infancy. Research has shown that the health of both women and children can be significantly improved by spacing births at least two years apart, avoiding pregnancies before the age of 18 and limiting the total number of pregnancies to four. Since families are the institutions charged with the responsibility for procreation, many countries provide some form of monetary compensation for the care of children.

Sexuality also has a vital function as a connecting link between the spouses even when seen as distinct from procreation. Intimacy and satisfying sexual roles for both partners may also need to be learned and promoted.

Examples of issues needing reconsideration

LAWS AND POLICIES. Is the existing legislation on procreation (e.g. on the possibility of abortion, *in vitro* fertilization) updated and consistent with the interests of the persons concerned, as well as the society or culture? Do the existing norms of sexual roles satisfy both sexes?

BENEFITS. Are there sufficient ways of financially supporting pregnancy and parturition (e.g. in the form of parental leave, free or subsidized care)? Are families adequately compensated for the economic burden of raising children?

SERVICES. Are adequate health services and emotional support available for pregnancy and parturition? Would sexual counselling, information on reproduction for youth, or family planning programmes be needed? What kind of programmes on "Responsible fatherhood" would be appropriate in the cultural context?

Giving a name and status to family members, especially children

Usually, children born in wedlock automatically inherit the name of the family and associated legal rights (e.g. to inherit family property). Unfortunately, the right to inherit does not apply to females in all countries. Children born out of wedlock should also have the same rights as those of other children. Likewise, adoption laws should give adopted children rights equal to those of biological children.

Examples of issues needing reconsideration

LAWS AND POLICIES. Are all children accorded equal rights concerning the name, status, or property of the family regardless of their sex? Do adopted children or children born out of wedlock enjoy the same rights as other children? Are the laws on guardianship updated, for example, after a possible divorce; is joint custody possible for those who would want it? Are adoption laws in line with Declaration on Social and Legal Principles relating to the Protection and Welfare of Children, with Special Reference to Foster Placement and Adoption Nationally and Internationally (General Assembly resolution 41/85, annex)?

BENEFITS. What responsibilities do fathers have to provide financial support to children born out of wedlock? Is there any public funding available in cases where the father is unknown or is unable to pay? Do tax laws promote the provision of support and protect beneficiaries?

SERVICES. Is there any service or legal aid to assist in matters of guardianship, name-giving or the legal status of children? Are the adoption process and adoption agencies functioning properly, and are they operating in accordance with international standards?

Providing for basic care of family members

The basic care of children and other family members is a crucial task for the family. Without the care provided by the family, many of the sick, disabled and elderly would not be cared for. However, families need support for this task and the burden should be more evenly shared by all family members than was the case before, as care has typically been the responsibility of women alone. In many cultures, the former traditions of child care no longer exist or, owing to altered family structures or external forces, are no longer able to operate. In declining extended family systems, for example, older relatives may not be able to transfer their knowledge to younger generations. Parental education is also needed. Where both parents work outside the home,

nurseries and kindergartens as well as flexible work arrangements would greatly facilitate the integration of basic care and other responsibilities.

Examples of issues needing reconsideration

LAWS AND POLICIES. Are the laws on custody, responsibilities and rights of children and parents updated? Are the responsibilities and rights of families as compared with those of society well defined? Do both partners receive equal treatment in regard to the custody and financial support of children in the case of separation or divorce?

BENEFITS. Are there economic possibilities for parents to stay at home to take care of infants, or when a child is ill? Is it possible for those in need to receive subsidized day-care assistance? Do families receive any benefits or housing aid, especially for caring for aged or disabled family members? Are adequate housing facilities available for families?

SERVICES. How are parents trained for the basic care of their children? How accessible is guidance and information? Are adequate and safe day-care facilities available? Where do families obtain help if the burden of care is temporarily too heavy?

Facilitating the socialization and education of children (and parents)

Everywhere the socialization of children is considered so important that societies have taken part in it, providing schools and other forms of education. Even during a recession, it would be short-sighted to reduce these efforts, since education is the main way of building for the future of the child and society. The level of education of girls has a direct correlation to the future health of the family, family size and spacing, as well as to its economic well-being.

The special educational needs of children with physical, mental, emotional and cognitive disabilities, children of recent immigrants, of minority groups, aboriginals and low-income groups have to be met.

Examples of issues needing reconsideration

LAWS AND POLICIES. Do all children regardless of their sex, economic situation or physical condition have a right to education? Is basic education available for adults who have not completed their primary or secondary schooling? How do educational policies or curricula affect the home life of families?

BENEFITS. Are there ways of financially supporting education (e.g., in the form of free schools, books, equipment, travel, school meals etc.)? Are families supported to a level that their children can attend school free from the responsibility to earn a living?

SERVICES. Are nurseries and schools inspiring, innovative and attractive? In addition to the formal curriculum, are children encouraged to explore and practise empathy, human dignity, equality and social justice? Is there a need for education programmes for parents? Are schools, kindergartens located where they are needed? Do their operating hours reflect and respect the needs of families? Are mechanisms in place that establish communication between parents and teachers?

Protecting family members

People look to their families for shelter and one of the vital functions of the family is provide protection for its members. Unfortunately, in stressed families this function might be endangered. Family violence has been largely hidden and has only recently been dealt with openly.

It is the responsibility of society to support families in creating a secure place for all its members. Various preventive programmes have proved effective all over the world. The pervasive problem of crime is also an imposing challenge and source of stress for many families. Numerous examples exist where families can be active in reducing their likelihood of being victims of crime. Families may also be important partners in reducing crime in local communities.

Examples of issues needing reconsideration

LAWS AND POLICIES. Do national child protection laws meet international standards? Are any of the different types of violence inside the family legally sanctioned? Are they adequately controlled? Are there laws and policies that help enforce non-violent ways of upbringing or problem-solving? Is the public fully aware of their human rights with regard to dignity and sexual self-regulation?

BENEFITS. To prevent domestic violence, are there, for instance, adequate housing programmes or means of financial support for families in crisis situations?

SERVICES. What kind of prevention programmes would be appropriate? Are shelters, emergency telephones; legal advice and guidance available for troubled families? What kinds of care and therapy would be needed for troubled individuals and families? Are educational and other forms of assistance available to families to reduce their risk of victimization by crime? Are families involved in crime prevention schemes?

Providing emotional care, affection and recreation to family members

By defining the roles and behavioural models of family members, society greatly affects the emotional atmosphere of families. There are numerous old but still practised customs (e.g. in the form of proverbs) that define the roles and relationships between family members. There are also several myths, which are constantly being strengthened through the mass media, concerning motherhood, fatherhood, and the roles of wife, husband and children. These written or implied norms can have an enormous impact on people's behaviour.

Examples of issues needing reconsideration

LAWS AND POLICIES. Do the present social customs regarding family life and the roles of family members satisfy the needs of all concerned? Are the emotional and psychological needs of family members recognized in policy or law?

BENEFITS. Are there provisions for free or subsidized counselling, health-care facilities or leave for burdened families or family members? Are employers encouraged to provide family support services or to recognize the impact of work-related demands and stresses on family life?

SERVICES. Do family members need any kind of sensitization or training in order to provide emotional care for each other? Are there any services for family counselling or family therapy? Do services exist in preventive mental-health care? Are community recreational facilities appropriate to the needs of families and do they help families to spend leisure time together?

Providing services and resources for family members

By defining the goals of social and economic policies, societies define the role of the family as the provider of resources for its members. There are often crucial differences between government policies for the distribution of public funds to individuals and families. The fewer social benefits and public services there are available, the more the welfare of the individual depends on the resources of the family and the prevention of different risk situations.

Examples of issues needing reconsideration

LAWS AND POLICIES. Is there an equitable division of labour for both sexes in the household and in the labour market? Are there regulations to facilitate the integration of work and family life? What is considered to be the responsibility of society to support families in need? Are family members that participate in family enterprises afforded the same state protection and services as other employees? Is family-based production recognized in economic policy or in development incentive programmes?

BENEFITS. Are there adequate allowances, benefits, tax reductions or subsidies to support families in the performance of their functions? Are benefits programmes harmonized and complementary?

SERVICES. Should children or newly-weds be trained in home economics? Are there services for families when they cannot manage their daily tasks because of illness, disability, age or the number of children? Are there adequate housing facilities for families, youth and the aged? Is housing appropriate to the variety of family forms that exist in the society or culture?

Research on the family

Collecting data on families

Collecting data on families and family policy might be an important national priority of IYF. Material may be made readily available to the public through publications or press releases.

Governmental, community or regional census offices, as well as numerous service agencies and family-related organizations, collect census and other data on families. With the cooperation of these organizations, such data could be used for the purposes of IYF. However, they often fail to elucidate several important issues concerning families especially when more detailed or substantial information would be needed. Universities and research centres might be able to help on more detailed issues and libraries or government information services might publicize and raise awareness of existing sources of information.

Information might be developed on the existing forms of support to families; the types of benefit and their use, as well as the services available to families, the types of client and possibly some of the parameters of such benefits or services. The history of laws concerning families and the benefits that they receive as a proportion of the gross national product are also of interest.

Promoting research

It is important to promote research on families, their forms, functions and needs for support. In cooperation with universities and research institutes, for example, the national coordinating committee should support studies and projects on such issues. (See annexes II and IV.)

Because census or other official data are often collected on the basis of households, special efforts might be taken in the collection of information on families, since there are certain

differences between these two concepts. This might involve gathering new and different data, or developing methodologies and capabilities to reconfigure existing data. It may also involve the development of longitudinal files to follow families through their life cycle.

Follow-up to the International Year of the Family

After IYF, it would be advisable to follow up the situation of the families at regular intervals. These situation reports may be more effective if they are developed on a regular schedule that is known to policy makers and other interested groups. Has there been any change in the laws, benefits and services concerning families? What kinds of new programmes and projects have been established? During the design phase of programmes and services, plans should be developed that would allow for rigorous evaluation.

Records should also be kept during the introduction of new initiatives to allow for their evaluation from design to implementation. Often the success or failure of a programme depends on how it is undertaken. Such process evaluations also provide useful information for those attempting to replicate successful programmes, or even in developing programmes to address different problems or to meet specific to local conditions. Because the actual content of programmes (i.e. specific benefits or services for national or local needs) is likely to vary between countries, knowledge on the process of design and implementation is often more transferable than the actual programmes themselves.

Another problem concerns the lack of evaluation research in the area of social policies and the failure to assess the impact of such policies on families. This deficiency can itself have a profound impact on families as regards income security, health or housing and has several causes. First, families, generally, have not been at the forefront of the social policy debate. Secondly, the orientation of much social policy has been focused on the particular needs of individual family members rather than on families as a whole. Finally, many of the methodological tools that are used in evaluation research are often not adequate to the complex task of assessing policy impacts on families. Including family impact assessments as a standard or legally required feature of the national planning process for social or economic development would be an important, durable and ongoing contribution to the objectives of IYF.

Annex I

SAMPLE RESOURCE MATERIALS

Checklist of Activities for an Effective International Year of the Family 1994 produced and distributed by the Vienna NGO Committee on the Family. Copies are available in English, French, German and Italian from:

NGO Executive Secretariat - IYF
An der Hulben 1/15
A - 1010 Vienna, Austria
Telephone: 513 86 87
Telefax: 512 16 38 75

Family and Society: Family Thesaurus - Australian Family Studies Indexing Terms 1991
The third edition of the *Thesaurus* to be produced and distributed by:

Australian Institute of Family Studies
300 Queen Street
Melbourne 3000, Victoria
Australia

International Directory of Innovative (Family) Programs For further information contact:

Information Services Directorate
National Center for Social Policy and Practice
750 First Street NE
Washington, D.C. 10002
United States of America
Telephone: (202) 408-8600

International Year of the Family: 1994 A guide to action planning produced by Health and Welfare Canada and available in English and French from:

Federal Coordinator
International Year of the Family
Department of National Health and Welfare
Room 956, Jeanne Mance Building
Tunney's Pasture, Ottawa, Ontario K1A 0K9, Canada
Telephone: (613) 957-7303/05
Telefax: (613) 952-7417

The IYF secretariat would welcome receiving suggestions and information on plans and programmes, as well as requests for information or material, at the following address:

IYF secretariat
Centre for Social Development and Humanitarian Affairs
P.O. Box 500
A-1400 Vienna
Austria
Telephone: (431) 21131 4223
Telefax: (431) 237 497 or (431) 232 156

Annex 11

A COMPILATION OF SUGGESTED THEMES AND SUB-THEMES

The family

- A basic unit of society
- Promoting the rights and responsibilities of individual members
- A milieu for caring for the vulnerable
- A seed-bed for gender equality
- A point of convergence for social policy
- Providing the psychological foundation of the future
- Agents and beneficiaries of development
- A resource for the social integration of the disadvantaged
- A matrix for improving the quality of life
- Family services and the training needs of service providers
- The role of families in community and rural development
- Agents and beneficiaries of development at the local level
- The basis for a people-oriented approach to development
- Creating community-based family-life support centres
- Agents for preserving human values, cultural identity and historical continuity
- The impact of industrialization, urbanization and modernization on families
- An ally in education for all
- A partner in environmental protection
- Understanding socio-cultural and political assumptions behind national family laws
- Creating legislation supportive of family
- A touchstone for human rights
- Promoting equal rights for all family members
- Promoting democratic principles and practices within families

IYF

- Taking national, regional and international action on behalf of families
- Enhancing awareness of family issues
- Building upon the achievements of the International Year of the Child, the International Year of Disabled Persons, the International Youth Year: Participation, Development, Peace, the World Assembly on Ageing and the United Nation Decade for Women: Equality, Development and Peace
- Promoting values and behaviour patterns benefiting all family members
- Building the smallest democracy at the heart of society
- Empowering families
- Providing legislation, policies, programmes and services
- Improving national capabilities to meet family needs

Spousal relations

- Spouses: a basic subsystem in families
- Fostering new roles for men
- Towards a more equal sharing
- Sexual relations between spouses

- Balancing the economic and social power of spouses
- Legal rights of spouses in marriage and divorce
- Promoting women's equality
- Education in family life
- Conflict resolution in relationships

Procreation

- Family planning
- Informed choices on fertility
- Safe motherhood
- Spacing births
- Promoting responsible parenthood
- Safe infancy

Providing children with status and a name

- Equal rights for all children
- Fathers and children born out of wedlock
- Support for adoptive and foster families
- Possibilities for joint custodial care and obstacles
- Parental relationship after divorce
- Needs of single-parent families

Basic care of family members

- Well-being and protection of children
- Promotion of primary health care
- Breastfeeding
- Improving skills in responsible parenting
- Meeting the health and nutrition needs of all family members
- Psychological growth of the child
- Child development and the father's role
- Child and maternal health and the family's role
- Prevention of disabilities
- The family and disabled family members
- The elderly and the family
- Agriculture and food production and the family unit
- Shelter and the family
- Food security and the family
- Preventive care for basic needs and the family
- Family well-being in times of economic constraint

Socialization

- The family and cultural identity
- Child development through family development
- The family as an interacting system
- Parents learning from their children
- The family and the teenager
- Literacy: a primary requirement for families to adapt to changes
- Prevention of drug and alcohol addiction and rehabilitation: the role of families

- Supporting families to prevent crime and delinquency
- Cooperation of schools and parents
- Educating youth for family life
- The family: the foundation for learning and education

Protection of family members

- Caring for youth
- Prevention of family violence and sexual abuse
- Shelters and services for troubled families
- Programmes for child protection
- Caring for vulnerable family members
- Prevention of crime and delinquency and the role of families
- Drug prevention and rehabilitation and the role of families
- Reunification and the well-being of migrant and refugee families
- Family resources for the protection of the environment

Emotional care of family members

- Preventive mental health care and the role of families
- The family and new role models
- Coping with dissonance in the family
- Services supporting families in crisis situations
- Special needs of refugee and migrant families
- Mediating interspousal conflict
- Ameliorating the effects of divorce
- Problem-solving in families
- Adjusting to parenthood

Providing services and resources for family members

- Drawing on family resources and strategies to alleviate poverty
- Reducing the impact of economic adjustment policies on families
- Promoting the equal sharing of household and parental responsibilities
- Promoting equal access to employment
- Balancing work and family responsibilities
- Protecting poor families
- Meeting the housing needs of families
- Promoting the economic self-reliance of families
- Providing support networks for single-parent families
- The family as an income-generating enterprise
- The caring role of the adult child
- Assessing the impact on families of policies, programmes and services
- Concepts, indicators and statistics on the family
- Promoting research on family issues

Annex III

EXAMPLES OF PLANNED NATIONAL ACTIONS

- Establishment of working groups to identify 15 priority subjects regarding the family and to formulate plans of action on: violence, living space, housing, employment, youth, older persons, compensation for contributions, disability, family forms, special burdens, legal system, health, society, media, and education
(Austria)
- Under the national coordinating committee, seven subcommittees are operating to meet government priorities in: public relations, fund-raising, legislation, education, research, health, social services and programmes
(Barbados)
- A public awareness campaign
- Seminars, studies and programmes focusing on health and nutrition
(Bolivia)
- Establishing and funding a non-profit corporation to administer the preparations for and the observance of IYF
- A comprehensive communication strategy on IYF, television programmes, publications in Braille etc.
- Publishing, through the National Statistics Agency, a series of reports on the social and economic characteristics of families
- Publicizing family-related policies of the Government for its employees through workshops, conferences and publications
- International support to the IYF secretariat, Vienna
- Educational materials for Canadian schools
(Canada)
- The council will advise the President on policy measures and supervise and coordinate plans. The national committee, chaired by the First Lady, includes prominent personalities and representatives of non-governmental organizations. Congress will deal with family issues of specific relevance at the Inter-American regional level
(Colombia)
- National priorities in the areas of: health and social protection; the rights and responsibilities of families; the concept and structures of family; the family and education; older persons in the family and society; the family and the environment; and the family and the economic situation have been assigned to working subcommittees, which will recommend specific national actions to be undertaken
(Côte d'Ivoire)
- A conference entitled "The role of the family in the 1990s" is to be documented in a catalogue containing the report of the conference as well as follow-up ideas and proposals
(Denmark)
- A programme to help care for families living in extreme poverty
(Ecuador)

- A ministerial-level committee will explore family issues in the fields of health, welfare and security, national education and religion, labour, culture, and equality
- Private-sector and public-sector committees have been established to recommend how IYF can be observed
- Research and studies on the situation of families
- Publications, promotional activities (Hungary)

- A commemorative postage stamp
- A state-of-the-family report
- Research on the impact of poverty and unemployment on the family
- Seminars and training workshops on family care for professionals, paraprofessionals and volunteers
- Expert group meetings. (Israel)

- A report on the situation of families and family policy
- Arranging conferences and seminars for in-depth discussions on family-related issues
- Publishing booklets that promote the importance of family life among children and youth
- A family day
- An exhibition of photographs on family life
- Establishing an honours programme intended to encourage innovations for families
- A rock concert for youth
- A brochure for young couples (Luxembourg)

- Research on family structures and child development as well as health care for mothers and children
- Conferences, seminars and workshops on family-related issues
- Posters, pamphlets and advertisements (Malaysia)

- Priorities in health, education, social security, marriage and family life (Maldives)

- Specialized campaigns to promote IYF among family organizations, social development agencies, associations of older persons, youth, children and trade unions (Mauritius)

- Round tables, cultural competitions and encounters concerning the family
- Symposia, debates, regional encounters
- Studies on families
- A national federation of organizations involved in family issues
- A national family charter (Morocco)

- Socialization of children
- Family demographic trends
- Violence in relationships (Netherlands)

- Creation of committees for the observance of IYF at the state and local levels
- Workshops, seminars, public lectures
- Media presentations
- National family week (held since 1984) (Nigeria)

- Recommendations for policies and programmes to strengthen solidarity and to promote the development of the Philippine family as the foundation of the nation (Philippines)
- Promotional campaigns in the media
- Research and studies
- Hosting international conferences
- Analysis of existing legislation (Poland)
- Preparation of a report on the current situation of the Portuguese family
- Publication of a study on the problems of families
- Creation of an IYF commemorative medal (Portugal)
- Issues related to women, youth, the elderly and the family (Senegal)
- Donation of booklets in Spanish to the IYF Secretariat
- Study of the situation of the family nationally
- Seminar on local and regional experience in dealing with family issues (Spain)
- Enhancing public awareness of the importance of the family and family issues, as well as the role of women in the family (Thailand)
- Publication of a series of research publications
- Local organizing groups
- Films and special events (Turkey)
- Film festivals and artistic exchanges
- Priority issues in: family law; cultural identity and continuity; family budgets; health; drug addiction (Ukraine)
- Primary focus on nutrition, education and health (Venezuela)

Annex IV

WAYS OF SUPPORTING THE FUNCTIONS OF THE FAMILY

Functions of the family	Ways of support		
	Laws and policies (examples)	Benefits (examples)	Services (examples)
Establishing bonds between spouses	Laws and customs related to marriage and divorce, roles of spouses	Marriage assistance, tax reductions	Family education, divorce mediation
Procreation and sexual relations between spouses	Laws and policies on abortion, customs on family size, roles of spouses	Maternity allowances, parental leave, tax reductions, housing support	Maternity health centres, midwives, family planning, family training
Giving children a name and status	Laws on names, fatherhood and adoption	Allowances paid by the father and by the State	Legal advice, adoption advice
Basic care of children (and relatives)	Laws and customs on care of the children	Child allowances	Education of parents, well-baby clinics, nurseries
Socialization and education of children (and parents)	Laws on education, traditions and educational policies	Free or subsidized schools, free materials and meals	Kindergartens, schools, family and child guidance centres
Protection of family members	Laws on child protection, criminal laws on violence	Subsidized housing, supported activities	Child protection services, therapies, shelters
Providing emotional care and recreation to family members	Customs on family life and the roles of family members	Subsidized leave for family members	Family counselling, therapies
Providing services and resources for family members	Norms of living and division of labour within the household	Allowances and benefits	Home-help services

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The VOLUNTARY HEALTH ASSOCIATION OF KARNATAKA (VHAK) is a secular, non-profit federation of over 156 Voluntary Organisation in Karnataka, working in the field of health and community development. VHAK strives to make health a reality for all, the people of Karnataka especially the unreached and to the needy.

VHAK fulfills these objectives primarily through health Education and Training and by providing information to the target groups VHAK provides platform for all the Vol-agencies to come together and explore the possibilities of strengthening the Health Care delivery system through Workshops/Seminars/Dialogues for improving the quality and services of health care.

VHAK campaigns on relevant and important health issues to ensures that a people oriented health policy is brought about and effectively implemented. VHAK also works to sensitise the larger public towards a scientific attitude on health.

The family – at the heart of health and human development

From the dawn of human history, the family has been at the heart of human development. The family is the first emotional and social support mechanism we experience, our first teacher, our first health care provider. And it is usually the women in the family who assume responsibility for each of these essential functions. Whether the extended family of several generations living in the same household, the nuclear family of mother, father and their children or the single parent family, what unites them all is love, partnership, a set of common values and a vision of the future. Modern times have spawned radical changes which challenge the capability of families to fulfil their functions. Some changes have been positive – modern medicines combined with public health interventions such as sanitation, clean water and immunization have reduced the toll of infectious diseases and permitted many families to emerge from the shadow of death and disease. Other changes, however, such as industrialization, urbanization, environmental degradation, migration and war place great strain on the family's ability to protect its members. Poverty, which affects more than half of the world's population, is the most damaging, for it marginalizes even more those who are most vulnerable – the mother and the child.

Rapid urbanization and migration are creating vast cities where the provision of services cannot keep pace with the influx of inhabitants.

Overstretched health infrastructures, inadequate sanitation and water supply, and industrial pollution all have adverse health consequences. Meanwhile, depopulation of the countryside leads to a breakdown in social structures as youngsters move to the cities in search of employment. Political and economic turmoil generates huge flows of migrants and refugees deprived of traditional sources of social and economic sustenance, with resulting heavy stress on the family.

Times of great social upheaval have always resulted in major changes in family life. Very often it is the young who represent the most radical break with traditional values and whose behaviour gives rise to greatest concern. Sexual mores change, access to harmful substances such as tobacco and psychoactive drugs increases, and the elders of the family feel that their authority and wisdom are ignored. But changing behavioural patterns can also be positive as young people develop coping strategies and seek new avenues for self-fulfilment in education and employment.

There are contradictions within all family structures. The family can be a shelter, a system of mutual solidarity and support; or it can be restrictive, hindering individual and social development, even providing the setting for child abuse, sexual abuse, battering and homicide.



Dr. Toniris Türmen, Director of WHO's Division of Family Health.

The great challenge for public health is to seek ways to empower families to do well what they do best, and this requires the support of the rest of society. Families are central to human development, but they cannot do the job alone; a positive relationship between families and the health sector is essential.

The International Year of the Family in 1994 reminds us all of the crucial importance of the family in maintaining an optimal level of physical, mental and social health for its members, to the ultimate benefit of all of us. ■

Toniris Türmen

Toniris Türmen

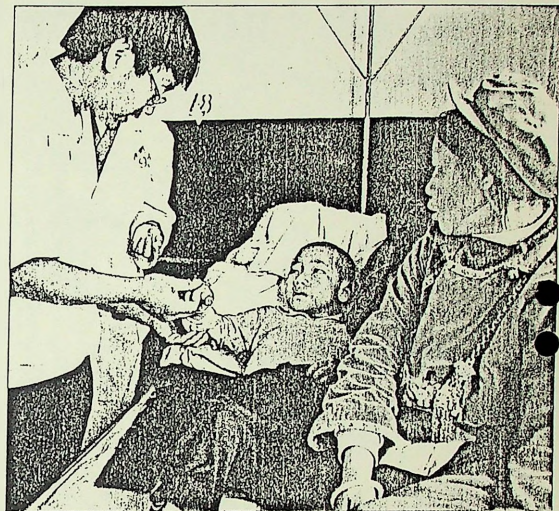
Health and the family

Vittorio Cigoli & Wilma Binda

Some families manage to cope with illness on their own; others may have few or no resources. In those cases, only external help — from properly alert health personnel — can find the appropriate resources and solutions.

For all of us, the most significant relationships and fundamental experiences of life occur within the family. The family setting is therefore the natural framework for matters concerning health; yet only in the last few years has the importance of the family to individual and collective health been gaining recognition. If the family's role is important in keeping its members healthy and protecting them from disease, that role becomes essential when it comes to treating, rehabilitating and assisting them during illness; indeed, the success of every cure or course of treatment, of every therapeutic or health-giving prescription, depends on the family.

This consideration should lead to a greater involvement of the family in health care, in accordance with the model of community medicine outlined by WHO at the 1978 Alma-Ata Conference, in which the family was seen as an element of primary health care with an active, responsible and participatory role. Unfortunately the family is still seen by health



Greater involvement of families in health care would benefit everyone

systems as something on which to unload all of the patient's problems, especially in the case of people with chronic or terminal illness.

For a correct analysis of the link between family dynamics and the issue of health and illness, we suggest that two essential points should be borne in mind.

1. Understanding health and illness in the family

Common perceptions of health and illness among individuals or families reveal close links with the quality of the relationship between family members. Psychosocial studies relate the health of the individual closely to the type of family in which he or she lives, to its dynamics, functioning and quality of life. The kind of relationship an individual has with people closest to him or her (family,

relatives, friends) is very important for his or her own well-being. Health is seen as a condition of this well-being, certainly in physical terms, but even more in relational terms, since a harmonious family life, or, on the contrary, the existence of acute conflicts and tension, will affect the well-being or illness of the family members.

