

NUTRITION PROGRAMMES IN HIMACHAL PRADESH: SELECT MANAGEMENT ISSUES

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ABSTRACT

Nutrition programmes are implemented through various governmental and non-governmental agencies in Himachal Pradesh. Several managerial issues were identified while conducting this study. Inter-departmental collaboration and coordination, continuing education, mobility, improved monitoring and community participation were some of the areas which need a focused attention.

National and regional level policy and planning bodies have recognized the need for area based and region wise information on nutrition programmes. A large number of nutrition programmes are being implemented through governmental and non-governmental organizations. This project was undertaken to study the nutritional content of community care services through health and non-health channels. This study analyzed the affiliation, objectives, activities, coverage, organization and select aspects of implementation of nutrition programmes in the State of Himachal Pradesh.

Forty programmes in Himachal Pradesh relate directly to nutrition. Sixteen programmes provide primarily nutrition supplements with protein and calories; 18 programmes carry out nutrition education activities; 3 programmes provide both nutrition supplementation and nutrition education; and 3 programmes give specific nutrient supplements (Vitamin A, iron and folic acid and iodine) as well as nutrition education. Twelve different organisations/departments are responsible for implementing nutrition programmes, seven of which are governmental and five are voluntary organisations. There are 1,38,521 beneficiaries in Himachal Pradesh of the supplementary nutrition programmes, being given food in 2,963 centres. 1,22,859 children below seven years of age as well as 15,662 pregnant and lactating mothers receive protein-calorie supplements'.

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SALIENT FEATURES AND RECOMMENDATIONS

Linkages

Nutrition programmes are basically intersectoral endeavours and there should be coordination and collaboration among departments, as well as voluntary organisations and private/donation trusts, linkages for administration of these programmes are supposed to be organised in accordance with the instructions received from the respective headquarters' office. However, in practice, functional linkages have not been established.

The health department interacts with the largest number of organisations implementing nutrition programmes. There are 14 programmes in which the health department provides inputs such as immunisation, health check-up, referral services, monitoring growth and development as well as nutrition and health education. It also actively participates in training activities, and in different aspects of programme implementation, such as selection of areas, where nutrition education is to be given by the Mobile Extension Units. The health department has to collaborate with nine agencies in order to function effectively. The State Health Education Bureau collaborates with the Department of Education, Rural Development, Welfare, *Panchayats* and All India Radio as well as community and opinion leaders for nutrition and health education activities.

Balwadis and creches implemented by voluntary organizations are mainly funded and supervised by the Department of Welfare and Himachal Pradesh Social Welfare Advisory Board. The Department of Welfare has to maintain a link with seven agencies to monitor/fund these programmes. In addition, it has to work with the health department for several programmes, in particular, Integrated Child Development Services.

For the selection of areas and functionaries as well as to carry out activities in rural areas under different programmes, like ICDS, Mobile Food and Extension Unit, Field Publicity, etc., the help of the Department of Rural Development is necessary. Staff of the Department of Rural Development as well as the Block Development Office work along with the respective programme staff.

Training of *Balvikas* and *Anganwadi* workers for Supplementary Nutrition Programme, Integrated Child Development Service, etc. is conducted by the Indian Council of Child Welfare mainly, and also by the Department of Agriculture.

The Food and Civil Supplies Department has been responsible for supplying food to the centres of mid-day-meal programme as well as supply of iodised salt under the National Goitre Control Programme. The linkages between select major departments and voluntary organisations is given in Table 1.

TABLE 1

[illegible]

5	Education	1. School Health Services 2 Non-formal education	Health Welfare	Provides health inputs Provides education in Integrated Child Development Services-Centre
6	Agriculture	1 Integrated CMD Development Services 2 Training of Functionaries	Welfare Rural Development	1 training of anganwadi workers Training of Gram-Sevikas and Sevaks
7	Food and Civil Supplies	1 Mid-Day-Meal 2. Goitre Control Programme	Education Health	Responsible for supplies of supplementary food Supply of iodised salt
8	Field Publicity Unit	Social input in Area Development	Rural Development Health	Educational activities in Social Input in Area Development. Health Programme
9.	Indian Council of Child Welfare	Integrated Child Development Services	Welfare	Training of anganwadi workers Implementation of NUMKX Programmes