It is therefore vital for health personnel to focus attention on the different ways in which families, considered as groups with their own history and culture, try to help their own members in coping with various aspects of life, especially health. Here health is understood as physical and interpersonal well-being, with its close connection to stressful events, including illness, and all the foreseeable and unforeseeable situations including sufferings, demands for care and attention.

disruption of a hard-won equilibrium, and even doubts and self-questioning. Also when families are changing and medical sciences are developing rapidly, all these changes and developments must take into consideration and eventually co-exist with the social ramifications of health – and the possible threats to it – which different generations in the family all share.

2. Relations between families and the health care system

In most Western countries the health system does not seem to give enough consideration to what the care of a sick person really entails, so that the "illusion of a doctor-patient reality in medical practice" prevails. This illusion obscures the multifaceted aspect of people's relationships, which involves on the one hand the entire family structure of the patient, and on the other the health care system, of which the doctor is an integral part.

Take, for example, those who are physically and mentally handicapped, mostly entrusted to parents and relatives, or elderly people who cannot cope alone and are looked after mainly by daughters and daughters-in-law. In other situations the family connection is completely ignored and all the problems of family life are

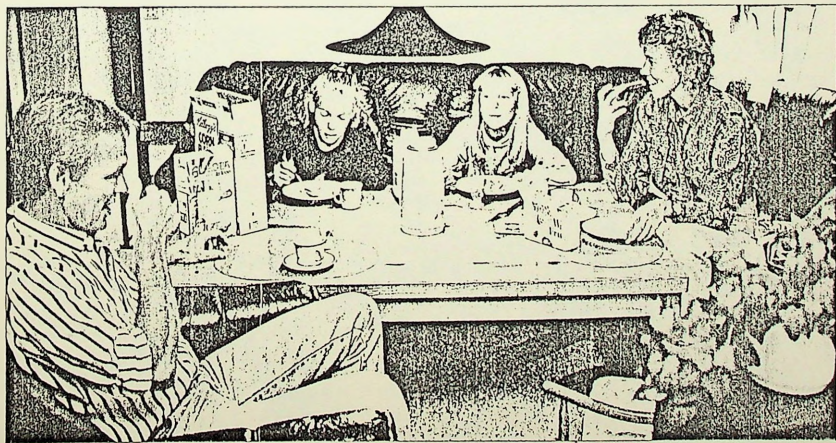
forgotten, leaving health – and illness – within the narrow framework of the doctor-patient relationship. Collaboration in protecting or restoring health between the patient, the family and the health care system has been described as a "therapeutic triangle" – an expression which clearly reflects the reciprocal influence of all three parties. Within it, there can be collaboration which promotes health, when the family members support the prescribed treatment or, on the contrary, a negative closing of ranks that can hinder the solution of the problem.

If a paediatrician has a good rapport with a child patient but not with the mother, it is obvious that treatment might not be completed or not even started at all. The same can also happen, in our experience, when a physician treating a man with diabetes does not encourage the wife to prepare proper diets to control his blood sugar level. The "therapeutic triangle" thus shows how essential it is for health personnel to have specific training to improve their analytical capacity, their understanding, and their ability to deal with the needs and realities of all those involved in the relationship.

Guiding principles

These two factors can be seen as the guiding principles that control often tumultuous family relationships, particularly during such stressful events as serious chronic or terminal illness, so disruptive of family life. On such occasions, families have a particularly hard time and need all the resources available. Each family deals with these problems in its own way and in its own time. Some families manage completely on their own, while others have few or no obvious resources. Sometimes the cohesion of the family is lost and each member is left alone to fight his or her own battle. In those cases, only external help – from properly alert health personnel – can find the appropriate resources and solutions that can bring meaning and value to such experiences. In this way both the individual and the entire family, even amidst suffering and hardship, can rediscover health as interpersonal well-being. ■

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Harmony within the family – an important element in well-being

The family of tomorrow: a message from a world-famous author

The future seems likely to see a crucial change in the role of the family, which will become the initial training centre where people are apprenticed for life in society.

Even more vital will be the revival of what used to be called the "extended" family, which knits together basic family units. This "joint family" comprising relatives in the broadest sense was what constituted Chinese and Indian society in the past. I myself had the good fortune to live in one of those "large" families – good groundwork for being able to adapt very easily to the most varied settings and personalities. Better still, I come from a complex family, mixed Chinese and European, so that I was never trapped within one single culture or forced along one single path; consequently I can take the broad view that the whole world seems like one vast family... Distrust and fear have no part in it, and there is no need for protection. This large family is not a fortress but rather an access route to everyone and thus the true cradle of society.

I have no doubt that the future will see this large "extended" family being recreated, in the sense that it will not be based simply on the notion of blood relations but rather on ties of affection. When the young people of North America tried in the 1960s to form such communities, they failed because all who were not of the same generation were excluded... Yet children yearn to belong to a great family: one has only to see the gangs of youngsters in the streets of our big cities to measure this need.

In order to be successful, the family ought to embrace several generations, since it is essential for the young and the less young to live together, understand one another and help one another. I have no doubt that the future will see the "extended" family being recreated, in the sense that it will not be based simply on the notion of blood relations but rather on ties of affection.

In order to be successful, this "family space" ought to embrace several generations, since it is essential for the young and the less young to live together, understand one another and help one another. Within a family at its basic level, the child can be lonely. In the bosom of the extended family it will never be lonely, because if the mother is absent there will always be the grandmother, the sister, the cousin or the aunt. Thus the child is not fixated exclusively on its mother since the very notion of motherhood is itself extended. The future will undoubtedly rediscover this family-community structure, particularly since technological advances make it possible for a lot of work to be done at home, thus avoiding useless and exhausting travelling.



Let me say again – because it is crucial – that the extended family can resolve at a stroke all the problems of unequal talents and unequal success which otherwise arouse that devastating emotion – human egoism. The function of the family is to level out inequality. ■

Extracted, with the permission of Mrs Han Suyin, from Les yeux de demain (The eyes of tomorrow), published by Christian de Baillat, Paris, 1992.

Mental health matters too!

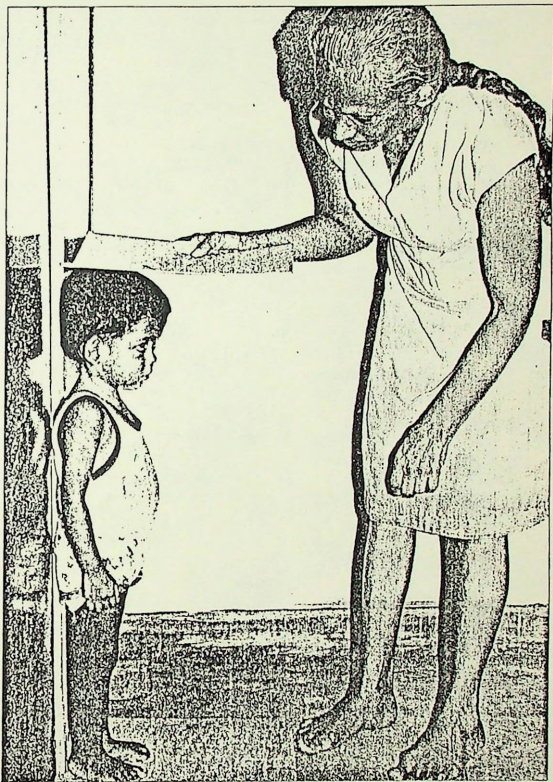
Anula D. Nikapota

A child who is healthy is physically well and also happy, growing and developing well according to his or her age. The child mental health programme in Sri Lanka encourages health workers to watch for families and children under stress.

Programmes for child and family health have for several years included specific tasks and training related to child development and mental health. Identifying the problems in this field led to the realization that promoting child development needs not one but many different inputs and the use of several different strategies.

The child mental health programme in Sri Lanka is implemented by the Family Health Bureau in the Ministry of Health, with the support of UNICEF. Coordination with other relevant agencies, particularly the training institutions for primary health care, has helped to nurture and extend these new inputs.

One early innovation was to introduce the concept of the integrated nature of health, growth and development. In other words, a child who is healthy is physically well and also happy, growing and developing well according to his or her age. One strategy selected was to include in the growth chart of each child a few selected developmental milestones such as walking, talking and understanding simple requests. This



A happy child is more likely to show normal growth and development.

served to create awareness of this concept among parents, families, communities and health workers.

Health workers were taught about children's developmental needs and about ways of discussing with parents how to promote development by fulfilling those needs. For example, one young mother who was very poor and had two young children was upset because she could not provide the kind of toys that would help her child to learn; she had read that this was

important. Health workers routinely visit homes with young children, and her own health worker had established a good relationship with her and presently learnt about her worries. The health worker was then able to build up the mother's confidence in her own ability to help her children's development through play and learning during day-to-day activities, using ordinary objects for play.

Another aspect of the programme of particular value in certain areas

involves identifying children who are slow developers, are under acute stress or have behavioural problems. Some of these inputs are similar to those in other parts of the world.

Risk factors at home

A unique feature of the programme is the introduction of the concept of routinely monitoring the home environment for risk factors. Such risk factors were identified during research which in fact used the health workers as research assistants. This part of the programme is still regarded as more of a project, although it has been accepted for use nationally.

The purpose of this monitoring is not merely to identify family problems. The real reason for this approach is that there are always families where educating them or "telling them what to do" is not sufficient because – for a variety of reasons – they find child care stressful or more than they can easily cope with. This is a common experience in health-related field work in many cultural settings.

Working with such families – that is, helping families to improve their mental health and functioning so as to cope and care better for their child – is very much part of clinical practice for child and family mental health. So it seemed entirely appropriate to introduce a similar concept into the primary health care programme for child and family health.

The risk factors include those that are likely to be associated with child care problems such as a very young mother, poor spacing (more than two children under 3 years old), lack of interest in the child, or a mother who finds understanding health messages difficult. In addition, there may be evidence of poor coping from whatever reason, such as poor organization in the home, or of specific problems such as severe marital discord, mental illness in parents, alcoholism and drug abuse, abject poverty, or trauma due to the conflict situation in the country. Sadly, the last factor is all too predominant in some communities at present.

Health promotive behaviour

Training materials have been developed which emphasize the basic principle of working with these families, which is for the health worker to approach the issue of meeting children's needs by looking at the families' problems, as well as their resources, and working with them to achieve, step by step, health promotive behaviours in their daily life.

A mother was unhappy and resentful that her husband was drinking heavily. The couple quarrelled every day and the children became increasingly worried by this. The mother told the health worker, who had known the family since the

youngest child was born and who was aware that the family had durable strengths: the husband did care for the family, and the couple did care for each other.

She explained to the wife how she could use those strengths by perhaps being less irritable with her husband even when she might feel he had let her down. The health worker also got on well with the husband and so was able to talk to him about his hopes for the children – at the same time using this opportunity to point out that his drinking was upsetting the children. Gradually the situation did improve, and the health worker went out of her way to praise all the family for their efforts.

Any programme has to be evaluated to judge whether its efforts are really leading to improvement. In the case of this programme in Sri Lanka, such tasks as are described here are still not as familiar – and hence are not performed as extensively in the field – as are tasks related to immunization or nutrition, for example. Those concerned with the programme, however, feel that these inputs, and particularly work with families and children under stress or having problems in coping, will significantly enhance child and family health. ■

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Playing is learning. The toys don't have to be expensive



Bathtime: a happy occasion for mother and child.

Towards Healthy Families

Healthy families — which are physically, emotionally and spiritually whole — are the foundation on which a healthy society is based

It is an undisputed fact that healthy families make a healthy society and those who work towards building a healthy society should start with families. Health, as many have come to realise now, is wholeness — the physical, emotional and spiritual well-being of a person, without which fullness of life is not possible. Unfortunately

the "family" has become an endangered institution, and is slowly becoming the mechanised, emotionless society portrayed by Aldous Huxley in his satirical novel, *A Brave New World*. Modernisation, development and so-called progress seem to be shaking the very foundations of our families as well as our value systems. Rapid changes taking place make us feel that we are "standing between two worlds — one dead and the other powerless to be born". Caught between changing values, ideas and ideologies, many seem to be losing their balance. I would like to concentrate on the "Values Of The Family". Without a sound value system there cannot be a healthy family.

The most visible sign of the decline and disintegration of a family as an institution is the alarmingly increasing rate of divorce. At least one out of every three marriages end up in divorce in most developed countries. Incompatibility between the husband and wife, cited as the commonest cause of divorce, is often only an euphemism for selfish-

ness and self-centredness. Both partners ask what they can get out of marriage and never bother to find out what they can put into it. Both are more conscious of their rights than their responsibilities. The absence of faithfulness, integrity and moral convictions, takes many marriages to the brink of disaster. No marriage can survive without mutual love and respect, commitment and a spirit of give and take. If both the husband and the wife share the same basic values, they are likely to have a good and lasting marriage — no matter how vast their differences are on other things.

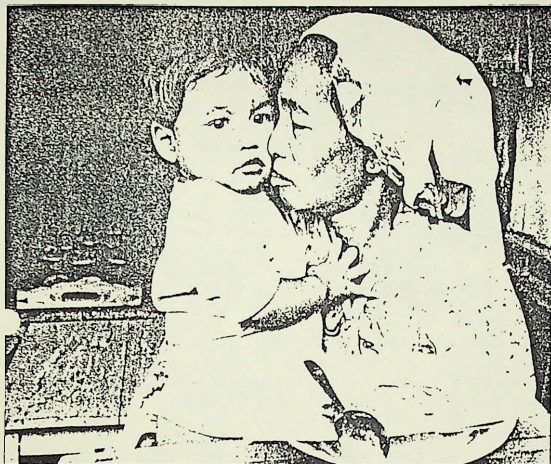
The best and the most important thing parents can give to their children is a sound value system. Value is a rather abstract term but can be clearly reflected in our choices and priorities. A fact we often forget is that a person's value system starts developing in his infancy. Let us not forget the words of wisdom, "Train up a child in the way he should go and when he is old he will not depart from it" (Prov. 22:6). At every stage of the development of a child, the parents are to guide the child to do what God has equipped him or her with, to serve God and to teach what is right and wrong and encourage to pursue what is pure and just.

The relationship between parents and children is undergoing a tremendous change. Parents do not have the time to train their children. With both parents working, children are often neglected at the spiritual and emotional levels while all their material needs are met. In their anxiety to provide for children, parents often forget to impart to them the most important thing to which Jesus referred, when he told Martha, "But one thing is needed and Mary has chosen that good part which will not be taken away from her". In our pursuit of worldly riches and security — very often more for our children than



CMJI

SOURCE: CMJI Journal/Vol.8 No.1., January-March 1993.



them to "lay up" their treasures in heaven while they see us frantically trying to lay up our treasures on earth! When we lie or withhold truth when it is expedient, when we climb social ladders without heeding whom we step over or knock down, when we are totally insensitive to the needs of the poor and the downtrodden around us, but say long prayers for people who suffer in the war-torn places of the Middle East and the starving children of Sudan, how do you expect your children to react?

"Seek ye first the kingdom of God," said Jesus, "and all these things will be added unto you." In modern phraseology, Jesus is asking us to get our priorities right. A family with the right priorities and right values is a spiritually and emotionally healthy family. Many parents as well as children complain about the 'generation gap' — that they do not understand each other or are on different wave lengths. However, if parents and children have the same values and priorities, they can agree or disagree on minor issues, like the type of clothes they wear, the length of their hair, the type of music they listen to, etc. but when moral questions are involved, they are likely to take the same stand.

The cliched expression, a family that prays together stays together, reveals a great truth. Meaningful, common family prayer which is more than a ritual brings the members together and brings stability to the family. There are bound to be problems, disagreement and discord in every family at times, but if all the members can kneel down before God with one accord and surrender themselves completely to Him, peace and harmony can be restored.

Aley Jacob

Aley Jacob is convener of CMAI's Medical Records Training Committee, St Stephen's Hospital, Delhi.

for ourselves — we fail to give them what they need and want most — *ourselves and our time*. Those of us whose children have grown up and left home should try to answer this interesting question, "If you had a chance to do it all over again, what would you do differently?" I am sure many would simply say that they would spend more time with their children.

In this context, I often remember the story of a little boy with a small cut on his finger. The child wanted to show this to his father who was deeply immersed in the business page of a newspaper. "Daddy, see this", the child kept saying, but the father never looked up. Having failed to draw his father's attention the child went away disappointed. Later on in the day, the father asked him that he had wanted to tell him earlier. The boy showed him the scratch on the finger. "Well, I couldn't have done anything about it, could I?" remarked the father. "But you could have said 'Oh,'" said the son. Very

To build happy and healthy families, all communication channels should be open between parents and children

often all we can do as parents is to say "oh" and be with our children when they need us. To build happy and healthy families, all communication channels should be open between parents and children.

"Values are caught rather than taught." When we preach one set of values and our lifestyles reflect another, is it surprising that our children get disillusioned and confused? We fail miserably when we teach ethics, morality and spirituality and seek earthly possessions and material comforts. We ask

ANGELS OF CHANGE

INDIA TODAY profiles ordinary people across the country living in relative obscurity who through their selfless action have brought extraordinary changes in our lives and the way we do things. In doing so, these quiet revolutionaries have demonstrated that it is possible to bring change even in the most dismal situations if one has the will to do so.

BY RAJ CHENGAPPA



LIFE is suffering, the Buddha said, enunciating the first of his four Noble Truths. In India, it is a reality that troubles us whichever street we live on, wherever we go. Homeless children imploring motorists at traffic lights for a few paise even as their tender lungs breathe in noxious fumes. The sick dying for want of medical care. One-third of India's populace going to bed hungry every night. Able-bodied men sitting idle, their life ahead as barren as their fields. For millions in the country, the flame of hope is but a flicker.

As citizens of this country, there is much that each of us can do to prevent that flame from being snuffed out. Or to help it burn more brightly. Yet those of us who are better off appear paralysed by the enormity of the problems confronting the country. We inure ourselves to the surrounding misery. It does twinge our conscience occasionally. But we soothe it by writing a cheque to a local charity. Or throwing a few coins into battered tiffin carriers. Usually we do nothing more. Let someone else pick the dying off the roads. Let orphans fend for themselves. Let the Government look after the poor. After all, aren't we paying our taxes?

Even if we did want to do something, we ask ourselves: Where do I begin? It is normally followed by another question: Can I really be of much help? In his poem *Road Not Taken*, Robert Frost hints at the answer:

Two roads diverged in a wood, and I—
I took the one less travelled by.

And that has made all the difference. The people, whose profiles appear in the following pages, took the path that all of us

hesitate to take for want of time or caring. The road to change, as they found out, is strewn with thorns. It is a long and winding one, always uphill. But their journey has already made a remarkable difference to the lives of the people they wanted to help.

Most of these helping hands are ordinary people. A sweeper. An unemployed technician. A retired clerk. A personnel officer in a company. A banker. A high school teacher. A housewife. They are neither rich nor powerful. Philosopher Khalil Gibran would describe them as "those who have little and give it all". And they give all not because they want recognition—they still live in relative obscurity—but because their concern comes from deep within.

These people are India's quiet revolutionaries. They are what Mahatma Gandhi would have called "determined spirits who are fired by an unquenchable faith in their mission". Such people, Gandhi had opined, can change the course of history.

They do that by understanding that there are no simple answers to complex problems such as eradicating poverty or ensuring sustainable development. They avoid using social band-aids that cover the wound without treating the underlying cause. They realise that there are no shortcuts to change and that nothing comes without a struggle. You can't get a crop without sowing it first.

Their secret, if there is any, is that they prefer to act as a catalyst to stimulate the process of change. They empower people with the knowledge and the means to improve their lives. Without seeming to do so, they actually work to a plan. They first win the community over through some concrete improvements. And once the people sense that they have the power to make the difference, the movement gathers a momentum of its own. They also exhibit patience to overcome setbacks and to endure prolonged battles. And all of them are incurable optimists.

In most cases, there are no yardsticks or profit graphs to measure the change they have brought about. How do you quantify the joy of orphaned children who have found places where people actually care for them? Or the benefit bestowed on a farmer by teaching him how to harness scarce water? Or the effort to generate a

THE ROAD TO
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community spirit to remove garbage from the streets?

These grassroots samaritans would in fact rival the organising abilities of any of the country's top corporate chief executives. They demonstrate extraordinary leadership qualities and vision. They make themselves redundant by teaching people how to help themselves. They are willing to learn from their mistakes. And they are not content only to revolutionise their minds. They have the strength and courage to change their lives, and the lives of other people. They are like *karmayogis* who prefer to enlighten themselves through action rather than meditation.

These are not human beings having a spiritual experience. They fall into the category of what management guru Wayne Dwyer calls "spiritual beings having a human experience". They are truly angels of change.

ELIAZAR ROSE

REDEEMING THEIR TOMORROWS

BY RAJ CHENGAPPA in Maniguda



IS favourite saying is: My name is Today. With good reason. For, as Eliazar Rose, 35, a technician turned social worker, says: "We cannot say to the leprosy patient standing naked in front of us, to the disabled child, to the expectant mother—Tomorrow. Their need is Today, whether we have a budget for them or not. Their outstretched hand is for Today."

For the past decade, the urgency of their need has guided his actions. For someone who grew up knowing what it means to be hungry and who had no money to fund his higher education, this philosophy has helped Rose do an enormous amount in a relatively short span of time. Enter the sprawling 35 acre New Hope Leprosy Trust complex that he and his group of workers have set up in Maniguda, a remote taluk in Orissa's Rayagada district, and you get an idea of just how much.

What began as a tiny rented out-patient clinic for treatment of leprosy patients has today grown into a major centre for health care and social development. So impressive has its track record been that it became the first NGO in the state to be given permission to manage a surveillance, treatment and eradication programme for leprosy. The centre's work covers 1,876 villages in the area and has already cured more than 3,000 villagers of the disease and is currently treating 2,500 more.

Apart from that, the complex houses the only reconstructive-surgery unit in the state for these patients where operations are performed free of cost. Suhasini, an 18-year-old tribal girl from a nearby village, was one of its most recent beneficia-

ries. The centre detected she had leprosy and cured her. The only visible scar was a claw-hand syndrome that many cured leprosy patients suffer from. This was later rectified by a 30-minute surgery. Says Suhasini: "Earlier, no one would marry me because they knew I had the disease when they saw my hands. Now, at least I have a fair chance."

What makes New Hope different from the numerous centres for helping leprosy patients that have come up over the years is its innovative approach. Rather than housing patients in leprosy colonies, they believe in educating villagers about how easily the disease can be cured and getting them to care for the patients in their homes. Part of the reason for this approach is that Rose has experienced the pain of such isolation. Both his parents were cured leprosy patients but were forced to stay in a lepers' colony, shunned by society, in Andhra Pradesh. To enrol in a regular school, Rose had to leave home and live in an or-

SHARAD SAXENA



"I CAN'T TURN AWAY THE NEEDY WITH THEIR OUTSTRETCHED HANDS, SAYING THAT I DON'T HAVE MONEY. I DO MY WORK AND I KNOW GOD WILL DO HIS."

planguing. His mother had to resort to begging to send him money. Rose's wife Ruth, whose parents were also leprosy patients, had to live away from her parents too.

After Rose finished his course at a local industrial-training unit, and to bide time before he found a regular job, he helped missionaries with leprosy work. It was then that he got deeply involved. With India harbouring four million leprosy patients—a third of the world's total—the problem is enormous. The real task lay in removing the stigma and the fear the disease evokes. Rose realised that if a dent had to be made, it was important to create awareness among the people about how easy it is to treat the disease. That is now one of the main missions of his trust.

To carry out this mission, the trust employs tribal girls and

gives them bicycles to go from house to house, both to educate womenfolk about the disease and to detect any new cases. Says Dr Rajnikanth Mishra, who had set up the out-patient clinic with Rose in Maniguda 10 years ago: "By employing their own girls as motivators, we were training the community in handling the disease. Even if we leave tomorrow, the knowledge remains with them."

But New Hope does not restrict itself to treating only leprosy patients. Rose also found that the elderly suffer from cataract and young children from night blindness. Maternity facilities for this tribal belt, adjoining the notoriously backward Kalandi district, were almost non-existent. So, in the New Hope centre, Rose encouraged villagers to come in for a

BEACON OF HOPE: Rose, drawing on his own bitter and painful experience of isolation, has helped battle the stigma and fear that leprosy evokes by creating awareness among the people about how easy it is to fight the disease



wide variety of treatment including removal of cataracts and even assisting in complicated pregnancies. All this went a long way in helping to reduce the stigma against associating with leprosy patients. Says an appreciative Upendra Prasad Hota, the block development officer for Maniguda: "They are an extremely dedicated team and even we seek their help to get to some remote areas."

Rose and his trust help people in numerous other ways. They train children afflicted with polio to make callipers so that they could be gainfully employed. They have helped women form a co-operative bank where each contributes a rupee a day and takes out loans in turns. The trust has popularised the concept of community gardens to enable villagers to produce concentrates of vitamin A cheaply. They run a free school in Vizianagaram, in neighbouring Andhra Pradesh, for children whose parents are leprosy patients. The list is endless.

Friends warn Rose that he is taking on too much. But his logic is simple: "I can't turn away the needy by saying I don't have the money. I do my work and I know God will do his." And somehow the money needed for the work pours in. The trust now receives funds from a host of foreign agencies involved in supporting health care and development in poor countries. And the annual budget is close to Rs 40 lakh. But Rose's reward is, as he puts it, "to see a child who has suffered so much smile again. I can't ask for a better thanks".

M. B. NIRMAL

CLEANING UP THEIR ACT

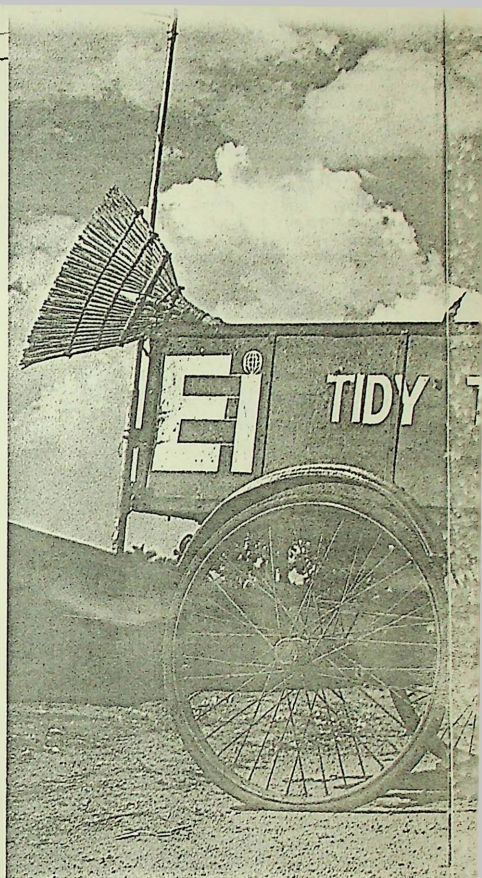
BY G. C. SHEKHAR in Madras



IT'S Sunday morning at Border Thottam, a downmarket locality in Madras. It presents a dismal sight with its lanes clogged with derelict, rusting lorries and stinking drains. Suddenly, dozens of youth armed with brooms arrive on the scene and in a flurry of activity start clearing the heaps of garbage lying uncleared for months. A group of girls, in green and white uniforms, follows suit and gives tips to the residents about cleanliness.

About 20 women, also members of the group, are cleaning an open sewer with bare hands when an old resident flings some garbage on the road. She receives cold stares, but is unapologetic and glowers in return. "Let me speak to her," says a middle-aged man, stepping forward. "This is your road, as important as your house," he explains, adding that boys cleaning up the muck are her neighbours and resorted to this as they could no longer put up with the civic authorities' neglect. "Will you also enrol as a member?" the man asks. "Sure, why not? And what should I do?" enquires the lady.

Exnora International has one more member and its founder, M. B. Nirmal, 52, has won yet another convert to cleanliness. Founded in 1989, the citizens' initiative has nearly 3,000 branches across the country today, thanks to its

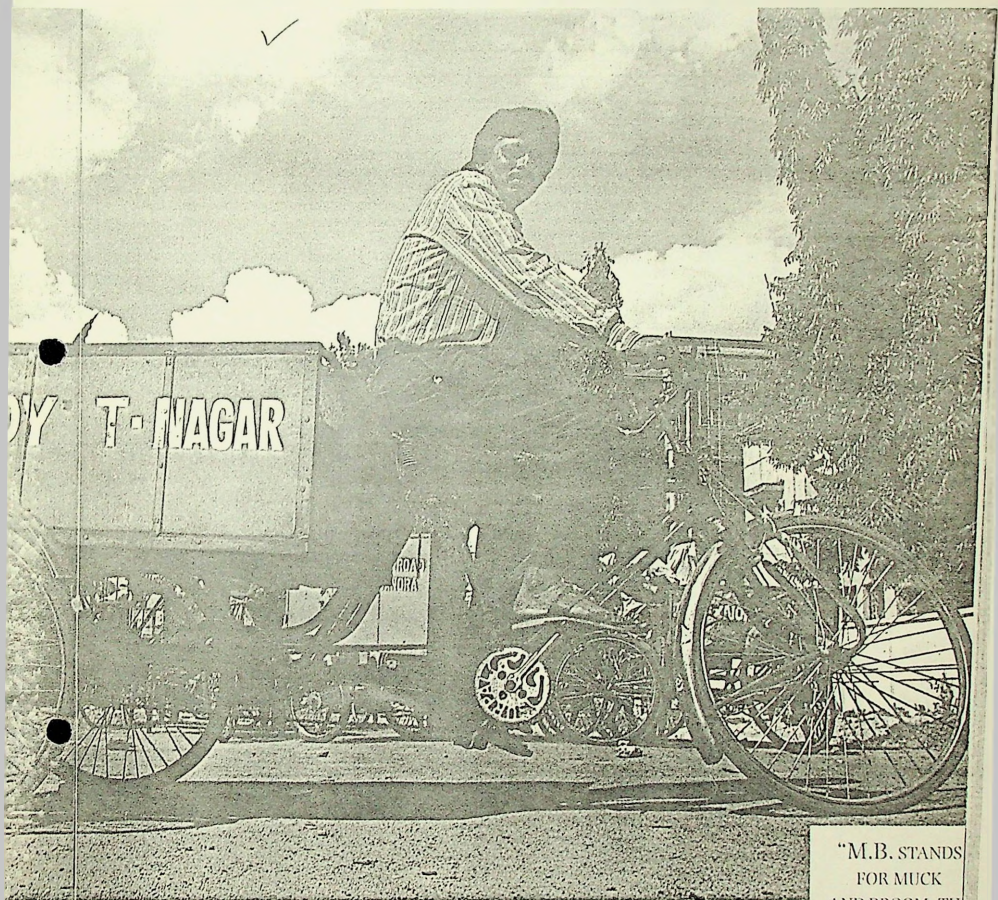


H. K. RAJASHEKAR

simple agenda: Use citizens to sort out citizens' problems. And the first citizen of this highly successful effort is without doubt Nirmal. "M. B. stands for Muck and Broom, the first is our enemy and the second our weapon, more powerful than the Ak-47," explains Nirmal with a laugh.

The Exnora habit has caught on because its effect is clearly evident: no overflowing garbage bins wait for the rare corporation lorry in Madras. They have been replaced by what the organisation calls "mobile dustbins", which is a "street beautifier", pedalling a tricycle cart, clears every morning.

Nirmal says that Exnora collects 20 per cent of the 3,000 tonnes of garbage that Madras generates daily. And it provides service to all tiers of society—from the push streets of Indira Nagar and Nungambakkam to the slums of Venkatapuram. Film director Mani Ratnam and his wife Subhasini and writer Sivasankari are active members in their area. And so are hundreds of housewives, students and retired persons who devote at least an hour a day to Exnora work. "We are not rivals of the civic authorities. Our



GARBAGE UNCLE: Nirmal's people's initiative has nearly 3,000 branches across the country today, and its success is due to its simple agenda of using citizens to solve citizens' problems

efforts are microcosmic because we still need the corporation to haul the tonnes of garbage and build roads," says Nirmal.

The plan to start Exnora (Excellent, Novel, Radical ideas) occurred to Nirmal, an officer in the Indian Overseas Bank, while he was still posted in Hong Kong. Initially, it was meant to be a forum to tap ideas from NRIs in their fields of specialisation and apply them for the betterment of the community. But when a bout of gastroenteritis gripped the slum dwellers around his house in Madras, Nirmal decided to take the message of cleanliness to the people of the city. And Civic Exnora was born.

The project was launched in an upper-middle-class locality, covering just two streets. "Though the residents were sore about the piling garbage, they were not very enthusiastic about calling someone to collect it," recalls Nirmal. But once they witnessed the streets being cleaned regularly, participation in-

creased. Nirmal tackled the hesitant ones patiently—when they balked at paying Rs 10 a month to the "beautifier" as salary and for his vehicle maintenance, he would only say: "No problem, just give us your garbage. We need that." A month later, the subscription would be paid, with arrears.

But it required all of Nirmal's tact and ingenuity to expand the scheme. In T. Nagar, for instance, when the residents of a particular street refused to join, he urged the president of the local Exnora to open his badminton court to the kids of the area. A month later, the parents had joined Exnora. Explains Nirmal: "Children are the most effective campaigners for cleanliness. Grown-ups feel that if it is an issue that concerns

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children, it should be serious."

A similar positive attitude is apparent in his approach towards the civic authorities. "Nirmal would first thank them for their earlier help and then unveil the problem. In most cases, it would work," says V.N. Subramanian, a former marketing executive and now a consultant with Exnora. The corporation authorities often view the group as an interloper but that has not deterred Nirmal from taking his problems to officers at all levels. "I see every obstacle as a stepping stone," he says.

This approach has instilled confidence in a growing number of people, who see Exnora as a forum for addressing their complaints. Nirmal now has to tackle problems such as lack of water, housing and even ration cards. Also, Exnora has spawned a host of progenies—Tree Exnora, Marriage Bureau, Speakers' Club, Naturalists' Club, Blood Donors' Club and even a Bhajan Club.

Civic Exnora, though, remains Nirmal's prime passion. "Garbage Uncle", that's what many children call him. Nirmal likes it.

BADRI NARAIN PANDEY STRIKING BACK AT TERROR

By FARZAND AHMED in West Champaran



ALTHOUGH it is noon, the thick fog enveloping Bakhri, in Bihar's West Champaran district, has not lifted. The armed gang of dacoits waiting on the outskirts of the village sees it as an opportune time to launch an attack. But they are in

for an unpleasant surprise.

As they move in to strike, instead of petrified villagers, they encounter a veritable army of people. The gang beats a hasty retreat with the villagers in hot pursuit. One of the dacoits who is caught is beaten mercilessly. The four others who escape are, however, unlikely to ever attack Bakhri again, for they have experienced the power of the Gram Raksha Dal (village-protection force).

Just four years ago, such resistance would have been unthinkable. Then lawlessness reigned supreme in this district bordering Nepal. Dacoits regularly raided villages, kidnapping people, looting valuables and raping women. In 1986, the police even launched a special drive called "Operation Black Panther", but with little success.

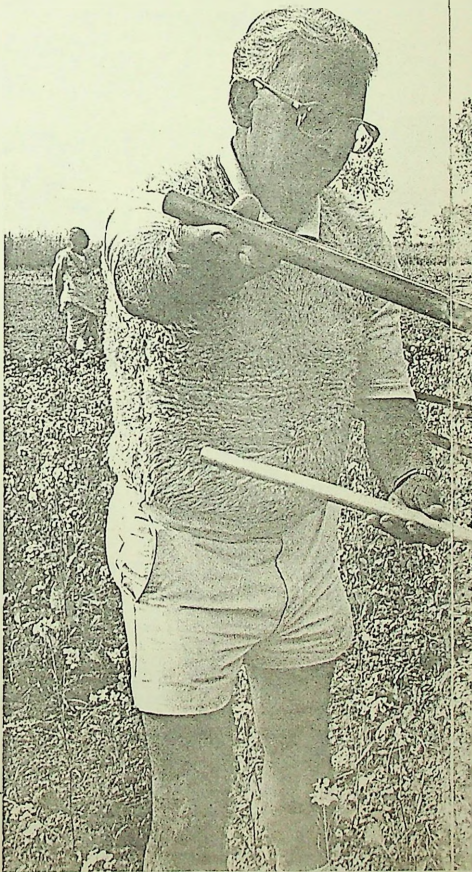
It was around this time that Badri Narain Pandey, 55, a retired clerk from the Army Medical Corps, decided it was time to act. He recalls that in his village, Siswa-Basantpur, people were so terrified that "no one dared open the doors before eight in the morning and locked them up before sunset". Pandey initially gathered a few villagers to form a *shahidi jathha* (suicide squad), collected all licensed arms and administered an oath to them that they would sacrifice their lives for the security of the villagers. And a new movement had begun.

The members of the squad took turns at keeping round-the-clock vigil on the village. They identified members of the dacoit

gangs, their contacts and informers from among the villagers and first tried to reform them. Those who refused to listen were assaulted and ousted from the village. The idea worked. Soon such *shahidi jathhas* were formed in all neighbouring villages with Pandey as *sanchalak* (coordinator). "Members of these *shahidi jathhas* are in fact a *qet* (Quick Reaction Team) that can react to the situation in a flash," says Amar, convener of the Samajik Sodhevan Vikas Kendra, which is based in Siswa-Basantpur.

For the movement to gain a firm foothold, Pandey realised that there had to be greater village involvement. Thus began the concept of Gram Raksha Dal whereby from each village people of all ages and castes got themselves enrolled and underwent arduous training under the guidance of Pandey and his band of dedicated men. In the past five years, more than 375 such village-protection forces have been set up, covering more than 60 per cent of West

RUSTIC SHERIFF: Pandey's initiative to organise self-defence forces in the village helped them thwart dacoits



Champanan district. So powerful have these groups become that the dacoit gangs have been forced to withdraw into the jungles of the 100-km-long Someshwar Hills range along the Indo-Nepal border. Amrik Singh Nimbran, deputy inspector general of police, acknowledges this: "Pandey's efforts are laudable. He was able to mobilise villagers to fight criminals. Without the people's cooperation, no anti-crime drive can succeed."

Initially, the district administration and the police, which had failed to provide security to the people, viewed Pandey's efforts with suspicion and refused to cooperate. But an enlightened district police superintendent, Abhayamand, saw the idea's potential and started providing Pandey and his men with moral and logistic support. Now Brajesh Mehrotra, the district magistrate of Champanan, says: "A new kind of cooperation between the people and the police is emerging and this is good."

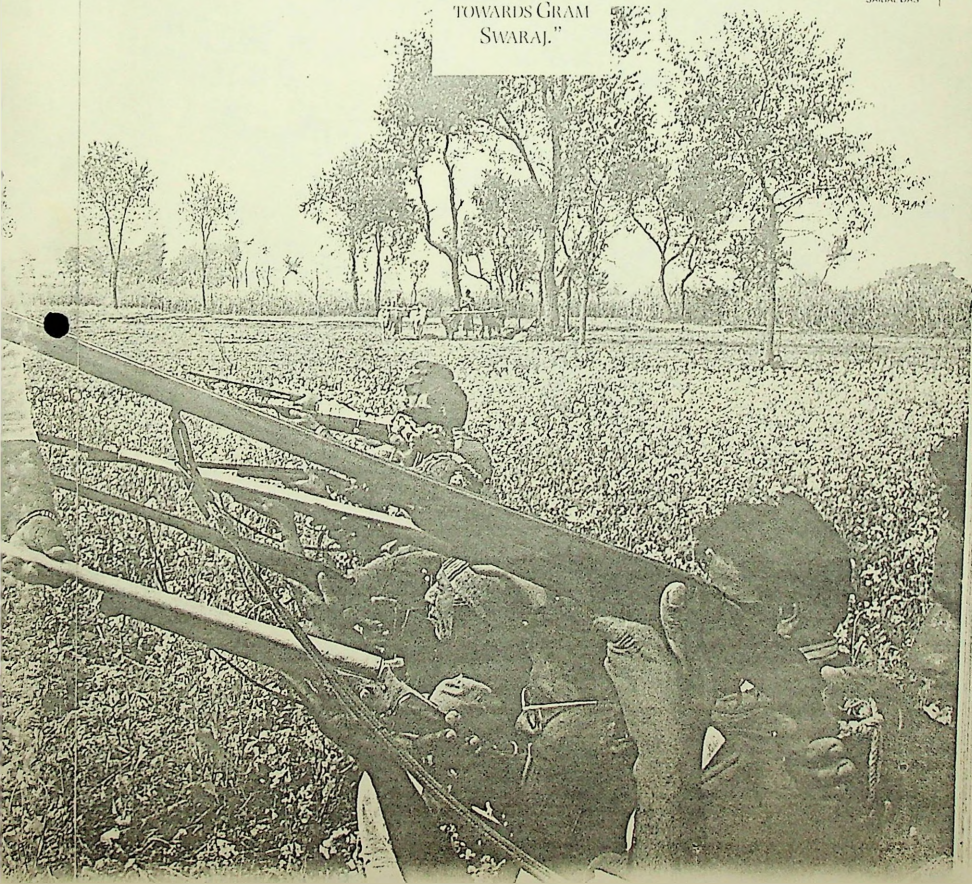
Officials are even willing to overlook some of the village-protection forces' unconventional methods that at times overstep the law. They concede that villagers have been using illegal guns against criminals. While there are only 9,500 licensed arms in the district, Pandey's forces have acquired more than 16,000 weapons. But since these are used for self-defence, the local authorities have not initiated legal action or disarmed them.

In many encounters, the protection forces have had bloody clashes with criminals and have killed about 70 of them. But officials acknowledge that since dacoits are rarely convicted, inquiries into such encounter deaths are not pursued too vigorously. The ruthlessness displayed by the dacoits may be partly responsible for this. Last fortnight, when a village, Narkatta Done, refused to supply rice, goats and women to the dacoits, they struck back and killed 15 people.

After the massacre, Chief Minister Laloo

SARIAL DAS

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Prasad Yadav announced that a new operation would be launched to flush out criminals from West Champaran. But the announcement was greeted cynically by most villagers. Instead, they preferred to rely on their own village-protection forces. That is a measure of the faith and credibility evoked by the army that Pandey has helped build.

SADHANA MUKHERJEE GIVING RESPECT A CHANCE

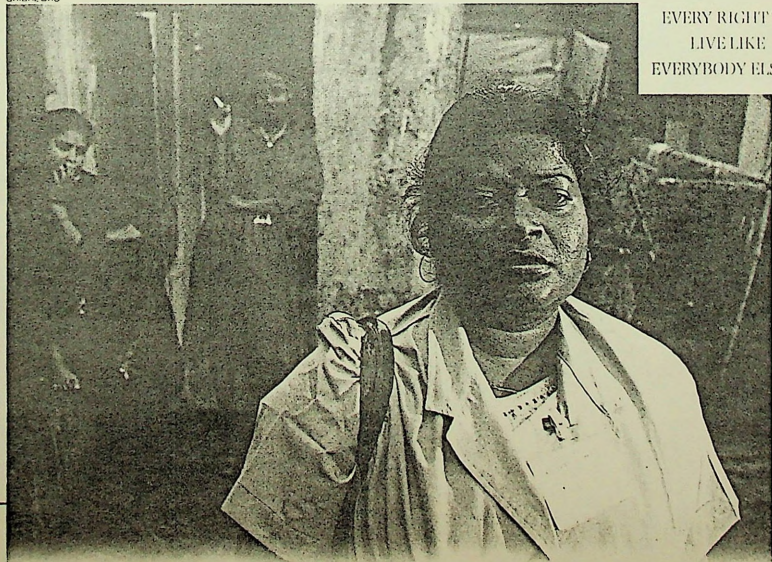
BY ROBIN BANERJEE in Calcutta



THE 100-year-old building in a corner of the serpentine Dayal Mitra Lane in Calcutta is depressingly dilapidated. The staircase is falling apart. The rooms are dark, dank and smelly. But unmindful of the setting, some gaudily dressed girls chatter in high spirits. Half-naked children loiter around while nattily dressed visitors pop in occasionally to pick a girl and disappear into one of the cavernous rooms for a while. It's well into the night, and the predominantly middle-

DIFFERENT APPEAL: Mukherjee and her band of dedicated workers have shown that if sex workers unite, they can effectively fight any force and improve their condition

SAIBAL DAS



class neighbourhood in Calcutta's Rambagan locality, on the edge of Sonagachi—the city's biggest red-light area—has long gone to bed. The inmates of the brothels situated alongside ordinary homes are in bed too, but for a different reason.

The light glows in the room of Sadhana Mukherjee, 38, inmate of one such brothel. Till two years ago, she sold her body to make a living. But now she spends her time charting out a better and healthier future for those still in the trade. As the convener of the Mahila Samanyay Committee (msc)—which has a third of the city's 17,000 sex workers as members—she is involved in diverse activities such as minimising the risk of sexually transmitted diseases (stds), ending the area's pernicious *dada* system and ensuring that the children of these hapless women do not end up in the profession.

"Ours is a struggle for gaining dignity," says Mukherjee. Forced into prostitution at the age of 15, none would know better than her the debasement and the depravity that these women suffer. And she has her hands full. Two months ago, local toughs attempted to extort huge sums from the prostitutes in Kalighat. The msc retaliated by organising a protest rally and petitioning the local police station for an end to the menace. Taken by surprise, the *dalas* beat a hasty retreat.

"Prostitution is our profession and we have every right to live like everybody else," argues Mukherjee. She has demonstrated that if the workers unite, they can effectively fight to improve their lot. For instance, in collaboration with the All India Institute of Hygiene and Public Health (aiihp), Mukherjee and her band of workers have made major strides in reducing the incidence of std among sex workers by educating them on the need to use condoms. Says Dr Sarajit Jena, aiihp's programme coordinator: "But for selfless

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women like Sadhana, we would have made little progress."

Recently, the msc won a major battle when it managed to register its co-operative by forcing the state Government to waive the requirement that members be of "good moral character". Mukherjee is making noises, as she puts it, on other fronts too. One is to convince the local authorities to license their profession, which would end harassment by both policemen and pimps. So far, no one is listening, but as Mukherjee says: "The noise has to grow into a roar before we finally get heard."

KINKRI DEVI FIGHTING FOR GREEN HILLS

BY RAMESH VENAYAK in Sirmour



At first sight the denuded hills of Sangraha, Himachal Pradesh, seem no different from anywhere else in the Himalayas. Relentless deforestation, caused by limestone quarrying, scars the landscape. Yet, go to

the local school. You might see a frail woman talking to an open-air class. She speaks of her memories of lush forests and of the need to stop the damage done to the countryside. With a rare passion and commitment, which is what has made a difference.

This is Kinkri Devi, 55, who in the past decade, has taken on the limestone quarriers responsible for much of the damage. And so far she is winning. As Jeevi Devi, a local resident, points out: "We were sleeping till now. She has raised our voice."

In Sirmour, limestone quarrying has been big business, especially since environmental concerns forced the closure of Doon Valley quarries. But it played havoc with the local ecology and the local lifestyle. Quarrying led to the reduction of forest cover, the contamination of water supply, reduction of the availability of firewood and degradation of agricultural land. For Kinkri, a widow who works as a part-time sweeper and for whom life has been a struggle, the impact was painfully obvious.

It was a workshop organised by a local ngo in 1987 that inspired Kinkri to write a letter to the high court. When there was no response, she sat for two weeks in front of the court till it agreed to take up the issue. Initially, the 48 mine owners of Sirmour dismissed it as a blackmail attempt. But the contempt was short lived. The court soon imposed a blanket ban on blasting, though it was

GUTSY GREEN: Kinkri has successfully battled the influential limestone quarriers in the area

partially lifted later. Finally, in 1991, it ordered the setting up of a high-powered committee of experts and government officials and directed it to visit the mines every six months to ensure that there was no damage being done to the environment. The court also directed the Ministry of Environment and Forests to undertake a complete study of the impact of mining on the region, which is being conducted presently. At least half-a-dozen mines have already been closed down and reforestation efforts are on.

For Kinkri, who realises the power of the mining lobby, this is not enough. She says: "They have money and I only have will power." Now she is busy spreading the gospel of *puhar paani* (hills and water), she is also busy mobilising locals for regeneration of the mining sites.

Her enthusiasm is infectious. Not only the local people but also the bureaucracy and the mine-owners themselves are full of admiration for Kinkri. P.C. Dhiman, deputy commissioner of Sirmour, says: "Her initiative has snowballed into a major environmental issue." Admits V.K. Walia, a leading mine-owner: "But for her intervention we would have been lethargic about the environmental damage due to quarrying."

More important, Kinkri has raised the level of awareness of these issues in the entire community and made them vigilant. At the school in Sangraha the

PHOTO: PUSHPA KATHA

"MINEOWNERS
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kids are determined that "Hamein bhi partyavaran ke liye a waz uthane chahiye. (We too should raise our voice for the environment)."

In September, Kinkri went to the Beijing Women's Conference—to learn and to teach. She does feel some satisfaction: "Meri ladai ab aur lay bhi lad rahi hai. (My battle has been taken up by other people as well)." And who knows—the hills of Sangraha may once again look lush with decidar.

—with ABHINAV KUMAR

AMOD KANTH GUARDIAN OF THE STREETS

BY CHARU LATA JOSHI in New Delhi



CRUISES of "namaste Bhaiyyaji", and a sea of faces, hair straggled, eyes twinkling, engulfs Amod Kanth, as he steps into a shed in west Delhi's Kathputli colony. Kanth, 47, is not the additional commissioner of Delhi Police anymore. He is in his other avatar, that of a foster brother, parent and guardian to nearly 3,000 street children: rag pickers, shoe-shine boys, vendors and beggars. And as he hugs four-year-old Elaichi, a Rajasthani street performer and a regular at Anupam

THE HUMAN FACE: Kanth, a police officer, is the driving force behind a movement that provides shelter, non-formal education and mid-day meals to nearly 3,000 street children

BHAVAN SINGH



Prayas—the west Delhi outfit of Kanth's organisation for neglected children—it is clear that these children are his main concern.

A concern which has slowly transformed into practical aid for minors in Delhi. Seven years ago, Anupam Prayas was started as a contact centre for juvenile delinquents with just 25 children as members. Today, with 17 units scattered in various slums across the capital, the srao provides non-formal education, vocational guidance, medical services and mid-day meals to close to around 3,000 street children. And the numbers are growing.

So is the financial aid. What began as a joint collaboration of the Delhi Police, Delhi School of Social Work and Shramik Vidya Peeth, with a small University Grants Commission aid of Rs 60,000, is now a professional srao, assisted among others by the British High Commission, Save the Children Fund and Child Relief and You. This year, its budget went up to Rs 25 lakh.

Moreover, from being purely a day-care rehabilitation centre, Anupam Prayas is on its way to establishing the capital's first shelter for homeless children, a project funded by the Planning Commission's recent grant of Rs 1.5 crore. "We've come a long way," says Kanth, reminiscing about the days when the first of such contact centres set up in two shacks provided by the Municipal Corporation of Delhi.

However, there's no time for complacency or mouthing platitudes. The action-oriented approach is something Kanth has grown up with. At 22, he started a college for tribals in the Naxalite-infested Jamshepur area of Bihar, and spent his spare time tutoring orphans of the area. Now, he sets aside Saturdays for the Anupam Prayas children, taking rounds of all the centres and settling niggling problems. These, incidentally, range from ensuring that the two medical vans—which provide free mobile service to nearly 1,000 children in the capital every week—have complete supplies to looking into the profile charts of the

"THERE IS TOO MUCH THAT STILL NEEDS TO BE DONE FOR THESE CHILDREN. WE'VE AT BEST MADE ONLY A VERY SMALL DENT."

children (each centre maintains a health- and family-background profile card of each registered member).

The Anupam Prayas model revolves around certain cardinal principles, most of which are based on Kanth's personal understanding of the situation: a clinical elimination of child labour is not feasible, so alternative employment should be provided; the child is the best agent of change, so he should never be taken away from his natural ambience; and finally, a child's needs are very basic, hence, the first step should be fulfilling them.

With voluntary psychologists and counsellors on board, the process of identifying a child's aptitude and skills is made simpler. The courses available range from beauty training, embroidery, tailoring and block printing to bookbinding, auto-repairs and candle making. "From being rag pickers, some of our girls are now working in the best beauty parlours in the city," says Bulbul, project manager, Jehangirpuri.

Five-year-old Mukesh, a rag picker from Patel Nagar in central Delhi, while picking at his *dal chawal* lunch, tells Kanth that he prefers *dough* bread, "because we get a boiled egg with it." "There's just too much that needs to be done. We've made a very small dent," regrets Kanth. But for the millions of street children—official estimates show that nearly 80 million children are out of the school system in the country, half of whom are labourers—blooming like some deadly nightshade on the fringes of society, people like Kanth spell hope.

RAM LAL BHALLA

DRUMMING UP BENEVOLENCE

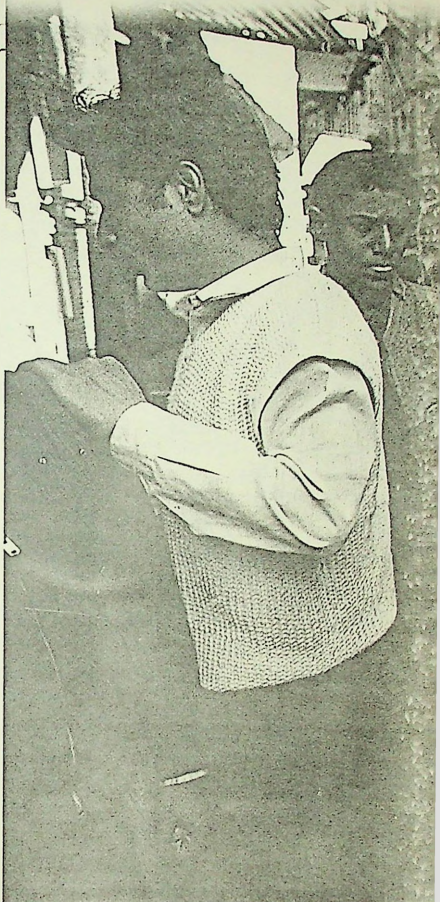
By RAMESH VINAYAK in Amritsar



RESSED in white khadi and an Amritsari cap, carrying a drum and a grey bag with his name and mission painted on the side, a slight, elderly figure wends his way through the bustling Amritsar bazaar. Look again, carefully.

An ordinary man, yes, but with an extraordinary mission. His piercing voice, rising frequently above the market's clamour, says it all: "*Daan mang riha hai Ram Lal Bhalla Lahorewalla, vidhya aurtaam te bahara hachhiin de laye* (Ram Lal Bhalla Lahorewalla seeks donations for widows and orphans)." The response is immediate. Shopkeepers, passers-by, even rickshawallahs reach out, pressing money, sometimes small change, into his hands. "*Shukriya daata* (thanks, donor)" is the humble response.

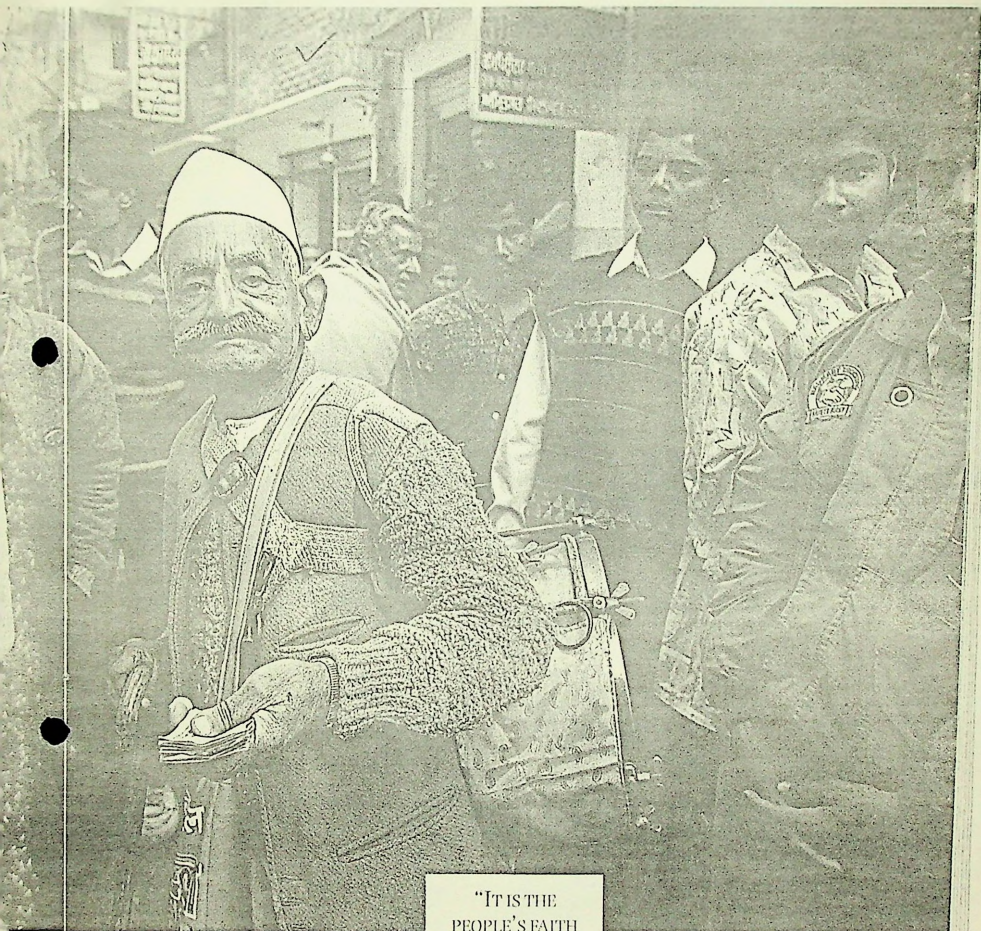
For the 101-year-old Bhalla—known as the Father Teresa of Amritsar—this is a part of his daily routine since 1986, in the course of which he traverses through the city collecting relief for the families of victims of terrorist violence. The first contribution was his own—two instalments of his monthly pension. He has collected almost Rs 12 lakh so far, which makes him the single largest contributor to the Shaheed Parivar Fund—managed by the Jalandhar-based *Hind Samachar*



FATHER TERESA: Bhalla's success in collecting funds for victims of terrorism is due to his unquestionable integrity

group of newspapers—which provides relief to the kin of victims of terrorism in Punjab, Jammu and Kashmir and the anti-Sikh riots of 1984.

What has made this humble town-crier's (one who makes public announcements to the beat of a drum) mission a success is his undoubtable honesty and transparency of his accounts. Says Shyam Lal, a shopkeeper: "The faith that each rupee collected by him reaches the needy is cent per cent." A view that is corroborated by Vijay Kumar Chopra, editor of the *Hind Samachar* group: "Not only is he scrupulous to the penny, but people also have immense faith in his campaign." Which is saying a lot for the integrity of a person who subsists, with his wife, on his freedom-fighter's pension of about Rs 2,000



"IT IS THE
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per month. As a matter of fact, Bhalla still sets apart Rs 100 from his pension as a personal contribution to the relief fund. Also, as Laxmi Kanta Chawla, the local BJP MLA, points out: "But for his grassroots approach, the small donor would not have had a chance to donate to this cause."

But for Bhalla, it hasn't exactly been a bed of roses. At the height of terrorism in Punjab, he received threats from extremists and was even beaten up in 1987, an attack which left his hearing seriously impaired. That, and failing health notwithstanding, he still carries on undaunted. "A lot has to be done...before my legs fail me," he says in a voice choked with emotion.

In the '80s, moved by tales of suffering of the families of

those killed by terrorists, Bhalla, who worked as a town-crier during the freedom struggle and even after Partition, decided to use his antiquated profession to start his selfless campaign. Says Om Parkash Soni, the city's mayor: "What he has done for succour to terrorism-hit families is far more creditable than the contribution of high-profile social organisations." A fact that is also reflected in the reverence the beneficiaries of his efforts hold him in. Says Gurcharan Kaur of Amritsar, whose husband was killed by terrorists in 1990: "For unfortunate people like us, he is next to God."

What sets apart Bhalla from other fund collectors is also the fact that despite a perceptible decline in public sympathy for victims' families, his appeal still endures and he collects on an

PRAMOD PUSKARAHNA

average, Rs 300 daily. As Om Pushkarna, a local shopkeeper, puts it: "People donate money to him not out of pity but respect." Bhalla, with his characteristic modesty, says: "It is the people's faith that inspires me to carry on with the mission against the odds of old age."

And so, every day, this old man sets out on his noble crusade, covering between 5 and 8 km on foot, refusing to accept even a glass of water from his donors. But for how long? Bhalla knows: "It is a mission until death."

HIRASINGH MARKAM

SMALL SAVINGS, BIG DIFFERENCE

BY BHARAT DESAI in Bilaspur



AXMI Bai, a tribal woman from Bilaspur district in Madhya Pradesh, is waiting for her family members to return home from the fields. She measures four kg of rice to cook, then takes out a handful and puts it away in an earthen pot. Offering to the gods? No, a step towards a loan to help her son "set up a bicycle-repairing shop"

For the Gond tribals of Bilaspur, a handful of rice goes far these days. And all because of Hirasingsh Markam, 54—schoolteacher-turned-social activist—who started the Gondwana Bank (GB) movement about three years ago. In the tribal's almost hand-to-mouth existence, savings were then out of the question. As for loans, their only source was the local moneylender, whose 1 per cent a day interest rate left most indebted for life.

Enter Markam. If saving money was a problem, he told the tribals to save rice instead. Making women the target of his 'small savings' campaign, he encouraged them to save a little rice from their family's daily quota, organised to sell it, and then opened accounts for them in GB to deposit the money earned. Or, he advised, the tribals could save a rupee a day and deposit the total at the month-end.

Once a member's deposit touched Rs 1,000, he became entitled to a loan, which at 24 per cent interest rate per annum was still low by local loan shark standards. Markam applied another idea. Keeping in mind the low 52 per cent loan-recovery rate of public-sector banks, he hired a team of agents to recover money for the bank on a commission basis. The result: In an area where district co-operatives barely get back 63 per cent of the money lent out, he recovers almost 85 per cent of his loans.

An example is Sadaram Markam. A tailor till 1993, he now owns a cloth shop at Ratanpur—GB's headquarters—bought from the Rs 90,000 he borrowed from the bank. He has already returned Rs 56,000. "If I repay quickly," he says,

"some other person can get a loan."

And therein lies Markam's contribution. More than the progress he has brought into the lives of the tribals, what he has contributed to is a change in their way of thinking. Savings are no longer foreign and loans not a temporary tidying-over of a crisis. Says Markam: "I don't give loans for feasts. The aim is to make them economically independent."

The figures tell their own tale: starting from a deposit of Rs 1,800 in 1992, the bank now has cash up to Rs 55 lakh, and 6,500 members. Says District Collector Manmat Kumar Raut: "We got interested when Markam started collecting money and decided to investigate, but his work is genuine."

And so is the man. Slightly built, clad in a dhoti, Markam, a native of Tiwartha village, has no pretensions of grandeur. His bank, too, operates out of an unassuming office and a secretary constitutes the entire staff.

It, in fact, is a product of an idea that came to him from the Gujarati community. "The secret of their success is the community helping the individual," he says. Always quick to act on his plans—he once jumped into politics, he says, incensed at a politician's drinking habits—he decided to open a bank, and has not looked back since. Completely devoted, he has no time even for his family—his wife, two sons and a daughter have met him just twice in the past year.

But Markam's contribution extends beyond economics. Using his influence within the Gond community, he is also trying to take on social problems, including drinking

R. C. SAHU

"MY MESSAGE IS
SIMPLE: GIVE ME A
FISTFUL OF RICE
EVERYDAY AND I
WILL GIVE YOU
ECONOMIC
INDEPENDENCE."



TRIBAL BANKER: Markam is transforming the lives of tribals through his innovative banking system

and the heavy expenditure on weddings.

Not everybody is pleased though, particularly the upper castes, whose dominant position is threatened by the growing tribal empowerment. Undaunted, Markam has other plans, including the "political reawakening" of the tribals. He intends to hand over or completely to the Goud community once its membership becomes one lakh, and move on himself—among other things to "gondwana soaps, gondwana agarbattis and a gondwana university". It is not time to rest yet.

—with SHALINI LANGER

RAJAN PAUL

CREATING NEW ENTREPRENEURS

By M.G. RAJAKRISHNAN in Ernakulam



OST people would have lost interest in life after that tragic accident. But not Rajan Paul. The 52-year-old mechanical engineer, who was paralysed from neck downwards 12 years ago after an accident in Doha, Qatar,

today runs a successful small-scale industry from his house in Kizhakkambalam, 25 km east of Ernakulam in Kerala, which provides employment

to over 6,000 people. In the process it has emerged as a role model for solving the unemployment problem of the state.

For Paul, whose accident virtually left him helpless physically, coming to terms with his disability would have been an achievement. But to have helped so many others despite it demonstrates his iron willpower. Initially, dire necessity had been the driving force. After the accident, most of his savings were spent in search of cure. So, in 1983, when Paul's friend C.P. Philipose, a mechanical engineer, suggested that the two start an industry without a factory, machinery or even workers, he grabbed the chance.

Since Kerala is known for its militant labour unions, the two hit on the idea of training villagers to make products and then buying it from them. Collecting Rs 3.7 lakh from friends, they set up Sevana Electrical Appliances Pvt Ltd at Kizhakkambalam to manufacture plastic-bag-sealing machines.

To begin with, Sevana trained two unemployed youth in manufacturing these machines. The stipulation was that after training they would assemble the components supplied by Sevana at home. "Initially, it was difficult to get trainees," recalls Philipose. "But when the villagers saw there was money to be made, they flocked to us." Within two years, more than a hundred families became involved.

Today, Sevana has more than 200 home units which produce 35 types of sealing machines. "None of the home units is bound to be our exclusive suppliers. This flexibility is the core of the Sevana model," says Philipose. Each of the Sevana families makes an average of Rs 2,500 a month. "I make at least Rs 3,500 a month and am not unemployed for even a day," says O.J. Thomas, an ill diploma holder who, along with his family members, makes transformers for Sevana. The company itself, which had been making losses, turned the corner in 1989. The profits have grown from

"WHILE
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ROLE MODEL: Overcoming his disability Paul, together with Philipose, started an industry which, without a factory, alleviates the state's chronic problem of unemployment

H.K. RAJASHEKAR



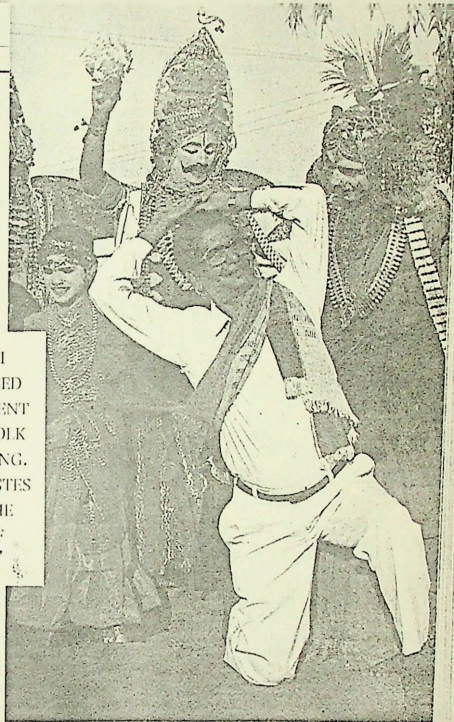
Rs 1.4 lakh in 1989-90 to Rs 23 lakh in 1994-95. The company exported machines worth Rs 4 lakh in 1995 and is projecting a target of Rs 10 lakh in 1996. Recently, it was awarded the Canadian Standards Association certificate—the first small-scale packaging firm in the country to have received it.

The Sevana model is beginning to catch up, at least in Kizhakkambalam, where several similar units have come up and now provide employment to a fifth of the panchayats' population. Today it boasts of the highest number of small-scale units in the state. Meanwhile, other companies have begun to manufacture products like medical equipment, rubber-sheet-drying machines and steel knives based on the Sevana model. "Among the panchayats in this area, Kizhakkambalam has the least number of unemployed persons, thanks mainly to Sevana," says K.V. Alias, former panchayat president and cr(ist) member.

The company has also demonstrated that you don't need big money to make a large difference. "To give employment to so many persons would require an investment of Rs 6,000 crore in the conventional sector. In a state where land is the scarcest commodity, the Sevana model is the perfect answer," points out M.V. Namboothiri, chief general manager, Small Industries Development Bank of India, Kerala and Lakshadweep.

Sevana may be difficult to replicate on a larger scale because, as Paul Anthony, state industries director, says: "It is too informal and flexible for an organised sector." But even Anthony regards the effort as a major solution to what he calls "the state's pathological industrial backwardness". It is only a small measure of Paul's incredible fight back against such daunting odds.

—with V.K. SANTOSH KUMAR



"ALL THAT I
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THE NATIVE FOLK
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BUT THE ARTISTES
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ART SAVIOUR: Narayana has helped revive an ancient folk art that was dying because of lack of support

almost vanished before Narayana stepped in. "All I have done is prevented this earthy folk-art form from dying," says the modest Narayana, now headmaster at a secondary school in Armoor town near Nizamabad.

That itself is no mean achievement. The artistes, who move in troupes from village to village, can do little on their own to preserve the art form. They subsist on the meagre earnings from their performances, usually in the form of grain and some cash. The entire family takes part in portraying episodes from the Ramayan, the Mahabharat and regional folklore. Annually, they move along well-defined routes through rural areas for all but four months—March through June—in a year.

The shows are held during the day as the only equipments they can afford are musical instruments—the harmonium, *miridangam* and cymbals. Among the distinctive features are the ornaments made from bark and soft wood, which is first cured for nearly six months. The *Chindu* artistes design and make the ornaments themselves. Another hallmark is the yellow turmeric paste they apply on their faces.

Money, or rather the lack of it, however, was an endemic problem till Narayana with his meagre resources became a generous patron. He helped them organise shows in several towns and invited Kuchipudi dance maestro Nataraja Ramakrishna to watch them perform in Nizamabad in 1979.

MADAVEDI NARAYANA AN EPIC REVIVAL

By AMARNATH K. MENON in Nizamabad



He was barely five when he saw it the first time in his native Lakkora, a village in the Nizamabad district of Andhra Pradesh. The verve and grace of the colourfully decked performers, enacting epics like the Ramayan and Mahabharat had held him spellbound. Now, 50 years on, Madavedi Narayana, a science teacher, has lifted the vibrant folk art, known as *Chindu Bhugavatham*, from the brink of extinction to nationwide recognition.

The unique dance drama perfected by a small group, which ranks lowest among the state's Scheduled Castes, had

"It was a turning point because an excited Ramakrishna helped us document the movements and attire and make it known to many outside," recalls Narayana. Soon, the artists were performing in Hyderabad at important dance festivals, and even made it to the *Apna Utsav* in 1986.

Ramakrishna is all praise for Narayana's efforts. "He helped us discover this, the most ancient and classical form of song, dance and music of the Telugus. There is little else that we can truly boast of as an original cultural form that goes back to the pre-historic days," he says. More importantly, Narayana made the artists conscious of the true worth of their art. Says Chindula Shyam, one of the performers: "Narayana made us aware of the value of what we were doing."

Even today, he is closely involved with the lives of the artists. He keeps in touch with the 1,200-odd number in the district and constantly recommends them for cultural shows. Says Shyam: "Wherever we went, he used up all his leave from school to be with us and encourage us." By popularising the art form, he has also helped build up an audience for them in many parts of the state.

Narayana is conscious of the limitations of his work. Many of the artists work as farm hands and do petty jobs in the countryside. They cannot spare funds even for practising their art. Says Narayana: "The artists are, even today, the poorest of the poor." He laments that the mandarins of culture in Delhi and in the state Government have not provided the artists any monetary support which could have helped them concentrate on their art.

Narayana is now pushing bureaucrats to set up an institution to preserve as well as develop and propagate this art form. But he is yet to find an audience receptive to his pleas.

HARNATH JAGAWAT A MAN FOR ALL SEASONS

By UDAY MAHURKAR in Panchmahal



IS work is very much in evidence as you drive through the rocky hills of Panchmahal in Gujarat. Lush green farms, soothing oasis in the dry, brown terrain now dot much of the district, a backward area of Gujarat. They are symbols of the dramatic transformation that Harnath Jagawat, 58, a former personnel officer in a private company, has brought in one of the country's most arid regions.

Before Jagawat, along with his wife Sharmistha, began work in Panchmahal and the adjoining districts of Banswara and Jabhua in Madhya Pradesh, these areas were perennially drought prone. The rains failed with depressing regularity, impoverishing the people—largely tribals dependent on agriculture or forests. Even when they did come, much of the rainwater drained away because the villagers could not afford to build storage dams.

The Jagawats concentrated their efforts on harvesting water. Gathering a team of like-minded individuals and tapping into the philanthropy of the Mafatlals, for whom Jagawat

worked, they began small. They set up a foundation called Sadguru which started by building check dams and mini-lift irrigation schemes in several villages. While they provided the money, they got the villagers to build the dam themselves. And then entrusted the management and maintenance of these projects to the villagers.

Seeing their success, other organisations and even the government started backing their effort with funds. Today, apart from receiving funds from the state Government, Sadguru is one of the only two voluntary bodies in the country which gets an annual aid of Rs 3 crore from the European Union. Besides this, it also gets Rs 2 crore a year from Norway.

The only reason money flows in with such ease is that the foundation has plenty of work to show for it. In the past 20 years, it has built 120 lift-irrigation projects, 90 check dams and recharged 10,000 wells, bringing under irrigation a total of 80,000 acres of land. "They have helped build

THE RAIN MAKER: Jagawat, with Sadguru members, used ingenious ways to help villagers harvest water



up a model of rural development by harvesting water. Their strength is that unlike others, they talk less and work more, and in doing so have brought a silent revolution to a parched land," says A.W.E.P. David, Gujarat's additional chief secretary.

Jagawat and his foundation has not just built dams. He has taught the region to fend for itself and manage its resources. And the results are showing. Two years ago, Sadguru helped build a 110-metre-long dam at a cost of Rs 28 lakh in Thunthi Kanshi, a village in Panchmahal district. Today, it irrigates over a 1,000 acres and allows them to grow three crops a year. Earlier about 80 per cent of the villagers used to migrate to cities. Today, the migration has come down to less than 10 per cent.

Moti Dhulia Garasia, 52, a resident of village Shankarpura, used to be one of the migrants. During the lean months he and his family of six would go to nearby cities in search of work and sleep on the pavements. Today, he gets Rs 12,000 worth of

foodgrains produced from his two-acres of land and finds no need to head for the city. Says he: "The dam has come as a boon for us."

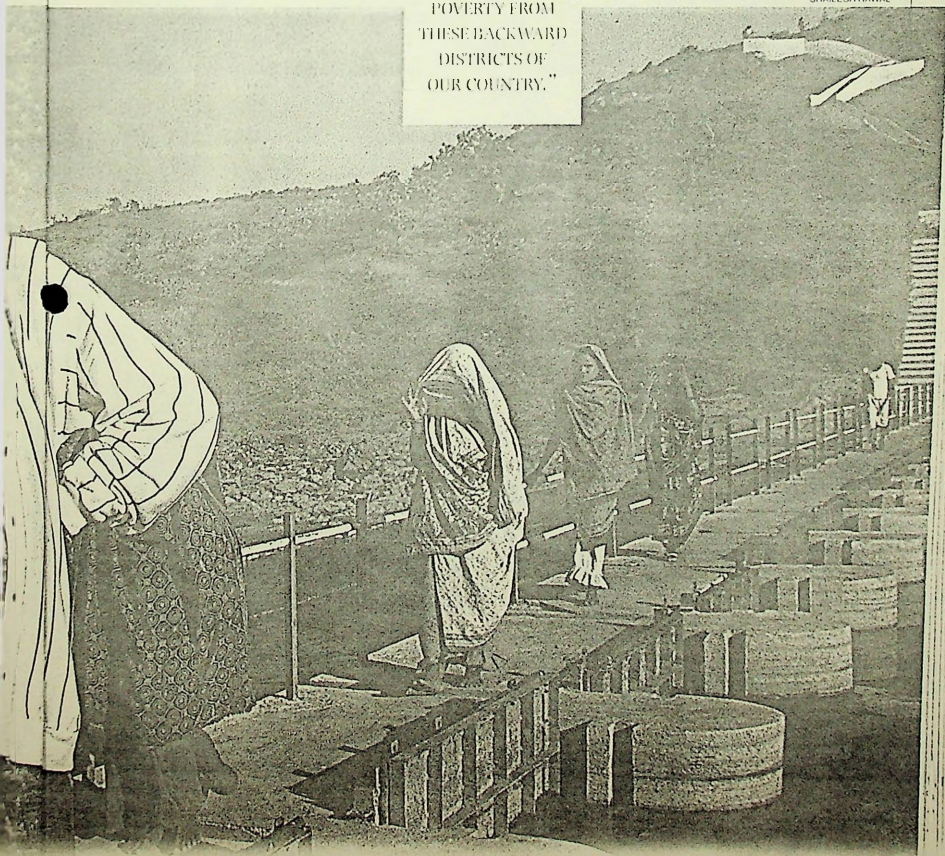
Besides using ingenious methods to help villagers harvest water, the foundation has begun extending its work to other areas. It has planted about 2.25 crore trees in the three districts. The trees are fast-growing Nilgiris and Baboos that can be sold for its wood and provide a livelihood for villagers when the monsoons fail.

The secret of Sadguru's success are the Jagawats and the dedication of the 100-odd members of the team. Sadguru boasts of seven IT engineers and five post-graduates from the Tata Institute of Social Sciences who are willing to work at less than half the salaries they could have earned if they worked elsewhere. Says a modest Jagawat: "We owe our success to these socially-committed professionals."

But Sadguru, with the Jagawats in the lead, is not one to rest on his laurels. According to a

SHARLESH RAWAL

"OUR PLAN
IS ULTIMATELY
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OUR COUNTRY."



study they have carried out, the area needs another 1,500 dams at a cost of Rs 70 crore. And Sadguru is planning to take up the task head-on. "Our plan is to ultimately wipe out poverty from the face of these districts," says Jagawat, with determination. And judging from its track record, there is no reason why the Sadguru foundation should not succeed.

AMULYA K.N. REDDY
DOING MORE
WITH LESS

By STEPHEN DAVID in Pura

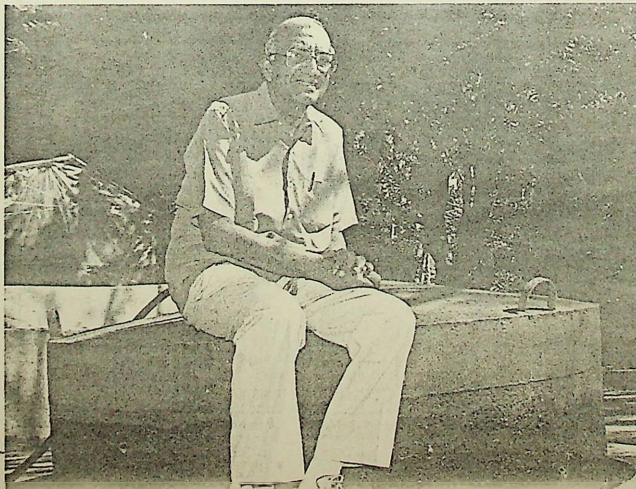


NYONE with his scientific temper would have preferred a well-paid job in the West. Amulya K.N. Reddy, 65, did think that American universities were the best place to be in—in the early '60s—when

he was hailed for his discovery of a new technique in chemistry called chrono-ellipsometry and for his book on electrochemistry. But a lecture on "Poverty in India" which he attended during a trip back home, changed his outlook. It shattered his faith in the Nehruvian dictum that more industrialisation equals less poverty and made him a staunch believer in an alternative pattern of capital-saving, labour-intensive technologies for

THE RIGHT TEMPER: Though Reddy is hailed in the West as a chemist of repute, at home he is known for his low-tech solutions, like fuel-efficient devices, to help rural areas

SIPRA DAS



the rural poor which he subsequently developed.

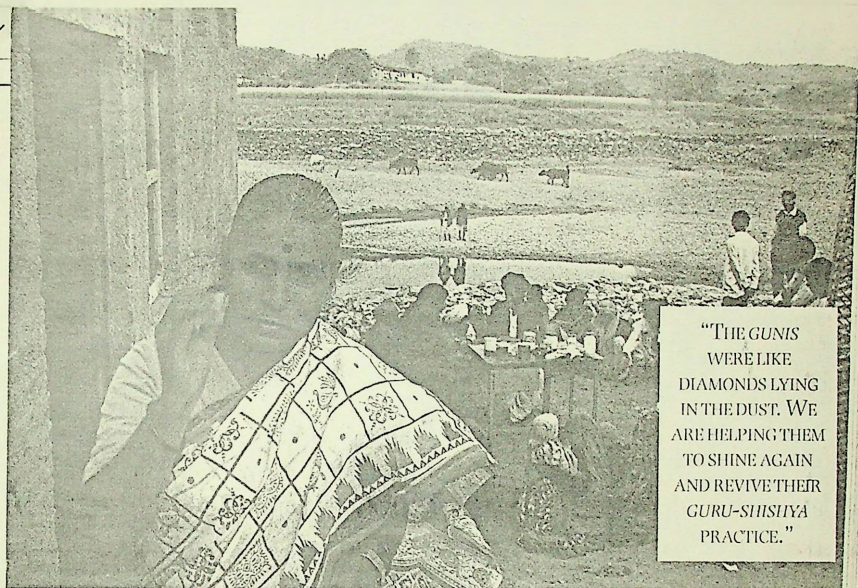
The West's loss has been India's gain. For today, Reddy is more famous for his rural energy centres that provide clean water and better electric illumination than for his accomplishments in electrochemistry and inorganic physics. "I spent too much time in conventional science without thinking of the rural folk who stood divorced from modern science and technology," he says a little ruefully.

The centre for Application of Science and Technology in Rural Areas (ASTRA), which Reddy started at the Indian Institute of Science, Bangalore, in 1974, has become the bedrock of his movement to help the rural poor. Over the years, a team of like-minded scientists drawn from various disciplines have helped Reddy evolve fuel-efficient devices like wood-burning stoves, solar ponds and brick- and tile-kilns that have created a mini-revolution in solving India's rural energy requirements.

Among their more recent efforts is the development of a cheap community biogas plant (CBP) that may provide a solution to the state's enormous power shortage problem. For starters, a CBP was set up in 1991 at Pura village in Tumkur district, Karnataka. For the past four years it has helped the village pump drinking water from a borewell and also lit up their homes at a price that is half of that provided by the grid-driven state electricity board. "Before Reddy moved in with his idea, we had to trek 2 km to fetch water," says Gangamma, a 53-year-old resident of Pura.

Reddy and the ASTRA team had made a detailed study of the energy systems prevalent in Indian villages before embarking on the project. "We chose biogas as, traditionally, Indian villages have large number of cattle, and cattle wastes are biomass energy sources," says Nirmala Das, a scientist with ASTRA. Armed with these findings, Reddy plunged into the design of a modified CBP and

"VILLAGERS SAID IT WAS OKAY TO MAKE MISTAKES AND THEY'LL GIVE ME TO SEE DEVELOPMENT THROUGH THEIR EYES."



"THE GUNIS WERE LIKE DIAMONDS LYING IN THE DUST. WE ARE HELPING THEM TO SHINE AGAIN AND REVIVE THEIR GURU-SHISHYA PRACTICE."

THE MOTIVATOR: Bai is spearheading a movement to revive traditional healing systems and preserve knowledge of herbs

trained village personnel to manage it "without relying on scientists". "For me the efficient management by the village development committee (VDC) is a key element in the success of the Pura rural energy centre," says Reddy.

The villagers have been enthusiastic because the VDC pays a villager 2 paise for a kilo of dung and returns 60 gm of manure for every kilo supplied. Every month, the VDC reports a net profit of Rs 200. "The Pura energy centre is evidence of the enormous energy that is available in the villages," says Kunigal taluk Deputy Tehsildar M. Chandrasekhariah.

There have been stumbling blocks on Reddy's way to tackling rural energy and water requirements. One of ASTRA's earlier experiments with a cooking stove failed as there were few takers for it. Says Chandramma, a resident of Pura: "The stove didn't conform to our traditional design and was unsuitable for our needs." Reddy, in fact, acts on such criticisms to work out viable energy-efficient household appliances. "It is the villagers who taught me to look at development from their eyes," says Reddy. "They said it is okay to make mistakes, unlike the people who cheer when a satellite goes up and jeer when it crashes into the sea."

The pace-setter rarely steps into ASTRA nowadays. "When you play a leader, you should also learn to let go. Let them come up on their own," he says. A recent heart surgery has upset Reddy's schedule slightly. But not too much. "My dream is to see a 100 more villages operating a Pura-type energy centre in the next five years," says Reddy, who set up an NGO, International Energy Initiative, two years ago to link like-minded energy management institutions across the world. Hunched over a laptop, these days Reddy is busy turning that dream into reality.

—with V.K. SANTOSH KUMAR

BHANWARDA BAI GOING BACK TO NATURE

By ANJAN MITRA in Udaipur



WHILE the West is intrigued by alternative healing systems, in India they appear to be on the decline. A trend most evident in Rajasthan which once boasted the most effective herbal practitioners in the country. As the villagers turned to allopathy, the *gunis* or traditional village doctors became a dying breed. Their vast knowledge of herbs and their cures were slowly being lost to posterity.

That's when Bhanwarda Bai, 38 and a "Class XI fail" decided to reverse this decline. Bai, who had begun social work when she was only 16, went about it systematically. She formed the Jagaran Jan Vikas Samiti and with funds from CWC, made a survey of the practising *gunis* in the region. Her findings were depressing. Only 40 of them could be identified, their ranks depleted by poverty and apathy. Also, deforestation had affected the availability of the rare herbs they required.

Along with a band of workers, she began persuading the remaining *gunis* to revive the *guru-shishya parampara* that

had sustained these traditions. Initially they were reluctant. But gradually, Jagaran was able to persuade them to impart their knowledge. Over the past few years, they have been able to train 15 new *gumis* in this art. Jagaran has thus been able to promote village, district and state level conferences where they could meet and upgrade their skills.

The villagers too are returning to the *gumis*. Last year, when the medicine given by the district administration for malaria failed in Phaloudi area of Rajasthan, the *gumis* recommended a decoction made from a plant called *nah*. And it proved more effective.

Bai uses such examples to remind villagers that "people survived before antibiotics were known because the *gumis* treated them". She believes that *gumis* are essential as they provide a cheap and reliable system of medicine. Rampal Somani, state drugs director (Ayurveda), says: "The value of herbs and roots has always been known but Bai has helped in reviving their importance." The environmental message also goes home. Says Dharamraj Meena, pradhan of 48 panchayats, "Jagaran's effort will help in conservation of forests as *gumis* slowly disappeared with the forests." The battle to revive the *gumi* system is a protracted one. But it hasn't dissuaded Bai yet.

SANU VAMUZO THE HEALING TOUCH

By SUBRATA NAGTIODHURY in Kohima



On November 24, Roko, a 28-year-old Naga youth, celebrated his 'second birthday'. His second year of a new life free from the clutches of drug addiction, that is. Hooked to alcohol and a desperate drug addict for years,

Roko was rescued by the Naga Mother's Association (NMA) and the detoxification and counselling centre it runs at Kohima with the Kripa Foundation. And today he is a grateful and enthusiastic counsellor at the same centre.

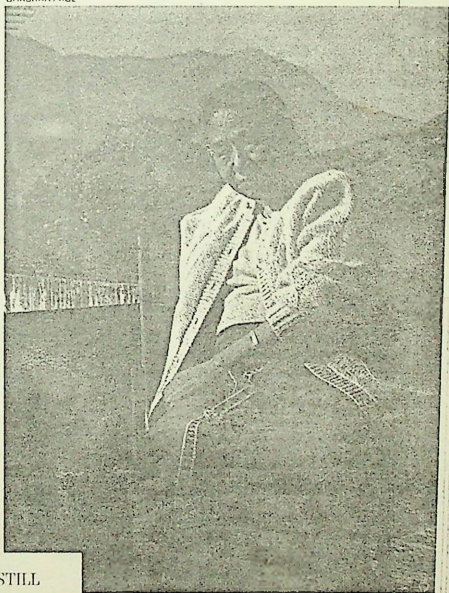
Roko had been one of thousands of victims of the drug plague that swept through the North-east since the early '80s, afflicting a substantial section of the youth. The main reason was the area's proximity to the drug-laden Golden Triangle. Economic and social problems, and a lax government machinery only compounded the problem. Until a courageous woman, Sanu Vamuzo, wife of a leading Nagaland politician, decided to rein in the problem. A personal trauma—with a son who underwent a drug problem—had given her both the sensitivity and the motivation to do something. She collected a group of women, mothers like her, and with their concerted effort the NMA was born, with her as president.

The NMA used innovative methods. They began by attacking the first aspect of the problem—an unwillingness to admit that it even existed because of the social stigma attached to it. A door-to-door campaign by volunteers not only educated families about the harmful effect of drugs but also helped bring the problem out in the open. The next step was to set up a rehabilitation home in Kohima with trained personnel to treat victims and put them on the slow road to recovery. Today, it treats an average 300 addicts annually.

Next, the NMA decided to tackle the source of the problem

REHABILITATOR: For a state reeling under the drugs menace, Vamuzo has shown the way to recovery

BHASKAR PAUL



"IT'S STILL
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STILL WE HAVE
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itself. It began by mounting strict vigils on the peddlers, the key players in the drug network, and had them arrested by the police. NMA activists introduced surprise checks on vehicles and suspected dens. The church was also persuaded to hold mass prayer congregations against drug addiction.

"It's still an uphill task," says Vamuzo. There is little official help, and a dearth of funds and trained personnel. And an inability to provide any kind of post-recovery support—like livelihood. And the nagging problems of remission and social acceptability of recovering addicts. However, the NMA is today recognised as a major weapon against the drug menace. It continues to gather momentum even as Vamuzo passes the baton on to others.

WH-13



SCIENCE

WHAT MAKES YOU WHO YOU ARE

Which is stronger—nature or nurture? The latest science says genes and your experience interact for your whole life

By MATT RIDLEY

THE PERENNIAL DEBATE ABOUT NATURE AND NURTURE—WHICH IS the more potent shaper of the human essence?—is perennially rekindled. It flared up again in the *London Observer* of Feb. 11, 2001. REVEALED: THE SECRET OF HUMAN BEHAVIOR, read the banner headline. ENVIRONMENT, NOT GENES, KEY TO OUR ACTS. The source of the story was Craig Venter, the self-made man of genes who had built a private company to read the full sequence of the human genome in competition with an international consortium funded by taxes and charities. That sequence—a string of 3 billion letters, composed in a four-letter alphabet, containing the complete recipe for building and running a human body—was to be published the very next day (the competition ended in an arranged tie). The first analysis of it had revealed that there were just 30,000 genes in it, not the 100,000 that many had been estimating until a few months before.

Illustrations for TIME by Tavis Coburn

PHOTOGRAPH BY GUY LAWRENCE FOR TIME; ILLUSTRATION BY TAVIS COBURN

Details had already been circulated to journalists under embargo. But Venter, by speaking to a reporter at a biotechnology conference in France on Feb. 9, had effectively broken the embargo. Not for the first time in the increasingly bitter rivalry over the genome project, Venter's version of the story would hit the headlines before his rivals. "We simply do not have enough genes for this idea of biological determinism to be right," Venter told the *Observer*. "The wonderful diversity of the human species is not hard-wired in our genetic code. Our environments are critical."

In truth, the number of human genes changed nothing. Venter's remarks concealed two whopping nonsequiturs: that fewer genes implied more environmental influences and that 30,000 genes were too few to explain human nature, whereas 100,000 would have been enough. As one scientist put it to me a few weeks later, just 33 genes, each coming in two varieties (on or off), would be enough to make every human being in the world unique. There are more than 10 billion combinations that could come from flipping a coin 33 times, so 30,000 does not seem such a small number after all. Besides, if fewer genes meant more free will, fruit flies would be freer than we are, bacteria freer still and viruses the John Stuart Mill of biology.

Fortunately, there was no need to reassure the population with such sophisticated calculations. People did not weep at the humiliating news that our genome has only about twice as many genes as a worm's. Nothing had been hung on the number 100,000, which was just a bad guess.

But the human genome project—and the decades of research that preceded it—did force a much more nuanced understanding of how genes work. In the early days, scientists detailed how genes encode the various proteins that make up the cells in our bodies. Their more sophisticated and ultimately more satisfying discovery—that gene expression can be modified by experience—has been gradually emerging since the 1980s. Only now is it dawning on scientists what a big and general idea it implies: that learning itself consists of nothing more than switching genes on and off. The more we lift the lid on the genome, the more vulnerable to experience genes appear to be.

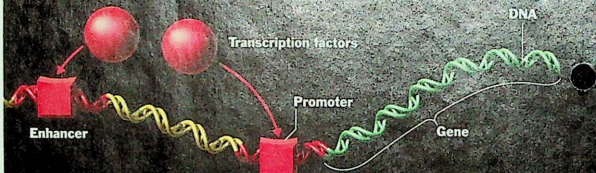
This is not some namby-pamby, middle-

NURTURING NATURE

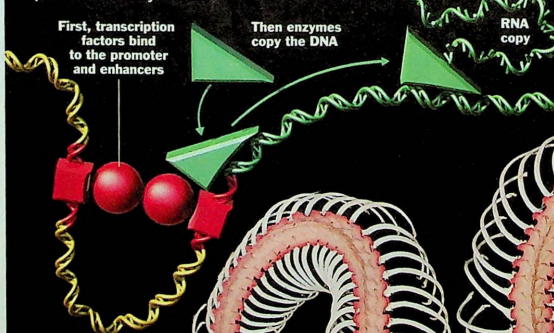
Genes are not static blueprints that dictate our destiny. How they are expressed—where and when they are turned on or off and for how long—can be determined in the womb, by the environment, and by the experiences of our lives.

How genes get switched on

1 Most genes have a switch, called a promoter, that controls how and when even if the gene becomes active. Other regions of DNA, called enhancers, also play a role.) The promoter and enhancers are able to do their jobs only after so-called transcription factors attach to them.

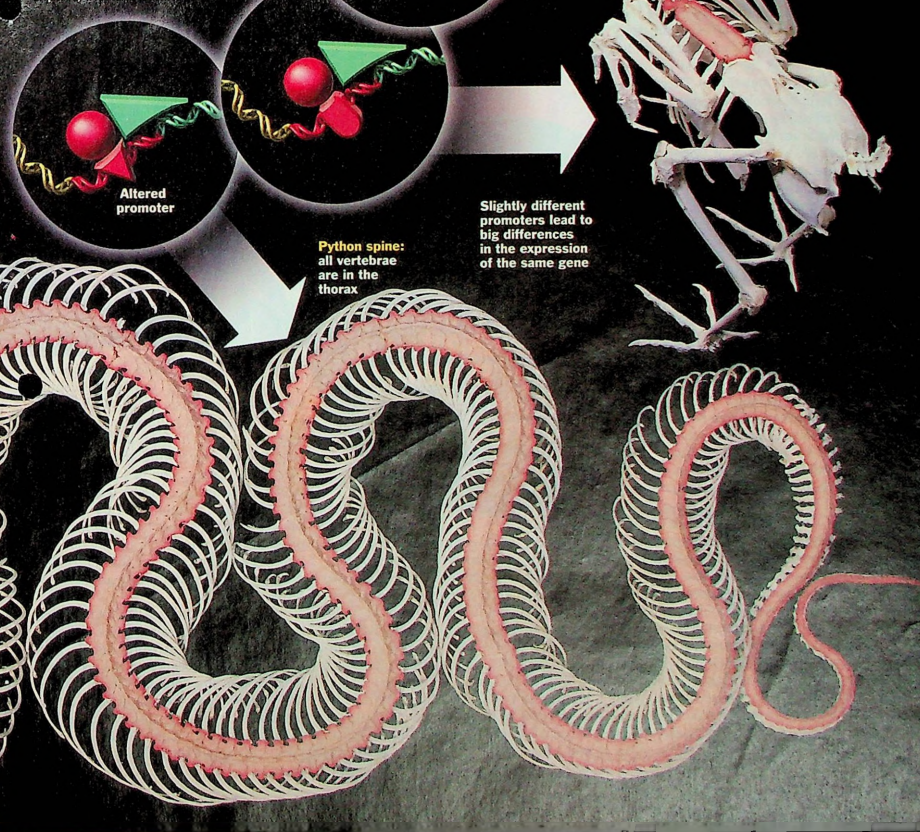


2 Once transcription factors are attached, other enzymes are able to make a first RNA copy of the gene, the first step in the long process of building a protein needed by the cell.



... and contribute to evolution

3 Slight alterations in the promoters can lead to dramatic changes in when and where genes are expressed. Various environmental factors can influence how easily a transcription factor binds to the promoter. Consider the example of the *Hoxc8* gene, which is responsible for determining the location of the thorax, which includes the chest area, of an animal. Rats, chickens, and pythons seem to have slightly different promoters that allow their respective *Hoxc8* genes to be turned on in slightly different configurations during development. Extensive activation produces an animal that's almost all thorax—like the python. Limited activation gives the chicken a short thorax. And the expression of the *Hoxc8* gene in the rat, with its medium-size thorax is, as you might expect, intermediate.



Matt Ridley is an Oxford-trained zoologist and science writer whose latest book is *Nature via Nurture*

Sources: Goodwill S. Shrivastava, Pennsylvania State University and other associates of Frank Ruddle, Yale University; Arno Burke, Wesleyan University; M. J. Cohn and C. Tickle, University of Reading; Brian Photos: TED TAYLOR; TIME; Graphic by Joe Lertola

of-the-road compromise. This is a new understanding of the fundamental building blocks of life based on the discovery that genes are not immutable things handed down from our parents like Moses' stone tablets but are active participants in our lives, designed to take their cues from everything that happens to us from the moment of our conception.

For the time being, this new awareness has taken its strongest hold among scientists, changing how they think about everything from the way bodies develop in the womb to how new species emerge to the inevitability of homosexuality in some people. (More on all this later.) But eventually, as the general population becomes more attuned to this interdependent view, changes may well occur in areas as diverse as education, medicine, law and religion. Dieters may learn precisely which combination of fats, carbohydrates and proteins has the greatest effect on their individual waistlines. Theologians may develop a whole new theory of free will based on the observation that learning expands our capacity to choose our own path. As was true of Copernicus's observation 500 years ago that the earth orbits the sun, there is no telling how far the repercussions of this new scientific paradigm may extend.

To appreciate what has happened, you will have to abandon cherished notions and open your mind. You will have to enter a world in which your genes are not puppet masters pulling the strings of your behavior but puppets at the mercy of your behavior, in which instinct is not the opposite of learning, environmental influences are often less reversible than genetic ones, and nature is designed for nurture.

Fear of snakes, for instance, is the most common human phobia, and it makes good evolutionary sense for it to be instinctive. Learning to fear snakes the hard way would be dangerous. Yet experiments with monkeys reveal that their fear of snakes (and probably ours) must still be acquired by watching another individual react with fear to a snake. It turns out that it is easy to teach monkeys to fear snakes but very difficult to teach them to fear flowers. What we inherit is not a fear of snakes but a predisposition to learn a fear of snakes—a nature for a certain kind of nurture.

Early Puberty

Girls raised in **FATHERLESS HOUSEHOLDS** experience puberty earlier. Apparently, the change in timing is the reaction of a **STILL MYSTERIOUS** set of genes to their **ENVIRONMENT**. Scientists don't know how many **SETS OF GENES** act this way

Before we dive into some of the other scientific discoveries that have so thoroughly transformed the debate, it helps to understand how deeply entrenched in our intellectual history the false dichotomy of nature vs. nurture became. Whether human nature is born or made is an ancient conundrum discussed by Plato and Aristotle. Empiricist philosophers such as John Locke and David Hume argued that the human mind was formed by experience; nativists like Jean-Jacques Rousseau and Immanuel Kant held that there was

such a thing as immutable human nature.

It was Charles Darwin's eccentric mathematician cousin Francis Galton who in 1874 ignited the nature-nurture controversy in its present form and coined the very phrase (borrowing the alliteration from Shakespeare, who had lifted it from an Elizabethan schoolmaster named Richard Mulcaster). Galton asserted that human personalities were born, not made by experience. At the same time, the philosopher William James argued that human beings have more instincts than animals, not fewer.

In the first decades of the 20th century, nature held sway over nurture in most fields. In the wake of World War I, however, three men recaptured the social sciences for nurture: John B. Watson, who set out to show how the conditioned reflex, discovered by Ivan Pavlov, could explain human learning; Sigmund Freud, who sought to explain the influence of parents

and early experiences on young minds; and Franz Boas, who argued that the origin of ethnic differences lay with history, experience and circumstance, not physiology and psychology.

Galton's insistence on innate explanations of human abilities had led him to espouse eugenics, a term he coined. Eugenics was enthusiastically adopted by the Nazis to justify their campaign of mass murder against the disabled and the Jews. Tainted by this association, the idea of innate behavior was in full retreat for most of the middle years of the century. In 1958, however, two men began the counterattack on behalf of nature. Noam Chomsky, in his review of a book by the behaviorist B.F. Skinner, argued that it was impossible to learn human language by trial and error alone; human beings must come already equipped with an innate grammatical skill. Harry Harlow did a simple experiment that showed that a baby monkey prefers a soft, cloth model of a mother to a hard, wire-frame mother, even if the wire-frame mother provides it with all its milk; some preferences are innate.

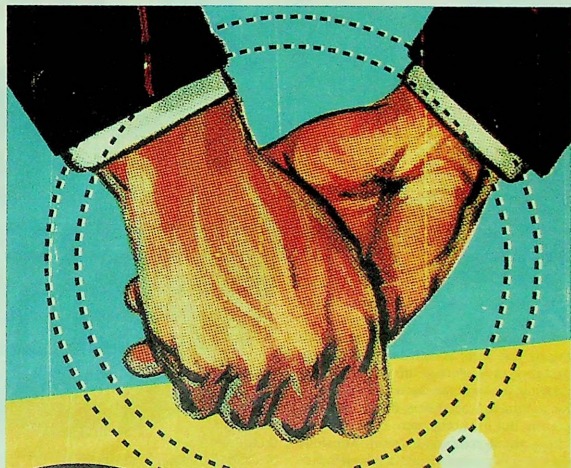
Fast-forward to the 1980s and one of the most stunning surprises to greet scientists when they first opened up animal genomes: fly geneticists found a small group of genes called the *hox* genes that seemed to set out the body plan of the fly during its early development—telling it roughly where to put the head, legs, wings and so on. But then colleagues studying mice found the same *hox* genes, in the same order, doing the same job in Mickey's world—telling the mouse where to put its various parts. And when scientists looked in our genome, they found *hox* genes there too.

Hox genes, like all genes, are

switched on and off in different parts of the body at different times. In this way, genes can have subtly different effects, depending on where, when and how they are switched on. The switches that control this process—stretches of DNA upstream of genes—are known as promoters.

Small changes in the promoter can have profound effects on the expression of a *hox* gene. For example, mice have short necks and long bodies; chickens have long necks and short bodies. If you count the vertebrae in the necks and thoraxes of mice and chickens, you will find

that a mouse has seven neck and 13 thoracic vertebrae, a chicken 14 and seven, respectively. The source of this difference lies in the promoter attached to *HoxC8*, a *hox* gene that helps shape the thorax of the body. The promoter is a 200-letter paragraph of DNA, and in the two species it differs by just a handful of letters. The effect is to alter the expression of the *HoxC8* gene in the development of the chicken embryo. This means the chicken makes thoracic vertebrae in a different part of the body than the mouse. In the python, *HoxC8* is expressed right from



Homosexuality

GAY MEN are more likely to have **OLDER BROTHERS** than either gay women or heterosexual men. It may be that a **FIRST MALE FETUS** triggers an immune reaction in the mother, **ALTERING THE EXPRESSION** of key gender genes

the head and goes on being expressed for most of the body. So pythons are one long thorax; they have ribs all down the body.

To make grand changes in the body plan of animals, there is no need to invent new genes, just as there's no need to invent new words to write an original novel (unless your name is Joyce). All you need do is switch the same ones on and off in different patterns. Suddenly, here is a mobaustic for creating large and small evolutionary changes from small genetic differences. Merely by adjusting the se-

ter our understanding of human nature? Take a look at four examples.

LANGUAGE Human beings differ from chimpanzees in having complex, grammatical language. But language does not spring fully formed from the brain; it must be learned from other language-speaking human beings. This capacity to learn is written into the human brain by genes that open and close a critical window during which learning takes place. One of those genes, FoxP2, has recently been discovered on human chromosome 7 by Anthony Monaco and his colleagues at the Wellcome Trust Centre for Human Genetics in Oxford. Just having the FoxP2 gene, though, is not enough. If a child is not exposed to a lot of spoken language during the critical learning period, he or she will always struggle with speech.

LOVE Some species of rodents, such as the prairie vole, form long pair bonds with their mates, as human beings do. Others, such as the montane vole, have only transitory liaisons, as do chimpanzees. The difference, according to Tom Insel and Larry Young at Emory University in Atlanta, lies in the promoter upstream of the oxytocin- and vasopressin-receptor genes. The insertion of an extra chunk of DNA text, usually about 460 letters long, into the promoter makes the animal more likely to bond with its mate. The extra text does not create love, but perhaps it creates the possibility of falling in love after the right experience.

ANTISOCIAL BEHAVIOR It has often been suggested that childhood maltreatment can

create an antisocial adult. New research by Terrie Moffitt of London's Kings College on a group of 442 New Zealand men who have been followed since birth suggests that this is true only for a genetic minority. Again, the difference lies in a promoter that alters the activity of a gene. Those with high-active monoamine oxidase A genes were virtually immune to the effects of mistreatment. Those with low-active genes were much more antisocial if maltreated, yet—if anything—slightly less antisocial if not maltreated. The low-active, mistreated men were responsible for four times their share of rapes, robberies and assaults. In other words, maltreatment is not enough; you must also have the low-active gene. And it is not enough to have the low-active gene; you must also be maltreated.

HOMOSEXUALITY Ray Blanchard at the University of Toronto has found that gay men are more likely than either lesbians or heterosexual men to have older brothers (but not older sisters). He has since confirmed this observation in 14 samples from many places. Something about occupying a womb that has held other boys occasionally results in reduced birth weight, a larger placenta and a greater probability of homosexuality. That something, Blanchard suspects, is an immune reaction in the mother, primed by the first male fetus, that grows stronger with each male pregnancy. Perhaps the immune response affects the expression of key genes during brain development in a way that boosts a boy's attraction to his own sex. Such an explanation would not hold true for all gay men, but it might provide important clues into the origins of both homosexuality and heterosexuality.

TO BE SURE, EARLIER SCIENTIFIC DISCOVERIES had hinted at the importance of this kind of interplay between heredity and environment. The most striking example is Pavlovian conditioning. When Pavlov announced his famous experiment a century ago this year, he had apparently discovered how the brain could be changed to acquire new knowledge of the world—in the case of his dogs, knowledge that a bell foretold the arrival of food. But now we know how the brain changes: by the



Divorce

If a **FRATERNAL TWIN** gets divorced, there's a **30% CHANCE** that his or her twin will get divorced as well. If the twins are **IDENTICAL**, however, one sibling's divorce **BOOSTS THE ODDS** to **45%** that the other will split

Likewise, the development of a certain human behavior takes a certain time and occurs in a certain order, just as the cooking of a perfect soufflé requires not just the right ingredients but also the right amount of cooking and the right order of events.

How does this new view of genes al-

quency of a promoter or adding a new one, you could alter the expression of a gene.

In one sense, this is a bit depressing. It means that until scientists know how to find gene promoters in the vast text of the genome, they will not learn how the recipe for a chimpanzee differs from that for a person. But in another sense, it is also uplifting, for it reminds us more forcefully than ever of a simple truth that is all too often forgotten: bodies are not made, they grow. The genome is not a blueprint for constructing a body. It is a recipe for baking a body. You could say the chicken embryo is marinated for a shorter time in the HoxC8 sauce than the mouse embryo is.

switch one another on and off; they respond to the environment. They may direct the construction of the body and brain in the womb, but then almost at once, in response to experience, they set about dismantling and rebuilding what they have made. They are both the cause and the consequence of our actions.

Will this new vision of genes enable us to leave the nature-nurture argument behind, or are we doomed to reinvent it in every generation? Unlike what happened in previous eras, science is explaining in great detail precisely how genes and their environment—be it the womb, the classroom or pop culture—interact. So perhaps the pendulum swings of a now demonstrably false dichotomy may cease.

It may be in our nature, however, to seek simple, linear, cause-and-effect stories and not think in terms of circular causation, in which effects become their own causes. Perhaps the idea of nature via nurture, like the ideas of quantum mechanics and relativity, is just too counterintuitive for human minds. The urge to see ourselves in terms of nature versus nurture, like our unattainable ability to fear snakes, may be encoded in our genes.

Crime Families

GENES may influence the way people respond to a "crimogenic" **ENVIRONMENT**. How else to explain why the **BIOLOGICAL** children of criminal parents are more likely than their **ADOPTED** children to break the **LAW**?

real-time expression of 17 genes, known as the CREB genes. They must be switched on and off to alter connections among nerve cells in the brain and thus lay down a new long-term memory. These genes are at the mercy of our behavior, not the other way around. Memory is in the genes in the sense that it uses genes, not in the sense that you inherit memories.

In this new view, genes allow the human mind to learn, remember, imitate, impute language, absorb culture and express instincts. Genes are not puppet masters or blueprints, nor are they just the carriers of heredity. They are active during life; they



ANCIENT QUARREL

How much of who we are is learned or innate is an argument with a fruitful but fractious pedigree

Nature

We may be destined to be bald, mourn our dead, seek mates, fear the dark



IMMANUEL KANT
His philosophy sought a native morality in the mind



FRANCIS GALTON
Math geek saw mental and physical traits as innate



KONRAD LORENZ
Studied patterns of instinctive behavior in animals



NOAM CHOMSKY
Argued that human beings are born with a capacity for grammar

Nurture

But we can also learn to love tea, hate polkas, invent alphabets and tell lies



JOHN LOCKE
Considered the mind of an infant to be a tabula rasa, or blank slate



IVAN PAVLOV
Trained dogs to salivate at the sound of the dinner bell



SIGMUND FREUD
Felt we are formed by mothers, sex, jokes and dreams



FRANZ BOAS
Believed chance and environs are key to cultural variation

MANU/SC/0523/2003

FACT HIGHLIGHT

CASE NOTE HIGHLIGHT

IN THE SUPREME COURT OF INDIA

Writ Petition No. 302 of 2001 with C.A. Nos. 5355 to 5372, 5380, 5381, 5382, 5397 to 5450 of 2003 Arising out of SLP(C) Nos. 7527-7528/2001, WP(C) No. 269/2001, SLP(C) Nos. 10551/2001, 10583/2001, 10725/2001, 11002/2001, 10729/2001, 12313-12314/2001, 10996/2001, WP(C) Nos. 316/2001, 315/2001, SLP(C) Nos. 12259/2001, 13595/2001, 13398/2001, 13430/2001, WP(C) Nos. 329/2001, 362/2001, 363/2001, 258/2001, SLP(C) Nos. 14547/2001, 14686/2001, 10189/2001, WP(C) Nos. 403/2001, 395/2001, SLP(C) Nos. 16477/2001, 16483/2001, 18020/2001, WP(C) No. 420/2001, SLP(C) Nos. 17247/2001, 17497/2001, 16892/2001, 18557/2001, 18554/2001, WP(C) Nos. 438/2001, 475/2001, 507/2001, 508/2001, SLP(C) Nos. 19211/2001, 19139/2001, WP(C) No. 495/2001, SLP(C) No. 19244/2001, WP(C) Nos. 567/2001, 560/2001, 559/2001, 561/2001, 538/2001, 539/2001, 579/2001, SLP(C) Nos. 22309/2001, 22278/2001, 447/2002, 12779/2001, WP(C) No. 19/2002, SLP(C) Nos. 22574/2001, 22672/2001, WP(C) Nos. 30/2002, 32/2002, SLP(C) Nos. 497/2002, 13185/2001, 2188/2002, 1020/2002, 17156/2001, WP(C) Nos. 1/2002, 49/2002, 50/2002, 79/2002, SLP(C) Nos. 1768/2002, 856/2002, 1483/2002, 1820/2002, 3028/2002, 2022/2002, 2237/2002, 22524/2001, 18636/2001, 3214/2002, 4409-4411/2002, WP(C) Nos. 94/2002, 130/2002, 93/2002, 127/2002, 144/2002, SLP(C) Nos. 5374/2002, 5517/2002, 6186/2002, WP(C) Nos. 169/2002, 168/2002, 128/2002, 177/2002, 112/2002, 71/2002, 91/2002, 178/2002, SLP(C) Nos. 6427/2002, 5207/2002, WP(C) Nos. 184/2002, SLP(C) Nos. 6397/2002, 6466/2002, WP(C) Nos. 183/2002, 185/2002, SLP(C) Nos. 13156/2001, 18263/2001, 6537/2002, WP(C) No. 68/2002, SLP(C) No. 6769/2002, WP(C) Nos. 430/2001, 213/2002, 214/2002, 162/2002, 230/2002, 225/2002, 228/2002, SLP(C) Nos. 7542/2002, 7392/2002, 7223/2002, WP(C) No. 254/2002, SLP(C) No. 8631/2002, WP(C) Nos. 296/2002, 280/2002, 281/2002, 305/2002, SLP(C) Nos. 8632/2002, 9113/2002, 8963/2002, 8547/2002, 9246/2002, WP(C) Nos. 317/2002, 309/2002, C.A. No. 3629/2002, SLP(C) Nos. 10294/2002, 11755/2002, WP(C) No. 306/2002, C.A. No. 4053/2002, WP(C) Nos. 341/2002, 342/2002, 395/2002, C.A. No. 4066/2002, WP(C) Nos. 396/2002, 406/2002, C.A. Nos. 4501/2002, 4487/2002, WP(C) Nos. 402/2002, 336/2002, 424/2002, 355/2002, 381/2002, 380/2002, 430/2002, 431/2002, 421/2002, 404/2002, C.A. Nos. 5080/2002, 5081/2002, WP(C) Nos. 443/2002, 457/2002, 451/2002, C.A. No. 5270/2002, SLP(C) No. 11810/2002, WP(C) Nos. 462/2002, 491/2002, 495/2002, C.A. Nos. 5902/2002, 5903/2002, WP(C) No. 278/2002, C.A. No. 7034/2002, WP(C) Nos. 612/2002, 574/2002, 607/2002, 240/2002, 655/2002, 676/2002, 677/2002, 547/202, 645/2002, 620/2002, 682/2002, 8/2003, 669/2002, 18/2003, 28/2003, 40/2003, C.A. No. 2033/2003, WP(C) No. 63/2003, SLP(C) No. 3140/2003, WP(C) No. 121/2003, 123/2003, C.A. No. 2395/2003, WP(C) Nos. 149/2003, 193/2003, 195/2003, 204/2003, 155/2003, 161/2003, 188/2003, 245/2003, 247/2003, 248/2003, 250/2003, 257/2003, 268/2003, 270/2003, 277/2003, 281/2003 and SLP(C) No. 10673/2003

Sent by: *Dr. Rajalakshmi, NLSU*
To lib - *Dr. Commissioner file*
22/9/03

Decided On: 30.07.2003

Appellants: **Javed and Ors. Vs. Respondent: State of Haryana and Ors.**

Hon'ble Judges:

R.C. Lahoti, Ashok Bhan and Arun Kumar, JJ.

Counsels:

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Subject: Constitution

Catch Words:

American Decision, Arbitrariness, Attorney General, Attorney General for India, Census, Civil Servant, Class Legislation, Concurrent List, Conscience and Free Profession, Constituency, Constitution of India, Constitution of Panchayat, Constitutional Validity, Cow Slaughter, Different Entries, Directive Principle, Directive Principles of State Policy, Discharge, Discrimination, Discriminatory, Distribution of Legislative Power, Educational and Economic Interest, Election, Eleventh Schedule, Existing Law, Freedom of Conscience, Freedom of Conscience and Free Profession, Freedom of Religion,

Freedom of Speech, Fundamental Duties, Fundamental Duty, Fundamental Right, Government Servant, Gram Panchayat, Guarantee, Hostile Discrimination, Interim Order, Judicial Scrutiny, Law made by the Legislature, Legal Practitioner, Legislation, Legislative Competence, Legislative Power, Legislature of the State, Level of Nutrition, Liberty, Life and Personal Liberty, Migration, National Interest, Natural Justice, Panchayat, Parliament, Personal Law, Personal Liberty, Policy Decision, Polygamy, Propagation of Religion, Qualification, Reasonable Opportunity, Reasonableness, Religious Belief, Remedy, Representation, Responsibilities of Panchayat, Right Conferred, Right of Free Speech, Right to Freedom, Right to Life, Rule of Law, Service Rule, Seventh Schedule, Social Justice, Social Order, Social Reform, Special Leave Petition, Standard of Living, State Legislature, State List, Statutory Provision, Sustainable Development, Test of Reasonableness, Uniform Law, Violation of Article, Weaker Section, Welfare of the People

Acts/Rules/Orders:

Haryana Panchayati Raj Act, 1994 - Sections 175, 175(1), 177(1) and 177(2); Constitution of India - Articles 14, 19(1), 21, 25, 25(2), 38, 47, 51A, 243F, 243G and 246; Haryana Municipal Act, 1973 - Section 13A; Representation of the People Act, 1951 - Sections 123(5) and 124(5); Criminal Procedure Code (CrPC) - Section 125; Government Servants' Conduct Rules - Rule 27

Cases Referred:

Budhan Choudhry and Ors. v. The State of Bihar, (1955) 1 SCR 1045; The State of Madhya Pradesh v. G.C. Mandawar, (1955) 2 SCR 225; The Bar Council of Uttar Pradesh v. The State of U.P. and Anr., (1973) 1 SCC 261; State of Tamil Nadu and Ors. v. Ananthi Ammal and Ors., (1995) 1 SCC 519; Prabhakaran Nair and Ors. v. State of Tamil Nadu and Ors., (1987) 4 SCC 238; Lalit Narayan Mishra Institute of Economic Development and Social Change, Patna etc. v. State of Bihar and Ors., (1988) 2 SCC 433; Pannalal Bansilal Pitti and Ors. v. State of A.P. and Anr., (1996) 2 SCC 498; N.P. Ponnuswami v. Returning Officer, Namakkal Constituency, (1952) SCR 218; Jagan Nath v. Jaswant Singh and Ors., 1954 SCR 892; Jyoti Basu and Ors. v. Debi Ghosal and Ors., (1982) (1) SCC 691; Jumuna Prasad Mukhariva and Ors. v. Lachhi Ram and Ors., (1955) 1 SCR 608; Sakhawat Ali v. The State of Orissa, (1955) 1 SCR 1004; Mrs. Maneka Gandhi v. Union of India and Anr. - (1978) 1 SCC 248; Kasturu Lal Lakshmi Reddy and Ors. v. State of Jammu and Kashmir and Anr., (1980) 4 SCC 1; Air India v. Nergesh Meerza and Ors., (1981) 4 SCC 335; Dr. M. Ismail Faruqui and Ors. v. Union of India and Ors., (1994) 6 SCC 360; Sarla Mudgal (Smt.), President, Kalyani and Ors. v. Union of India and Ors., (1995) 3 SCC 635; Mohd. Ahmed Khan v. Shah Bano Begum and Ors., (1985) 2 SCC 556; Mohd. Hanif Quareshi and Ors. v. The State of Bihar, (1959) SCR 629; The State of Bombay v. Narasu Appa Mali, AIR 1952 Bombay 84; Badruddin v. Aisha Begam, 1957 ALJ 300; Smt. R.A. Pathan v. Director of Technical Education and Ors., 1981 (22) GLR 289; Ram Prasad Seth v. State of Uttar Pradesh and Ors., 1957 L.L.J. II 172, AIR 1961 Allahabad 334

Disposition:

Petition dismissed

Citing Reference:

* Mentioned

** Relied On

*** Examined

Budhan Choudhry and Ors. v. The State of Bihar .	**	
The State of Madhya Pradesh v. G.C. Mandawar.		..
The Bar Council of Uttar Pradesh v. The State of U.P. and Anr.	*	
State of Tamil Nadu and Ors. v. Ananthi Ammal and Ors.	*	
Prabhakaran Nair and Ors. v. State of Tamil Nadu and Ors.	*	
Lalit Narayan Mishra Institute of Economic Development and Social Change, Patna etc. v. State of Bihar and Ors.	**	
Pannalal Bansilal Pitti and Ors. v. State of A.P. and Anr.	**	
N.P. Ponnuswami v. Returning Officer, Namakkal Constituency.	*	
Jagan Nath v. Jaswant Singh and Ors.		*
Jyoti Basu and Ors. v. Debi Ghosal and Ors.	**	
Jununa Prasad Mukhariva and Ors. v. Lachhi Ram and Ors.	***	
Sakhawat Ali v. The State of Orissa		***
Mrs. Maneka Gandhi v. Union of India and Anr.	*	
Kasturu Lal Lakshmi Reddy and Ors. v. State of Jammy and Kashmir and Anr.	*	
Air India v. Nergesh Meerza and Ors.		..
Dr. M. Ismail Faruqi and Ors. v. Union of India and Ors.	**	
Sarla Mudgal (Smt.) President, Kalyani and Ors. v. Union of India and Ors.	**	
Mohd. Ahmed Khan v. Shah Bano Begum and Ors.		..
Mohd. Hanif Quareshi and Ors. v. The State of Bihar	**	
The State of Bombay v. Narasu Appa Mali	***	
Badruddin v. Aisha Begam.		..
Smt. R. A. Patnan v. Director of Technical Education and Ors.	**	
Ram Prasad Seth v. State of Uttar Pradesh and Ors.	**	

Case Note:

Constitution – Haryana Panchayati Raj Act, 1994 – Section 175, 177 – Constitution of India – Article 14, 21, 25, 38, 47, 51A, 243F, 243G, 246 – Validity of Section 175(1) (q) and 177(1) – Persons having more than 2 living children are clearly distinguishable from persons having not more than 2 living children – These two constitutes 2 different classes and classification is founded on an intelligible differential – Objects sought to be achieved is popularizing the family welfare programme and disqualification creates a disincentive – Number of children based on legislative wisdom and the number is a policy decision – No fault can be found with the state for having enacted the legislation the disqualification contained in the Act is neither arbitrary nor discriminatory – Disqualification seeks to achieve socio-economic welfare and healthcare of the masses and is consistent with national population policy – Disqualification on the right to contest an election by having more than two living children does not contravene any fundamental right – Appeals dismissed

JUDGMENT

R.C. Lahoti, J.

1. Leave granted in all the Special Leave Petitions.
2. In this batch of writ petitions and appeals the core issues is the vires of the provisions of Section 175(1)(q) and 177(1) of the Haryana Panchayati Raj Act, 1994 (Act No. 11 of 1994) (hereinafter referred to as the Act, for short). The relevant provisions are extracted and reproduced hereunder:-

175. (1) No person shall be a Sarpanch or a Panch of a Gram Panchayat or a member of a Panchayat Samiti or Zila Parishad or continue as such who

xxx xxx xxx
xxx xxx xxx

(q) has more than two living children :

Provided that a person having more than two children on or upto the expiry of one year of the commencement of this Act, shall not be deemed to be disqualified;

"177(1) If any member of a Gram Panchayat, Panchayat Samiti or Zila Parishad -

(a) who is elected, as such, was subject to any of the disqualifications mentioned in Section 175 at time of his election;

(b) during the term for which he had been elected, incurs any of the disqualifications mentioned in Section 175.

shall be disqualified from continuing to be a member and his office shall become vacant.

(2) In every case, the question whether a vacancy has arisen shall be decided by the Director. The Director may give its decision either on an application made to it by any person, or on its own motion. Until the Director decides that the vacancy, has arisen, the members shall not be disqualified under Sub-section (1) for continuing to be a member. Any person aggrieved by the decision of the Director may, within a period of fifteen days from the date of such decision, appeal to the Government and the orders passed by Government in such appeal shall be final :

Provided that no order shall be passed under this sub-section by the Director against any member without giving him a reasonable opportunity of being heard."

3. Act No. 11 of 1994 was enacted with various objectives based on past experience and in view of the shortcomings noticed in the implementation of preceding laws and also to

bring the legislation in conformity with Part IX of the Constitution of India relating to "The Panchayats' added by the Seventy-third Amendment. One of the objectives set out in the Statement of Objects and Reasons is to disqualify person for election of Panchayats at each level, having more than 2 children after one year of the date of commencement of this Act, to popularize Family Welfare/Family Planning Programme (Vide Clause (m) of Para 4 of SOR).

4. Placed in plain words the provision disqualifies a person having more than two living children from holding the specified offices in Panchayats. The enforcement of disqualification is postponed for a period of one year from the date of the commencement of the Act. A person having more than two children upto the expiry of one year of the commencement of the Act is not disqualified. This postponement for one year takes care of any conception on or around the commencement of the Act, the normal period of gestation being nine months. If a woman has conceived at the commencement of the Act then any one of such couples would not be disqualified. Though not disqualified on the date of election if any person holding any of the said offices incurs a disqualification by giving birth to a child one year after the commencement of the Act he becomes subject to disqualification and is disabled from continuing to hold the office. The disability is incurred by the birth of a child which results in increasing the number of living children, including the additional child born one year after the commencement of the Act, to a figure more than two. If the factum is disputed the Director is entrusted with the duty of holding an enquiry and declaring the office vacant. The decision of the Director is subject to appeal to the Government. The Director has to afford a reasonable opportunity of being heard to the holder of office sought to be disqualified. These safeguards satisfy the requirements of natural justice.

5. Several persons (who are the writ petitioners or appellants in this batch of matters) have been disqualified or proceeded against for disqualifying either from contesting the elections for, or from continuing in, the office of Panchas/Sarpanchas in view of their having incurred the disqualification as provided by Section 175(1)(q) or Section 177(1) read with Section 175(1)(q) of the Act. The grounds for challenging the constitutional validity of the abovesaid provision are very many, couched differently in different writ petitions. We have heard all the learned counsel representing the different petitioners/appellants. As agreed to at the Bar, the grounds of challenge can be categorized into five :- (i) that the provision is arbitrary and hence violative of Article 14 of the Constitution; (ii) that the disqualification does not serve the purpose sought to be achieved by the legislation; (iii) that the provision is discriminatory; (iv) that the provision adversely affects the liberty of leading personal life in all its freedom and having as many children as one chooses to have and hence is violative of Article 21 of the Constitution; and (v) that the provision interferes with freedom of religion and hence violates Article 25 of the Constitution.

6. The State of Haryana has defended its legislation on all counts. We have also heard the learned Standing Counsel for the State. On notice, Sh. Soll J. Sorabji, the learned Attorney General for India, has appeared to assist the Court and he too has addressed the Court. We would deal with each of the submissions made.

Submissions (i), (ii) & (iii)

7. The first three submissions are based on Article 14 of the Constitution and, therefore, are taken up together for consideration.

Is the classification arbitrary?

8. It is well-settled that Article 14 forbids class legislation; it does not forbid reasonable classification for the purpose of legislation. To satisfy the constitutional test of permissibility, two conditions must be satisfied, namely (i) that the classification is founded on an intelligible differentia which distinguishes persons or things that are grouped together from others left out of the group, and (ii) that such (sic) has a rational relation to the object sought to be (sic) by the Statute in question. The basis for classification may rest on conditions which may be geographical or according to objects or occupation or the like. [See : Constitution Bench decision in **Budhan Choudhry and Ors. v. The State of Bihar**, (1955) 1 SCR 1045]. The classification is well-defined and well-perceptible. Persons having more than two living children are clearly distinguishable from persons having not more than two living children. The two constitute two different classes and the classification is founded on an intelligible differentia clearly distinguishing one from the other. One of the objects sought to be achieved by the legislation is popularizing the family welfare/family planning programme. The disqualification enacted by the provision seeks to achieve the objective by creating a disincentive. The classification does not suffer from any arbitrariness. The number of children, viz., two is based on legislative wisdom. It could have been more or less. The number is a matter of policy decision which is not open to judicial scrutiny.

The legislation does not serve its object?

9. It was submitted that the number of children which one has, whether two or three or more, does not affect the capacity, competence and quality of a person to serve on any office of a Panchayat and, therefore, the impugned disqualification has no nexus with the purpose sought to be achieved by the Act. There is no merit in the submission. We have already stated that one of the objects of the enactment is to popularize Family Welfare/Family Planning Programme. This is consistent with the National Population Policy.

10. Under Article 243G of the Constitution the Legislature of a State has been vested with the authority to make law endowing the Panchayats with such powers and authority which may be necessary to enable the Gram Panchayat to function as institutions of self-Government and such law may contain provisions for the devolution of powers and responsibilities upon Panchayats, at the appropriate level, subject to such conditions as may be specified therein. Clause (b) of Article 243G provides that Gram Panchayats may be entrusted the powers to implement the schemes for economic development and social justice including those in relation to matters listed in the Eleventh Schedule. Entries 24 and 25 of the Eleventh Schedule read:

24. Family Welfare.

25. Women and child development.

In pursuance to the powers given to the State Legislature to enact laws the Haryana Legislature enacted the Haryana Panchayati Raj Act, 1994 (Haryana Act No. 11 of 1994). Section 21 enumerates the functions and duties of Gram Panchayat. Clause XIX (1) of Section 21 reads:

"XIX. Public Health and Family Welfare-

(1) Implementation of family welfare programme."

The family welfare would include family planning as well. To carry out the purpose of the Act as well as the mandate of the Constitution the Legislature has made a provision for making a person ineligible to either contest for the post of Panch or Sarpanch having more than two living children. Such a provision would serve the purpose of the Act as mandated by the Constitution. It cannot be said that such a provision would not serve the purpose of the Act.

11. In our opinion, the impugned disqualification does have a nexus with the purpose sought to be achieved by the Act. Hence it is valid

The provision is discriminatory?

12. It was submitted that though the State of Haryana has introduced such a provision of disqualification by reference to elective offices in panchayats, a similar provision is not found to have been enacted for disqualifying aspirants or holders of elective or public offices in other institutions of local self-governance and also not in State Legislatures and Parliament. So also all the States, i.e., other than Haryana have not enacted similar laws, and therefore, it appears that people aspiring to participate in Panchayati Raj governance in the State of Haryana have been singled out and meted out hostile discrimination. The submission has been stated only to be rejected. Under the constitutional scheme there is a well-defined distribution of legislative powers contained in Part XI of the Constitution. The Parliament and every State Legislature has power to make laws with respect to any of the matters which fall within its field of legislation under Article 246 read with Seventh Schedule of the Constitution. A legislation by one of the States cannot be held to be discriminatory or suffering from the vice of hostile discrimination as against its citizens simply because the Parliament or the Legislatures of other States have not chosen to enact similar laws. Such a submission if accepted would be violative of the autonomy given to the Centre and the States within their respective fields under the constitutional scheme.

13. Similarly, legislations referable to different organs of local self-government, that is, Panchayats, Municipalities and so on may be, rather are, different. Many a time they are referable to different entries of Lists I, II and III of the Seventh Schedule. All such laws need not necessarily be identical. So is the case with the laws governing legislators and parliamentarians.

14. It is not permissible to compare a piece of legislation enacted by a State in exercise of its own legislative power with the provisions of another law, though *pari materia* it may be, but enacted by Parliament or by another State legislature within its own power to legislate. The sources of power are different and so do differ those who exercise the power. The Constitution Bench in **The State of Madhya Pradesh v. G.C. Mandawar**, (1955) 2 SCR 225, held that the power of the Court to declare a law void under Article 13 has to be exercised with reference to the specific legislation which is impugned. Two laws enacted by two different Governments and by two different legislatures can be read neither in conjunction nor by comparison for the purpose of finding out if they are discriminatory. Article 14 does not authorize the striking down of a law of one State on the ground that in contrast with a law of another State on the same subject, its provisions are discriminatory. When the source of authority for the two statutes are different, Article

14 can have no application. So is the view taken in **The Bar Council of Uttar Pradesh v. The State of U.P. and Anr.** (1973) 1 SCC 261, **State of Tamil Nadu and Ors. v. Ananthi Ammal and Ors.** (1995) 1 SCC 519 and **Prabhakaran Nair and Ors. v. State of Tamil Nadu and Ors.** (1987) 4 SCC 238.

15. Incidentally it may be noted that so far as the State of Haryana is concerned, in the Haryana Municipal Act, 1973 (Act No. 24 of 1973) Section 13A has been inserted to make a provision for similar disqualification for a person from being chosen or holding the office of a member of municipality.

16. A uniform policy may be devised by the Centre or by a State. However, there is no constitutional requirement that any such policy must be implemented in one-go. Policies are capable of being implemented in a phased manner. More so, when the policies have far-reaching implications and are dynamic in nature, their implementation in a phased manner is welcome for it receives gradual willing acceptance and invites lesser resistance.

17. The implementation of policy decision in a phased manner is suggestive neither of arbitrariness nor of discrimination. In **Lalit Narayan Mishra Institute of Economic Development and Social Change, Patna etc., v. State of Bihar and Ors.** (1988) 2 SCC 433, the policy of nationalizing educational institutes was sought to be implemented in a phased manner. This Court held that all the institutions cannot be taken over at a time and merely because the beginning was made with one institute, it could not complain that it was singled out and, therefore, Article 14 was violated. Observations of this Court in **Pannalal Bansilal Pitti and Ors. v. State of A.P. and Anr.** (1996) 2 SCC 498, are apposite. In a pluralist society like India, people having faiths in different religions, different beliefs and tenets, have peculiar problems of their own. "A uniform law, though is highly desirable, enactment thereof in one go perhaps may be counter-productive to unity and integrity of the nation. In a democracy governed by rule of law, gradual progressive change and order should be brought about. Making law or amendment to a law is a slow process and the legislature attempts to remedy where the need is felt most acute. It would, therefore, be inexpedient and incorrect to think that all laws have to be made uniformly applicable to all people in one go. The mischief or defect which is most acute can be remedied by process of law at stages."

18. To make a beginning, the reforms may be introduced at the grass-root level so as to spiral up or may be introduced at the top so as to percolate down. Panchayats are grass-root level institutions of local self-governance. They have a wider base. There is nothing wrong in the State of Haryana having chosen to subscribe to the national movement of population control by enacting a legislation which would go a long way in ameliorating health, social and economic conditions of rural population, and thereby contribute to the development of the nation which in its turn would benefit the entire citizenry. We may quote from the National Population Policy 2000 (Government of India Publication, page 35):-

"Demonstration of support by elected leaders, opinion makers, and religious leaders with close involvement in the reproductive and child health programme greatly influences the behaviour and response patterns of individuals and communities. This serves to enthuse communities to be attentive towards the quality and converge of maternal and child health

service.s including referral care."....."The involvement and enthusiastic participation of elected leaders will ensure dedicated involvement of administrators at district and sub-distinct levels. Demonstration of strong support to the small family norm, as well as personal example, by political, community, business, professional, and religious leaders, media and film stars, sports personalities and opinion makers, will enhance its acceptance throughout society."

19. No fault can be found with the State of Haryana having enacted the legislation. It is for others to emulate.

20. We are clearly of the opinion that the impugned provision is neither arbitrary nor unreasonable nor discriminatory. The disqualification contained in Section 175(1)(q) of Haryana Act No. 11 of 1994 seeks to achieve a laudable purpose - socio-economic welfare and health care of the masses and is consistent with the national population policy. It is not violative of Article 14 of the Constitution.

Submission (iv) & (v) : the provision if it violates Article 21 or 25?

21. Before testing the validity of the impugned legislation from the viewpoint of Articles 21 and 25, in the light of the submissions made, we take up first the more basic issue - Whether it is at all permissible to test the validity of a law which enacts a disqualification operating in the field of elections on the touchstone of violation of fundamental rights?

22. Right to contest an election is neither a fundamental right nor a common law right. It is a right conferred by a Statute. At the most, in view of Part IX having been added in the Constitution, a right to contest election for an office in Panchayat may be said to be a constitutional right -- a right originating in Constitution and given shape by statute. But even so it cannot be equated with a fundamental right. There is nothing wrong in the same Statute which confers the right to contest an election also to provide for the necessary qualifications without which a person cannot offer his candidature for an elective office and also to provide for disqualifications which would disable a person from contesting for, or holding, an elective statutory office.

23. Reiterating the law laid down in **N.P. Ponnuswami v. Returning Officer, Namakkal Constituency** (1952) SCR 218, and **Jagan Nath v. Jaswant Singh and Ors.**, 1954 SCR 892, this Court held in **Jyoti Basu and Ors. v. Debi Ghosal and Ors.**, (1982) (1) SCC 691, - "A right to elect, fundamental though it is to democracy, is, anomalously enough, neither a fundamental right nor a common law right. It is pure and simple, a statutory right. So is the right to be elected. So is the right to dispute an election. Outside of statute, there is no right to elect, no right to be elected and no right to dispute an election. Statutory creations they are, and therefore, subject to statutory limitation."

24. In **Jumuna Prasad Mukhariva and Ors. v. Lachhi Ram and Ors.**, (1955) 1 SCR 608, a candidate at the election made a systematic appeal to voters of a particular caste to vote for him on the basis of his caste through publishing and circulating leaflets. Sections 123(5) and 124(5) of the Representation of the People Act, 1951, were challenged as ultra vires of Article 19(1)(a) of the Constitution, submitting that the provisions of Representation of the People Act interfered with a citizen's fundamental right to freedom of speech. Repelling the contention, the Constitution Bench held that these laws do not stop a man from speaking. They merely provide conditions which must be observed if he wants to enter Parliament. The right to stand as a candidate and contest an election is not

a common law right; it is a special right created by statute and can only be exercised on the conditions laid down by the statute. The Fundamental Rights Chapter has no bearing on a right like this created by statute. The appellants have no fundamental right to be elected and if they want to be elected they must observe the rules. If they prefer to exercise their right of free speech outside these rules, the impugned sections do not stop them. In **Sakhawat Ali v. The State of Orissa**, (1955) 1 SCR 1004, the appellant's nomination paper for election as a councillor of the Municipality was rejected on the ground that he was employed as a legal practitioner against the Municipality which was a disqualification under the relevant Municipality Act. It was contended that the disqualification prescribed violated the appellant's fundamental rights guaranteed under Article 14 and 19(1)(g) of the Constitution. The Constitution Bench held that the impugned provision has a public purpose behind it, i.e., the purity of public life which would be thwarted where there was a conflict between interest and duty. The Constitution Bench further held that the right of the appellant to practise the profession of law guaranteed by Article 19(1)(g) cannot be said to have been violated because in laying down the disqualification the Municipal Act does not prevent him from practising his profession of law; it only lays down that if he wants to stand as a candidate for election he shall not either be employed as a paid legal practitioner on behalf of the Municipality or act as a legal practitioner against the Municipality. There is no fundamental right in any person to stand as a candidate for election to the Municipality. The only fundamental right which is guaranteed is that of practising any profession or carrying on any occupation, trade or business. The impugned disqualification does not violate the latter right. Primarily no fundamental right is violated and even assuming that it be taken as a restriction on his right to practise his profession of law, such restriction would be liable to be upheld being reasonable and imposed in the interest of general public for the preservation of purity in public life.

25. In our view, disqualification on the right to contest an election by having more than two living children does not contravene any fundamental right nor does it cross the limits of reasonability. Rather it is a disqualification conceptually devised in national interest.

26. With this general statement of law which has application to Articles 21 and 25 both, we now proceed to test the sustainability of attack on constitutional validity of impugned legislation separated by reference to Article 21 and 25.

The disqualification if violates Article 21?

27. Placing strong reliance on **Mrs. Maneka Gandhi v. Union of India and Anr.** - (1978) 1 SCC 248, and **Kasturu Lal Lakshmi Reddy and Ors. v. State of Jammu and Kashmir and Anr.** - (1980) 4 SCC 1, it was forcefully urged that the fundamental right to life and personal liberty emanating from Article 21 of the Constitution should be allowed to stretch its span to its optimum so as to include in the compendious term of the Article all the varieties of rights which go to make up the personal liberty of man including the right to enjoy all the materialistic pleasures and to procreate as many children as one pleases.

28. At the very outset we are constrained to observe that the law laid down by this Court in the decisions relied on is either being misread or red divorced of the context. The test of reasonableness is not a wholly subjective test and its contours are fairly indicated by the Constitution. The requirement of reasonableness runs like a golden thread through the entire fabric of fundamental rights. The lofty ideals of social and economic justice, the

advancement of the nation as a whole and the philosophy of distributive justice - economic, social and political - cannot be given a go-by in the name of run due stress on fundamental rights and individual liberty. Reasonableness and rationality, legally as well as philosophically, provide colour to the meaning of fundamental rights and these principles are deducible from those very decisions which have been relied on by the learned counsel for the petitioners.

29. It is necessary to have a look at the population scenario, of the world and of our own country.

30. India has the (dis)credit of being second only to China at the top in the list of the 10 most-populous countries of the world. As on 1.2.2000 the population of China was 1,277.6 million while the population of India as on 1.3.2001 was 1,027.0 million (Census of India, 2001. Series I, India - Paper I of 2001, page 29).

31. The torrential increase in the population of the country is one of the major hindrances in the pace of India's socio-economic progress. Everyday, about 50,000 persons are added to the already large base of its population. The Karunakaran Population Committee (1992-93) had proposed certain disincentives for those who do not follow the norms of the Development Model adopted by National Public Policy so as to bring down the fertility rate. It is a matter of regret that though the Constitution of India is committed to social and economic justice for all, yet India has entered the new millennium with the largest number of illiterates in the world and the largest number of people below the poverty line. The laudable goals spelt out in the Directive Principles of State Policy in the Constitution of India can best be achieved if the population explosion is checked effectively. Therefore, the population control assumes a central importance for providing social and economic justice to the people of India (Usha Tandon, Reader, Faculty of Law, Delhi University. - Research Paper on Population Stabilisation. Delhi Law Review, Vol. XXIII 2001, pp. 125-131).

32. In the words of Bertand Russell, "Population explosion is more dangerous than Hydrogen Bomb." This explosive population over-growth is not confined to a particular country but it is a global phenomenon. India being the largest secular democracy has the population problem going side by side and directly impacting on its per capita income, and resulting in shortfall of food grains in spite of the green revolution, and has hampered improvement on the educational front and has caused swelling of unemployment numbers, creating a new class of pavement and slum-dwellers and leading to congestion in urban areas due to the migration of rural poor. (Paper by B.K. Raina in Population Policy and the Law, 1992, edited by B.P. Singh Sehgal, page 52).

33. In the beginning of this century, the world population crossed six billions, of which India alone accounts for one billion (17 per cent) in a land area of 2.5 per cent of the world area. The global annual increase of population is 80 millions. Out of this, India's growth share is over 18 millions (23 per cent), equivalent to the total population of Australia, which has two and a half times the land space of India. In other words, India is growing at the alarming rate of one Australia every year and will be the most densely populous country in the world, outbeating China, which ranks first, with a land area thrice this country's. China can withstand the growth for a few years more, but not India, with a constricted land space. Here, the per capita crop land is the lowest in the world, which is also shrinking fast. If this falls below the minimum sustained level, people can no longer feed themselves and shall become dependent on imported food, provided there are

nations with exportable surpluses. Perhaps, this may lead to famine and abnormal conditions in some parts of the country. (Source - Population Challenge. Arcot Easwaran. The Hindu. dated 8.8.2003). It is emphasized that as the population grows rapidly there is a corresponding decrease in per capita water and food. Women in many places trek long distances in search of water which distances would increase every next year on account of excessive ground water withdrawals catering to the need of the increasing population, resulting in lowering the levels of water tables.

34. Arcot Easwaran has quoted the China example. China, the most populous country in the world, has been able to control its growth rate by adopting the 'carrot and stick' rule. Attractive incentives in the field of education and employment were provided to the couples following the 'one-child norm'. At the same time drastic disincentives were cast on the couples breaching 'one-child norm' which even included penal action. India being a democratic country has so far not chosen to go beyond casting minimal disincentives and has not embarked upon penalizing procreation of children beyond a particular limit. However, it has to be remembered that complacency in controlling population in the name of democracy is too heavy a price to pay, allowing the nation to drift towards disaster.

35. The growing population of India had alarmed the Indian leadership even before India achieved independence. In 1940 the sub-Committee on Population, appointed by the National Planning Committee set up by the President of the Indian National Congress (Pandit Jawaharlal Nehru), considered 'family planning and a limitation of children' essential for the interests of social economy, family happiness and national planning. The committee recommended the establishment of birth control clinics and other necessary measures such as raising the age at marriage and a eugenic sterilization programme. A committee on population set up by the National Development Council in 1991, in the wake of the census result, also proposed the formulation of a national policy. (Source - Seminar, March 2002, page 25)

36. Every successive Five Year Plan has given prominence to a population policy. In the first draft of the First Five Year Plan (1951-56) the Planning Commission recognized that population policy was essential to planning and that family planning was a step forward for improvement in health, particularly that of mothers and children. The Second Five Year Plan (1956-61) emphasized the method of sterilization. A central Family Planning Board was also constituted in 1956 for the purpose. The Fourth Five Year Plan (1969-74) placed the family planning programme, "as one amongst items of the highest national priority". The Seventh Five Year Plan (1985-86 to 1990-91) has underlined "the importance of population control for the success of the plan programme...." But, despite all such exhortations, "the fact remains that the rate of population growth has not moved one bit from the level of 33 per thousand reached in 1979. And in many cases, even the reduced targets set since then have not been realised. (Population Policy and the Law, *ibid.*, pages 44-46).

37. The above facts and excerpts highlight the problem of population explosion as a national and global issue and provide justification for priority in policy-oriented legislations wherever needed.

38. None of the petitioners has disputed the legislative competence of the State of Haryana to enact the legislation. Incidentally, it may be stated that Seventh Schedule, List II - State List, Entry 5 speaks of 'Local government, that is to say, the constitution and

powers of municipal corporations, improvement trusts, district boards, mining settlement authorities and other local authorities for the purpose of local self-government or village administration'. Entry 6 speaks of 'Public health and sanitation' *inter alia*. In List III - Concurrent List, Entry 20A was added which reads 'Population control and family planning'. The legislation is within the permitted field of State subjects. Article 243C makes provision for the Legislature of a State enacting laws with respect to Constitution of Panchayats. Article 243F in Part IX of the Constitution itself provides that a person shall be disqualified for being chosen as, and for being, a member of Panchayat if he is so disqualified by or under any law made by the Legislature of the State. Article 243G casts one of the responsibilities of Panchayats as preparation of plans and implementation of schemes for economic development and social justice. Some of the schemes that can be entrusted to Panchayats, as spelt out by Article 243G read with Eleventh Schedule is - Scheme for economic development and social justice in relation to health and sanitation, family welfare. Family planning is essentially a scheme referable to health, family welfare, women and child development and social welfare. Nothing more needs to be said to demonstrate that the Constitution contemplates Panchayat as a potent instrument of family welfare and social welfare schemes coming true for the betterment of people's health especially women's health and family welfare coupled with social welfare. Under Section 21 of the Act, the functions and duties entrusted to Gram Panchayats include 'Public Health and Family Welfare', 'Women and Child Development' and 'Social Welfare'. Family planning falls therein. Who can better enable the discharge of functions and duties and such constitutional goals being achieved than the leaders of Panchayats themselves taking a lead and setting an example.

39. Fundamental rights are not to be read in isolation. They have to be read along with the Chapter on Directive Principles of State Policy and the Fundamental Duties enshrined in Article 51A. Under Article 38 the State shall strive to promote the welfare of the people and developing a social order empowered at distributive justice - social, economic and political. Under Article 47 the State shall promote with special care the educational and economic interests of the weaker sections of the people and in particular the constitutionally down-trodden. Under Article 47 the State shall 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. None of these lofty ideals can be achieved without controlling the population inasmuch as our materialistic resources are limited and the claimants are many. The concept of sustainable development which emerges as a fundamental duty from the several clauses of Article 51A too dictates the expansion of population being kept within reasonable bounds.

40. The menace of growing population was judicially noticed and constitutional validity of legislative means to check the population was upheld in Air India v. Nergesh Meerza and Ors. (1981) 4 SCC 335. The Court found no fault with the rule which would terminate the services of Air Hostesses on the third pregnancy with two existing children, and held the rule both salutary and reasonable for two reasons - "In the first place, the provision preventing a third pregnancy with two existing children would be in the larger interest of the health of the Air Hostess concerned as also for the good upbringing of the children. Secondly,when the entire world is faced with the problem of population explosion it will not only be desirable but absolutely essential for every country to see that the family planning programme is not only whipped up but maintained at sufficient

levels so as to meet the danger of over-population which, if not controlled, may lead to serious social and economic problems throughout the world."

41. To say the least it is futile to assume or urge that the impugned legislation violates right to life and liberty guaranteed under Article 21 in any of the meanings howsoever expanded the meanings may be.

The provisions if it violates Article 25?

42. It was then submitted that the personal law of muslims permits performance of marriages with 4 women, obviously for the purpose of procreating children and any restriction thereon would be violative of right to freedom of religion enshrined in article 25 of the Constitution. The relevant part of Article 25 reads as under:-

25. Freedom of conscience and free profession, practice and propagation of religion. - (1) Subject to public order, morality and health and to the other provisions of this Part, all persons are equally entitled to freedom of conscience and the right freely to profess, practise and propagate religion.

(2) Nothing in this article shall affect the operation of any existing law or prevent the State from making any law -

(a) regulating or restricting any economic, financial, political or other secular activity which may be associated with religious practice;

(b) providing for social welfare and reform or the throwing open of Hindu religious institutions of a public character to all classes and sections of Hindus.

43. A bare reading of this Article deprives the submission of all its force, vigour and charm. The freedom is subject to public order, morality and health. So the Article itself permits a legislation in the interest of social welfare and reform which are obviously part and parcel of public order, national morality and the collective health of the nation's people.

44. The Muslim Law permits marrying four women. The personal law nowhere mandates or dictates it as a duty to perform four marriages. No religious scripture or authority has been brought to our notice which provides that marrying less than four women or abstaining from procreating a child from each and every wife in case of permitted bigamy or polygamy would be irreligious or offensive to the dictates or the religion. In our view, the question of the impugned provision of Haryana Act being violative of Article 25 does not arise. We may have a reference to a few decided cases.

45. The meaning of religion - the term as employed in Article 25 and the nature of protection conferred by Article 25 stands settled by the pronouncement of the Constitution Bench decision in **Dr. M. Ismail Faruqi and Ors. v. Union of India and Ors.**, (1994) 6 SCC 360. The protection under Articles 25 and 26 of the Constitution is with respect to religious practice which forms an essential and integral part of the

religion. A practice may be a religious practice but not an essential and integral part of practice of that religion. The latter is not protected by Article 25.

46. In **Sarla Mudgal (Smt.), President, Kalyani and Ors. v. Union of India and Ors.** (1995) 3 SCC 635, this Court has judicially noticed it being acclaimed in the United States of America that the practice of polygamy is injurious to 'public morals', even though some religions may make it obligatory or desirable for its followers. The Court held that polygamy can be superseded by the State just as it can prohibit human sacrifice or the practice of Sati in the interest of public order. The Personal Law operates under the authority of the legislation and not under the religion and, therefore, the Personal Law can always be superseded or supplemented by legislation.

47. In **Mohd. Ahmed Khan v. Shah Bano Begum and Ors.**, (1985) 2 SCC 556, the Constitution Bench was confronted with a canvassed conflict between the provisions of Section 125 of Cr.P.C. and Muslim Personal Law. The question was: when the Personal Law makes a provision for maintenance to a divorced wife, the provision for maintenance under Section 125 of Cr.P.C. would run in conflict with the Personal Law. The Constitution Bench laid down two principles; firstly, the two provisions operate in different fields and, therefore, there is no conflict and; secondly, even if there is a conflict it should be set at rest by holding that the statutory law will prevail over the Personal Law of the parties, in cases where they are in conflict.

48. In **Mohd. Hanif Quareshi and Ors. v. The State of Bihar**, (1959) SCR 629, the State Legislation placing a total ban on cow slaughter was under challenge. One of the submissions made was that such a ban offended Article 25 of the Constitution because such ban came in the way of the sacrifice of a cow on a particular day where it was considered to be religious by Muslims. Having made a review of various religious books, the Court concluded that it did not appear to be obligatory that a person must sacrifice a cow. It was optional for a Muslim to do so. The fact of an option seems to run counter to the notion of an obligatory duty. Many Muslims do not sacrifice a cow on the Id day. As it was not proved that the sacrifice of a cow on a particular day was an obligatory overt act for a Mussalman for the performance of his religious beliefs and ideas, it could not be held that a total ban on the slaughter of cows ran counter to Article 25 of the Constitution.

49. In **The State of Bombay v. Narasu Appa Mali**, AIR 1952 Bombay 84, the constitutional validity of the Bombay Prevention of Hindu Bigamous Marriages Act (XXV (25) of 1946) was challenged on the ground of violation of Article 14, 15 and 25 of the Constitution. A Division Bench, consisting of Chief Justice Chagla and Justice Gajendragadkar (as His Lordship then was), held-

"A sharp distinction must be drawn between religious faith and belief and religious practices. What the State protects is religious faith and belief. If religious practices run counter to public order, morality or health or a policy of social welfare upon which the State has embarked, then the religious practices must give way before the good of the people of the State as a whole."

50. Their Lordships quoted from American decisions that the laws are made for the government of actions, and while they cannot interfere with mere religious belief and opinions, they may with practices. Their Lordships found it difficult to accept the

proposition that polygamy is an integral part of Hindu religion though Hindu religions recognizes the necessity of a son for religious efficacy and spiritual salvation. However, proceeding on an assumption that polygamy is recognized institution according to Hindu religious practice, their Lordships stated in no uncertain terms-

"The right of the State of legislate on questions relating to marriage cannot be disputed. Marriage is undoubtedly a social institution an institution in which the State is vitally interested. Although there may not be universal recognition of the fact, still a very large volume of opinion in the world today admits that monogamy is a very desirable and praiseworthy institution. If, therefore, the State of Bombay compels Hindus to become monogamists, it is a measure of social reform, and if it is a measure of social reform then the State is empowered to legislate with regard to social reform under Article 25(2)(b) notwithstanding the fact that it may interfere with the right of a citizen freely to profess, practise and propagate religion."

51. What constitutes social reform? Is it for the legislature to decide the same? Their Lordships held in *Narasu Appa Mali's case* (supra) that the will expressed by the legislature, constituted by the chosen representatives of the people in a democracy who are supposed to be responsible for the welfare of the State, is the will of the people and if they lay down the policy which a State should pursue such as when the legislature in its wisdom has come to the conclusion that monogamy tends to the welfare of the State, then it is not for the Courts of Law to sit in judgment upon that decision. Such legislation does not contravene Article 25(1) of the Constitution.

52. We find ourselves in entire agreement, with the view so taken by the learned Judges whose eminence as jurists concerned with social welfare and social justice is recognized without any demur. Divorce unknown to ancient Hindu Law, rather considered abominable to Hindu religious belief, has been statutorily provided for Hindus and the Hindu marriage which was considered indissoluble is now capable of being dissolved or annulled by a decree of divorce or annulment. The reasoning adopted by the High Court of Bombay, in our opinion, applies fully to repel the contention of the petitioners even when we are examining the case from the point of view of Muslim Personal Law.

53. The Division Bench of the Bombay High Court in *Narasu Appa Mali* (supra) also had an occasion to examine the validity of the legislation when it was sought to be implemented not in one go but gradually. Their Lordships held - "Article 14 does not lay down that any legislation that the State may embark upon must necessarily be of an all-embracing character. The State may rightly decide to bring about social reform by stages and the stages may be territorial or they may be community-wise."

54. Rule 21 of the Central Civil Services (Conduct) Rules, 1964 restrains any government servant having a living spouse from entering into or contracting a marriage with any person. A similar provision is to be found in several service rules framed by the States governing the conduct of their civil servants. No decided case of this court has been brought to our notice wherein the constitutional validity of such provisions may have been put in issue on the ground of violating the freedom of religion under Article 25 or the freedom of personal life and liberty under Article 21. Such a challenge was never laid

before this Court apparently because of its futility. However, a few decisions by the High Courts may be noticed.

55. In **Badruddin v. Aisha Begam**, 1957 ALJ 300, the Allahabad High Court ruled that though the personal law of Muslims permitted having as many as four wives but it could not be said that having more than one wife is a part of religion. Neither is it made obligatory by religion nor is it a matter of freedom of conscience. Any law in favour of monogamy does not interfere with the right to profess, practise and propagate religion and does not involve any violation of Article 25 of the Constitution.

56. In **Smt. R.A. Pathan v. Director of Technical Education and Ors.** - 1981 (22) GLR 289, having analysed in depth the tenets of Muslim personal law and its base in religion, a Division Bench of Gujarat High Court held that a religious practice ordinarily connotes a mandate which a faithful must carry out. What is permissive under the scripture cannot be equated with a mandate which may amount to a religious practice. Therefore, there is nothing in the extract of the Quaranic text (cited before the Court) that contracting plural marriages is a matter of religious practice amongst Muslims. A bigamous amongst Muslims is neither a religious practice nor a religious belief and certainly not a religious injunction or mandate. The question of attracting Articles 15(1), 25(2) or 26(b) to protect a bigamous marriage and in the name of religion does not arise.

57. In **Ram Prasad Seth v. State of Uttar Pradesh and Ors.** (1957 L.L.J. (Vol.II) 172 = AIR 1961 Allahabad 334) a learned single Judge held that the act of performing a second marriage during the lifetime of one's wife cannot be regarded as an integral part of Hindu religion nor could it be regarded as practising or professing or propagating Hindu religion. Even if bigamy be regarded as an integral part of Hindu religion, the Rule 27 of the Government Servants' Conduct Rules requiring permission of the Government before contracting such marriage must be held to come under the protection of Article 25(2)(b) of the Constitution.

58. The law has been correctly stated by the High Court of Allahabad, Bombay and Gujarat, in the cases cited hereinabove and we record our respectful approval thereof. The principles stated therein are applicable to all religions practised by whichever religious groups and sects in India.

59. In our view, a statutory provision casting disqualification on contesting for, or holding, an elective office is not violative of Article 25 of the Constitution.

60. Looked at from any angle, the challenge to the constitutional validity of Section 175(1)(q) and Section 177(1) must fail. The right to contest an election for any office in Panchayat is neither fundamental nor a common law right. It is the creature of a statute and is obviously subject to qualifications and disqualifications enacted by legislation. It may be permissible for Muslims to enter into four marriages with four women and for anyone whether a Muslim or belonging to any other community or religion to procreate as many children as he likes but no religion in India dictates or mandates as an obligation to enter into bigamy or polygamy or to have children more than one. What is permitted or not prohibited by a religion does not become a religious practise or a positive tenet of a religion. A practice does not acquire the sanction of religion simply because it is permitted. Assuming the practice of having more wives than one or procreating more children than one is a practice followed by any community or group of people the same can be regulated or prohibited by legislation in the interest of public order, morality and

health or by any law providing for social welfare and reform which the impugned legislation clearly does.

61. If anyone chooses to have more living children than two, he is free to do so under the law as it stands now but then he should pay a little price and that is of depriving himself from holding an office in Panchayat in the State of Haryana. There is nothing illegal about it and certainly no unconstitutionality attaches to it.

Some incidental questions

62. It was submitted that the enactment has created serious problems in the rural population as couples desirous of contesting an election but having living children more than two, are feeling compelled to give them in adoption. Subject to what has already been stated hereinabove, we may add that disqualification is attracted no sooner a third child is born and is living after two living children. Merely because the couple has parted with one child by giving the child away in adoption, the disqualification does not come to an end. While interpreting the scope of disqualification we shall have to keep in view the evil sought to be cured and purpose sought to be achieved by the enactment. If the person sought to be disqualified is responsible for or has given birth to children more than two who are living then merely because one or more of them are given in adoption the disqualification is not wiped out.

63. It was also submitted that the impugned disqualification would hit the women worst, inasmuch as in the Indian society they have no independence and they almost helplessly bear a third child if their husbands want them to do so. This contention need not detain us any longer. A male who compels his wife to bear a third child would disqualify not only his wife but himself as well. We do not think that with the awareness which is arising in Indian women folk, they are so helpless as to be compelled to bear a third child even though they do not wish to do so. At the end, suffice it to say that if the legislature chooses to carve out an exception in favour of females it is free to do so but merely because women are not excepted from the operation of the disqualification it does not render it unconstitutional.

64. Hypothetical examples were tried to be floated across the bar by submitting that there may be cases where triplets are born or twins are born on the second pregnancy and consequently both of the parents would incur disqualification for reasons beyond their control or just by freak of divinity. Such are not normal cases and the validity of the law cannot be tested by applying it to abnormal situations. Exceptions do not make the rule nor render the rule irrelevant. One swallow does not make a summer; a single instance or indicator of something is not necessarily significant.

Conclusion

65. The challenge to the constitutional validity of Section 175(1)(q) and 177(1) fails on all the counts. Both the provisions are held, *intra vires* the Constitution. The provisions are salutary and in public interest. All the petitions which challenge the constitutional validity of the abovesaid provisions are held liable to be dismissed.

66. Certain consequential orders would be needed. The matters in this batch of hundreds of petitions can broadly be divided into a few categories. There are writ petitions under Article 32 of the Constitution directly filed in this Court wherein the only question arising for decision is the constitutional validity of the impugned provisions of the Haryana Act. There were many a writ petitions filed in the High Court of Punjab & Haryana under Articles 226/227 of the Constitution which have been dismissed and appeals by special

leave have been filed in this Court against the decisions of the High Court. The writ petitions, whether in this Court or in the High Court, were filed at different stages of the proceedings. In some of the matters the High Court had refused to stay by interim order the disqualification or the proceedings relating to disqualification pending before the Director under Section 177(2) of the Act. With the decision in these writ petitions and the appeals arising out of SLPs the proceedings shall stand revived at the stage at which they were, excepting in those matters where they stand already concluded. The proceedings under Section 177(2) of the Act before the Director or the hearing in the appeals as the case may be shall now be concluded. In such of the cases where the persons proceeded against have not filed their replies or have not appealed against the decision of the Director in view of the interim order of this Court or the High Court having been secured by them they would be entitled to file reply or appeal, as the case may be, within 15 days from the date of this judgment if the time had not already expired before their initiating proceedings in the High Court or this Court. Such of the cases where defence in the proceedings under Section 177(2) of the Act was raised on the ground that the disqualification was not attracted on account of a child or more having been given in adoption, need not be re-opened as we have held that such a defence is not available.

67. Subject to the abovesaid directions all the writ petitions and civil appeals arising out of SLPs are dismissed.

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RESEARCH ON HEALTH CARE AND THE FAMILY: A METHODOLOGICAL OVERVIEW*

WH-13

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Abstract—Despite increased interest on the part of behavioural scientists in the role of the family in health and illness, empirical research has remained relatively limited, plagued by methodological imprecision and minimal integration with family theory. Some of the major empirical problems involved and potential areas for future research are examined in this methodological overview.

Although interest on the part of behavioural scientists in the role of the family in health and illness has increased greatly since the seminal efforts of Richardson in the mid-1940s [1], empirical inquiry has remained relatively limited, plagued by methodological imprecision and minimal integration with family theory. Nevertheless, a recent review of the current state of the art has revealed a rather rich and insightful literature representing the contributions of a diversity of fields and disciplines [2].

Over the course of the past two decades, the family has variously been treated not only as an independent, dependent and intervening variable, but as a precipitating, predisposing and contributory factor in the etiology, care and treatment of both physical and mental illness, as well as a basic unit of interaction and transaction in health care.

On the whole, much of our early knowledge of the role of the family in health care has been the product of either broad-based, national or regional surveys, or panel studies of subscribers to select pre-paid insurance programs [3-8]. For the most part, attempts at either longitudinal or intergenerational analyses of family health patterns and practices have been relatively limited.

Noting the relative paucity of available data and the need for more sophisticated statistical information concerning the family and health care, the final report of the World Health Organization's Special Consultation on the Statistical Aspects of the Family as a Unit of Health Studies observed:

In spite of its central position in society, the family has been infrequently studied from the public health point of view. The complex interrelationships between health and the family virtually constitute *terra incognita*. In the form presented or available, statistics too often tell very little about the family setting although this is undoubtedly a major factor in, for example, the rearing of children and the development and stabilization of adult personality. Many of the strains and maladjustments which place an increasing burden on pediatric, general medical, and psychiatric services can be understood and efficiently tackled only after due attention has been given to the family set-

ting. The fact that the family is a unit of illness because it is the unit of "living" has been grossly neglected in the development of statistical tools suitable for coping with this set of problems, and in the provision of statistical data essential for an investigation of the individual as part of the family in illness as well as health [9].

In an earlier review [10], we explored the theoretical and conceptual dimensions of family health care research; in this one, we will examine some of the major methodological problems involved and suggest possible avenues for future study.

MODELS AND DESIGNS

Methodologically, research in the area of health care and the family has embraced a variety of designs and techniques ranging from the use of demographic and census data [11] and household interview surveys [12] on one hand to model building and the exploration of innovative data collection procedures on the other.

SOME EFFORTS AT MODEL BUILDING

Haggerty [13], for instance, has sought to examine the relationship of family functioning to disease, or dysfunction in the family and/or its members, through what is termed "family diagnosis". Based on a general theory of family functioning, the proposed model encompasses three major functional categories: (1) past medical experiences and attitudes toward health; (2) internal functions, including relations to the family of origin, internal role relations, family dominance, child-rearing practices, etc., as well as the physical environment; and (3) external functions, e.g. social mobility, social isolation and recreational activities. Since ratings are obtained for several family functions without reference to known disorders, the technique differs conceptually from the diagnostic labels of malfunction (deficiency, dependency and deprivation) used earlier by Miller *et al.*, in the famous Newcastle Study [14, 15].

In a somewhat different vein, Andersen, in perhaps one of the most ambitious efforts to date, has sought to explain familial utilization of health services through the development of a multi-faceted, behavioural model involving the relationship between predisposing, enabling and need factors and the use

* Based in part on a paper prepared for a meeting of a special WHO Study Group on Statistical Indices of Family Health, February 17-22, 1975, Geneva, Switzerland.

of health services [16]. Roghmann and Haggerty [17] on the other hand have suggested the use of a "Flow Model" for the study of how families and their members, especially mothers and their children, transcend a sequence of days through various states of stress, illness and utilization. Finally, Crawford [18] has proposed a fairly complicated, four-dimensional paradigm for the analysis of the family and health that seeks to take into consideration the relationship of disease, state of illness, and the context of care.

Unfortunately, as with most efforts of this type, the Haggerty and Andersen models, as well as those of Roghmann and Crawford, still require more extensive exploration and refinement. Moreover, the need for greater integration with family theory remains. For not only is systematic theory building needed to blend with empirical observation to create testable hypotheses and meaningful models, but concepts need to be formulated, clarified, and logically interrelated with propositions of more general applicability.

The recent attempt by Klein [19] to explore the applicability of Hill's [20] ABCX model [A (the event) interacts with B (the family's resources), which in turn interacts with C (the family's definition of the event) to produce X (the crisis)] to family adaptation and response to chronic kidney disease, is a step in the right direction.

VIEWING THE FAMILY IN HEALTH—THE LONGITUDINAL APPROACH

Although the interrelationship of the family and health is a fairly dynamic, ongoing process, most family health care research has revolved around cross-sectional data in which the family is viewed at only one point in time. While retrospective data can recapture some of the processional dimension, the accuracy of such data is often distorted by the difficulty of accurate recall. In order to breach this problem, a number of innovative attempts have been made to examine the role of the family in health care over a more prolonged period of time.

Downes [21], for instance, in one of the earliest efforts along these lines, sought to explore the applicability of the longitudinal design to family health care research in a study of chronic illness in the Eastern Health District of Baltimore, Maryland. Using data derived from a study of 951 families over the course of a five-year period, she noted that such a design permits not only a description of the family patterns of disease, and the growth and decline of the family as a biologic, social and economic unit, but it offers an opportunity to gain a better understanding of family attitudes toward health and illness as well.

Such advantages aside, however, the longitudinal approach is not without its problems. Foremost among these is the rather high rate of attrition and non-response. For instance, securing the family's long-term cooperation and commitment may be much more difficult in such a design than when cross-sectional data is used. Moreover, financial and organizational costs may frequently prove prohibitive. Finally, very long projects may be subject to premature termination or incompleteness due to the un-

anticipated death of either the subjects and/or the investigator.

An effective alternative to the pure longitudinal design, which tends to minimize many of its disadvantages while still providing insight into the process, is suggested in Litman's [22, 23] imaginative use of intergenerational analysis in the study of the family and health care. Predicated on the pioneering work of Hill and associates at the University of Minnesota's Family Study Center [24], the health attitudes, beliefs, experiences, and practices of a sample of 201 nuclear families, comprising some 69 three-generational lineages, all living within the Twin Cities (Minneapolis-St. Paul) metropolitan area, were explored in a multifaceted 15-month study. Data of both a cross-sectional as well as a longitudinal nature were obtained, as each family was interviewed five times during the course of the project.

In addition to the development of such qualitative measures as a family Chronic Disease and Acute Disease Index as well as a family index of specific preventive health practices, the study demonstrated the applicability and value of intergenerational family analysis to health care research. Such an approach, it was noted, lends itself to not only an examination of the interaction of family members but the totality of intra-familial transactions within the context of historical time as well. Moreover, as far as health and health care are concerned, such a design facilitates assessment of both the socialization of health attitudes, values and beliefs as well as the dynamic aspects of the health behaviour of families and their members within and throughout the three phases of the life cycle.

Despite such efforts, as well as Davis' [25] pioneering study of family reaction to polio, longitudinal and intergenerational analyses of family health problems has remained limited.

THE FAMILY LIFE CYCLE

Similarly, while the family life cycle has proven to be one of the most fruitful approaches to understanding variations in family behaviour in general, its use to explore, describe, explain and predict various aspects of family health has not as yet reached its full potential. Andersen et al. [26], for instance, at the University of Chicago, have found that the value and type of health services used tend to follow a predictable pattern of variation from one stage to another as the needs of family members change throughout the life cycle.

Such an approach may provide additional insights into a number of other areas of family health as well, including: variations in familial adjustment and ability to cope with chronic disease throughout various stages of the life cycle and/or the impact and reaction of young families to the incidence of childhood diseases during the pre- vs post-school age period.

DATA COLLECTION

On the whole, the collection of reliable health information on the family unit is subject to a number of difficulties including those involving respondent bias, error and inaccuracy in recording. Of equal, if not

perhaps even greater importance, however, is the problem of gaining access to systematic and uniform sources of information on all members of the family at a given time.

Over the course of the past few years or so a number of attempts have been made to improve the level of data collection and develop a set of research protocols for use in family health care research. None of these, however, has proven to be universally applicable. For the most part the methods used in the collection of family related health data tend to be dependent upon the particular purpose of the study and the availability and accessibility of the sources of information.

NATIONAL CENSUS AND DEMOGRAPHIC DATA

While census surveys have proven satisfactory for the acquisition of relatively crude demographic data on the family and health, they tend to be insufficiently sensitive to the more detailed analysis afforded through the use of population sample surveys [27, 28]. Similarly, although national and regional surveys such as those conducted by the National Center for Health Statistics involving a continuous sampling of the population provide useful demographic and trend data for health planning, they again are not sufficiently detailed nor accurate enough to explore the health needs of family units.

Finally, while limited as a source of family data and subject to inaccuracies of recording and recall, such vital records as births, marriages, divorces and deaths may be helpful in yielding insights into family health experiences, relationships and trends. The restriction of the data recorded in such official documents to categories that are clearly defined and unambiguous, however, may serve to mask other important information. For example, the mere recording of "yes" or "no" to depict the presence or absence of congenital abnormalities tends not only to lack sufficient specificity as to the type of condition in question, but may also serve to hide the degree of severity of the anomaly as well. Thus, in a recent investigation of Down's syndrome conducted at the University of Minnesota, Venters, Schaacht and Ten Bessel [29], using data drawn from birth certificates, later verified for chromosomal analysis via individual physician referral forms, found that there was a 79 per cent under-reporting of the condition (even though Down's syndrome is an easily medically recognizable condition at birth) where the presence of the abnormality had merely been recorded on the certificate as "yes" or "no", as compared to a 36 per cent under-reporting when the identification of the specific abnormality was requested.

HOSPITAL AND MEDICAL RECORDS

For the most part, hospital and medical records are maintained by institutions and practitioners as a record of the care, treatment and condition of their individual patients. Although such records may be useful as a source of information concerning an individual's illness or illness experience, they normally are not collected nor stored by families or family units. As a result, they have only tangential value for family

health research even in terms of record linkage. Such linkages, Glick [30] has noted, offer a number of advantages over both the interview and observation in the collection of family data. For instance, not only are the basic data generally available in relatively uniform quality, but the information obtained from different record sources may be cross-checked to safeguard against errors of recording. In addition, distortions that may arise in questioning persons directly about previous events of a sensitive nature may be avoided or at least minimized through the use of matched vital records.

The utility of record linkages, however, may be limited by the general inadequacies of physician and institutional records for socio-medical research, the lack of adequate vital records in some localities, the restricted nature of the data available on the record, as well as the potential loss of data for persons who have moved from the study area.

The need, then, for a more extensive, nationwide collection of morbidity and family data, involving a variety of sources guided by an interdisciplinary effort along the lines proposed by the 1976 WHO Study Group on Statistical Indices of Family Health, seems clear indeed [31].

HEALTH SURVEYS: THE PROBLEM OF MEASUREMENT

Perhaps one of the most confounding problems encountered in family health surveys has been the difficulty in obtaining accurate information concerning the health and related behaviour of various family members. While data furnished by the patient is normally more reliable than that provided by an informant [32, 33], the former's age, incapacity or non-availability at the time of the study may necessitate reliance on the use of another member of the family as a source of information. As the central agent of care and care within the family setting, the wife-mother is frequently called upon to serve in this capacity. But while probably the most knowledgeable and accessible source of information about the family and its members, she is not without her faults in this regard.

Mechanic [34], for instance, found that mothers under stress tend to report not only more symptoms of illness for themselves, but for their children. Moreover, mothers with less education tend to be more fatalistic about illness and less concerned about detecting and reporting it in their children. Similarly, Cartwright [35] found that discrepancies in the wives' estimates of their spouses' symptoms as compared to those of the husbands themselves constituted one of the most serious problems encountered in the familial study of morbidity.

Kosa [36], on the other hand, has observed that the general health of the family is comprised of so many disparate events that their total recall or consistent recording over a specified period of time or sequence is high on impossible. As a result, such accounts are frequently subject to both quantitative, especially number and length of illness, as well as qualitative errors, including the under-reporting of actual events.

Such reports of family health may be further pla-

gued by bias engendered by the normative values of medical relevance and social desirability. Kosa [37], for instance, found that mothers tended to invoke a selective censorship involving norms of relevance, social desirability, privacy and decency, in separating reportable events and suppressing others. Moreover, in response to questions concerning the temporal aspects of health, their replies tended to be structured in accordance with the implied reference and current health status of the family member involved. As a result, data collected about the same family at different times or in reference to various aspects of health and related behavior may not necessarily be correlated. As a matter of fact, less than one-fourth of the mothers studied by Kosa were found to have reported the number of health visits of their family members correctly, when verified against the medical record. Interestingly enough, there appeared to be no evidence that either number of children per family or their health status were significantly associated with a tendency to under- or over-report clinic visits.

Andersen and Kasper [38], on the other hand, found that family size may well serve as a serious source of measurement error in family-type health surveys where information is collected on all family members at one time. The problem of recall, coupled with the attendant fatigue and lessened motivation of both the family-informant and the interviewer, they noted, may result in more conservative estimates of the health service utilization of persons in large versus small families.

Finally, an equally if not more disturbing problem that has continued to plague this area of empirical inquiry has been the relative inadequacy and lack of applicability of established measures of family functioning to health care research. Unfortunately, despite considerable effort on the part of a number of family sociologists to develop meaningful and appropriate indicators [39, 40], the measurement of family function remains ill-defined and underdeveloped. To a large extent, not only have such indices tended to be almost totally dependent on the use of proxy indicators with little or no independent or outside validation of their relation to reality [41], but as Pless and Satterwhille [42] have noted, they have not adequately dealt with the multidimensional concept of family function as a whole. Moreover, variables most directly concerned with function may not necessarily be identical with those related to health. Thus, while extensive evaluation of the ability of such techniques in the measurement of the interrelationship of family behavior and the etiology and cause of disability and chronic illness has produced rather mixed results [43], the various available measures of family solidarity, cohesion, and integration have been found to be quite wanting in health care research, providing neither the precision nor discriminatory power to make adequate assessments [44, 45].

HEALTH SURVEYS

Although still limited, a number of attempts have been made over the course of the past few years to improve the level of data collection in family health research. One of the earliest efforts along these lines was the New Haven Family Health Survey [46] con-

ducted in 1966 under a grant from the Children's Bureau. Originally conceived as part of a maternal and child health project of the Connecticut State Department of Health, the study sought to determine not only the feasibility of using a mail questionnaire technique for the collection of health related data but to:

- (1) Test the feasibility of combining data from two independent sources (i.e. the Family Health Survey and a more detailed 25% sample census) based upon the matching of data for the same households;
- (2) Gather meaningful data on utilization, health status, family planning and child care;
- (3) Design new health status indicators in the field of maternal and child care; and
- (4) Test the feasibility of using health data derived from a small area survey as a component health information system.

Unfortunately, while large amounts of data were obtained on medical care utilization, health insurance coverage and limitation of activity, the data output did not prove to be as extensive as originally hoped. Data on child care arrangements and morbidity, for instance, both of which have potential value as components of a health information system, proved to be inadequate for such use. Moreover, the susceptibility of mailed questionnaires to the under-reporting of both acute and chronic diseases as well as disabilities raised serious doubts as to their ability to provide complete and reliable morbidity data.

More recently, Eichhorn [47] and associates at the University of Purdue, using the family as a source of data collection rather than the focus of analysis, developed a fairly extensive instrument known as the Family Health Survey Questionnaire for use as part of a health services data system. Among its purported advantages are its relatively low costs due to the use of the telephone as a means of data collection; the provision of aggregate statistics useful for item-wide planning, management and evaluation; as well as the opportunity to obtain gross estimates of the need for health services and their use. In addition, when properly administered, the instrument may be used to estimate not only the total volume of services consumed by a population or its components, but the discrepancy between the use of services (as measured by the number of times a person visited a physician or was hospitalized) and the need for services as indicated by disability days. As a matter of fact, a major focus of the instrument is the construction of just such a discrepancy ratio.

Unfortunately, however, a major shortcoming of the protocol, at least as far as family health research is concerned, is its over-reliance on the use of telephone sampling and only tangential focus on the family and family health *per se*.

HEALTH DIARIES

Another approach which seems to have overcome some of the problems cited above in the acquisition of socio-medical information on the family and its health care is the health calendar or diary. Since their

initial employment in studies in California* and Canada, health calendars and/or diaries have been used with considerable success in the study of family health both in the United States and abroad. Roghmann *et al.* [48], for example, in a sample survey of 512 families residing in New York State (excluding New York City) found such diaries provided an efficient and reliable instrument for recording a wide range of family related health events. Similarly, the use of such data collection procedures to gather medical-social information about the families has been reported in the Soviet Union [49].

Although admittedly subjective and susceptible to imprecise description of events in non-medical terms, such devices, Alpert *et al.* [50], have noted, have provided not only a rich source of comprehensive health information about the family not usually found in medical records nor obtainable from patient recall, but also documentation of the importance of many non-medically attended symptoms including many minor conditions and events in the evaluation of the total health of the family unit that otherwise might not have been brought to the attention of an interviewer. In addition, the sequence and clustering of events over short time periods and their causal processes can be demonstrated, while the level of analysis may be easily shifted from individual to the family or community at large.

One of the earliest attempts to use the diary approach in the study of health care was the 1949 California Family Health Study which, as one of its main features, employed a specially designed Health Record booklet, kept by the family and supplemented by periodic monthly interviews [51, 52]. Although intended to be retained at home to record the family's daily health experiences, the booklets frequently were kept at work by the study participants in fear that they would forget to return them on the day of the follow-up interview. This resulted in the family's health experience in the daily recording of the family's health experiences. In addition, language difficulties, summer vacations, fear of spoiling the booklet and indifference tended to further deter complete record keeping. Despite such obstacles, however, the health booklet proved to be not only an effective source of information, providing an extensive array of data on both major and minor illnesses and routine health services, but a meaningful approach to the study of family health as well [53].

The day-to-day illness record or diary technique was also successfully employed (primarily as a back-up reminder to the interview) in conjunction with the Canadian Sickness Survey [54]. No attempt, however, was made to assess the relative merits of the diary as an independent source of morbidity data until 1952 and the California Department of Public Health's California Morbidity Research Project

[55, 56]. Using comparable subsamples of about 400 households, comprising some 1000 persons, the relative merits of the diary vs the household interview as a data collection technique were assessed over the course of a three-month period.

As expected, rather wide differences were found in the rates of illness elicited by the two techniques, due in large part to variations in the effects of memory error. On the whole, almost twice as many episodes of illness were reported in the diary as compared to the interview. But while the diaries tended to generate higher rates of illness for a calendar month than the personal interviews, most of the variation was attributed to differences in the reporting of minor, unattended, disabling, and nondisabling illnesses. Moreover, although there was little evidence that the diary elicited more complete reporting for one age-sex group than another, the diary appeared to offer the least advantage over the interview in obtaining information on the elderly.

On the other hand, the additional information secured through the use of the diary was found to be somewhat offset by its relatively higher cost (i.e. initial placement plus follow-up assistance in diary maintenance and return), its susceptibility to editing and coding problems due to illegibility, respondent misunderstanding and confusion over what was to be entered, and the provision of insufficient information to permit adequate classification.

Furthermore, while health calendars have generally proven to be fairly efficient and reliable in recording such everyday events as doctors' visits, medication usage, etc., they have not nearly been as successful in assessing relatively rare events such as hospitalizations or major life crises such as deaths in the family.

Such devices, moreover, have been found to be particularly susceptible to the problem of sample attrition due to employment turnover and/or residential mobility. For example, in the original California study, in addition to a decline in record keeping over the course of the five-month study period, there was also a sample loss of approximately 38% [57, 58] as well. Similarly, Kosa *et al.* [59] found that maintenance of a health calendar over a period of six months or more resulted in not only a loss of subjects due to residential mobility but also an increase in incomplete recording. For instance, health calendars kept for four weeks were found to contain, on the average, reports of twice as many symptoms per family as those kept for six months. Those kept for shorter durations, on the other hand, were more likely to reflect symptoms of seasonal variation than those kept for longer periods of time. Interestingly, Roghmann and Haggerty reported an increase in both respondent motivation and commitment to complete a 28-day calendar in return for a token payment (i.e. 10 dollars) for the time expended [60].

In addition to the problems of sample attrition, high cost and high refusal rates, as well as insufficient compliance with instructions, such self-initiated and maintained reports are also subject to less reliable classification of medical symptoms, diagnoses and therapeutic interventions than that obtained through the probing of a trained interviewer. Nevertheless, in many cases these disadvantages may be more than offset by the high yield of health data such as infor-

* The first systematic use of a health diary was probably made in 1952 as part of the San Jose Morbidity Survey. In an effort to increase accuracy at minimal cost, an elaborate study was undertaken to compare the relative effectiveness of health diaries with household interviews. On the whole, the relatively small increase in accuracy obtained by the diaries did not appear to be justified by the extra expenses incurred.

mation on unattended and minor symptoms and events, use of self-medications and home remedies, how people perceive illness and present the symptoms to their physician, as well as the sequence and clustering of events over short periods of time not available through other sources.

Yet despite their relatively higher yield (twice as many episodes reported as compared with the interview) Kosa *et al.* [61] found that health calendars proved to be no better a comprehensive nor reliable indicator of the health of the family unit than either a utilization questionnaire or a child health index. Moreover, the health calendar appeared to be subject to the same normative influences, as to what is deemed to be important enough to be recorded and what is not, as the interview. Some mothers, for instance, tended to exert a degree of censorship over what was recorded, detailing only those symptoms that met certain minimal requirements of severity and duration. The latter, in turn, tended to vary with the season.

In view of the various problems cited above, Haggerty [62] has suggested that health calendars and/or diaries might be best utilized in conjunction with other data collection techniques such as the home interview and/or questionnaires. The former, it is argued, lend themselves not only to easy recording of events over time for the computation of descriptive personal and family characteristics, and to the detection of the clustering of illness and visits within families, but also to the provision of time-series data for the study of short-term family processes which, when combined with interview data, hold promise of greater theoretical return for morbidity and utilization surveys.

SUMMARY AND CONCLUSIONS

While exploration into the area of family health has involved a variety of techniques and designs and has produced a number of promising insights as to the role of the family and its members in time of illness, much more remains to be done, including:

- (1) Greater application and integration of family theory in health care research.
- (2) Development of more valid and reliable measures of family functioning and integration for use in the study of the impact of illness in the family and family relations.
- (3) Development of a standard set of minimum health data, census as well as vital statistics, relative to the family and family health.
- (4) Development of a more extensive data base in family health, drawing upon not only the mother but the father and children as well as sources of information.
- (5) Development of an index or series of indices to measure the health status of families for use in: (a) identification of families at "high risk" to mental or physical illness and/or reduction in family functioning; (b) organizing and planning health and social services; (c) epidemiological studies of family related illnesses;
- (6) Exploration of the feasibility of using various observational techniques to record the involvement

of family members in the care and treatment of institutionalized patients.

(7) A phased program of study to help determine and in what way, if any, certain structural and functional family characteristics may be related to health, illness, accident and disease.

(8) Finally, there is need for more extensive longitudinal and intergenerational studies of the family in health and health care, including the use of: (a) a variety of data collection procedures; (b) different types of family units of (c) varying cultural and class characteristics.

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Chattisgarh Sterilisation Deaths – Survivors being harassed by State Government #Vaw

Posted by : kamayani On : April 17, 2015

Category: Advocacy, Announcements, Human Rights, Justice, KRACTIVISM, Law, Minority Rights, Violence against Women

Justice delayed, denied

Author(s): [Jyotsna Singh](#)

Apr 30, 2015

Five months after 14 women died in sterilisation camps in [Chhattisgarh](#), there is no sign of justice being delivered to those who lost their kin. Rather, they are being harassed for standing up for the truth



Women, who underwent sterilisation surgeries at a government mass sterilisation camp, had to be admitted to the Chhattisgarh Institute of Medical Sciences hospital in Bilaspur for treatment (Photo: Reuters)

On November 10, news of 13 women dying and many others landing in hospital after mass sterilisations in Chhattisgarh made national and international headlines. Subsequent investigations, including by Down To Earth ("Operation Cover-Up", 16-31 December, 2014), exposed state attempts to cover up the entire incident as well as deep flaws in India's approach to family planning. Five months on, no justice seems to have been done. In

fact, evidence points to the state government being responsible for the deaths.

The state government has repeatedly tried to shift the responsibility of deaths and illness among survivors to non-state agencies, saying that the drugs were contaminated with rat poison. But reports of the State Forensic Laboratory, Raipur, show that the deaths were not caused by rat poison. Viscera analyses of five of the 13 women who lost their lives at the sterilisation camp did not find poison in the body of the deceased, says a source who has a copy of the reports.

"Viscera report is the final word in forensic science in investigations of deaths. The State Forensic Laboratory reports suggest the deaths have not occurred due to any poison, let alone rat poison," says B L Chaudhary, forensic expert at Lady Hardinge Medical College, Delhi. All postmortem reports suggest that the deaths occurred due to infection, caused by unhygienic conditions and medical practices at the camp, he adds.

Test results of drugs used at the camp— Ciprocin 500 (contains antibiotic ciprofloxacin) by Mahawar Paharma and Ibuprofen 400 mg (contains anti-inflammatory ibuprofen) by Technical Labs and Pharma—further expose the callous attitude of the state government.

Soon after the incident, drug samples from the spot were sent to four laboratories—government and private—to determine cause of deaths and illness. The list includes the Central Drugs Laboratory (CDL), Kolkata, the National Institute of Immunology, Delhi, Sriram Institute of Industrial Research (SIIR), Delhi, and Qualichem Laboratories, Nagpur. All four laboratories' reports, which are with Down To Earth, state that the medicines used in the operations were substandard. "A tablet is defined as substandard when it contains less than 80 per cent of what is claimed," explains an official with the Central Drugs Standard Control Organisation (CDSCO), Delhi. Two reports indicate toxicity.

SIIR tested 50 tablets of Ciprocin 500. The results showed that each tablet contained only 295 mg, or 59 per cent, of ciprofloxacin. It also indicated toxicity. Four of the five mice who were administered with the tablets died within 24 hours. The laboratory conducted an additional test which showed the presence of "zinc/aluminum and phosphide" or rat poison. Its report, however, does not mention the amount, crucial to determine whether the deaths happened due to rat poison. SIIR's test on Ibuprofane also shows that the tablets were substandard, with 219 mg of ibuprofane, and contaminated with rat poison.

Similarly, the report by the National Institute of Immunology, Delhi, shows that after administering very high dose of Ciprocin 500 (500 mg/rat) the animal

suffered from acute toxic shock and died. The same dose of another standard medicine Ciplox by company Cipla, did not affect the rat adversely. A public health expert, on condition of anonymity, says such high doses can be fatal for animals. He points out that the women at camp did not consume such high doses. "Amount is the key to the mystery of deaths and illnesses," he says.

The report by Qualichem Laboratories established that the medicines were substandard. It is silent on contamination.

The CDL report also shows that Ciprocin 500 contained only 258.88 mg, or 51.78 per cent, of ciprofloxacin claimed. CDL's report, however, does not mention contamination with rat poison. "The Kolkata laboratory is not even equipped to test for contamination of zinc phosphide, or rat poison," says the CDSCO official. Why did the state administration send samples to a laboratory that cannot test for the probable cause of deaths espoused by the state itself?

Lack of seriousness

The CDL report points to the lousiness of the Bilaspur Food and Drug Administration, which had handed over samples to the laboratory. While CDL received 200 tablets (10×20 strips), the official communication put the count as 1,000 (1000×1×500mg). CDL report also claims that the expiry date of September 2016 mentioned on the strip did not match with the expiry date of September 2015 mentioned in the official communication. "Even though these details do not affect the test results, it shows that the authorities were not serious about the issue," says Sulakshana Nandi of People's Health Movement, who has been fighting for the rights of the victims.

Responding to Down To Earth's queries, R Prasanna, who heads Health Department in Chhattisgarh, said, "We cannot reveal anything as the matter is pending before a judicial commission."

State harassment

The only serious step taken by the state government so far is to set up a one-person Bilaspur District Sterilisation Camp Judicial Inquiry Commission headed by retired judge Anita Jha. But deposing before the commission has been an ordeal for victims and their families. They had to travel long distances at their own expense. Ramanuj Sahu, for instance, had to travel 50 km twice to submit affidavit on behalf of his wife. The commission did issue letters urging women to file affidavits, but that was on March 3, 2015, the last date of the submission. Of 134 cases, only 51 have submitted affidavits. Most of the victims could submit affidavits only after receiving guidance from the Centre for Social Justice, a non-profit in Bilaspur. Gayatri Suman Narang, who heads the non-profit, says, "The government did not put any effort in collecting

affidavits. The room was found closed on several occasions." To add to their troubles, the commission since March 27 has started to cross examine those who deposed.

The affidavits outline the way surgeries proceeded on the two days of the camps. In one affidavit, a woman recounts how she gave thumb print on a paper, but the contents were not read out to her. In another affidavit, husband of a deceased woman says that he has not received the postmortem report of his wife despite asking for it several times. He says the surgeon reached the venue only at 3.00 pm, leaving little time for proper sterilisation of 83 women in one day.

Apart from the judicial commission, the police is investigating the matter based on FIRs of the deaths. "The state government has also initiated a departmental inquiry into the matter, but it is biased as all the members are from the health department," says Yogesh Jain, convener of non-profit Jan Swasthya Sahyog. "This is the reason, we have been demanding a clinical inquiry since January." A clinical inquiry is done by a team, that includes a forensic expert, epidemiologist, gynaecologist, toxicologist, microbiologist, public health expert and local activists, and is considered unbiased. "But the state government is yet to set up one," he adds.

The courts have also intervened in the matter. The Chhattisgarh High Court took suomotu cognizance of the matter and has asked the state government to submit a response. A public interest petition filed by Human Rights Law Network, Delhi, is pending in the Supreme Court. The apex court, on March 21, blamed the government for being unprepared in the matter. The next date of hearing is April 17, 2015.

<http://www.downtoearth.org.in/content/justice-delayed-denied>

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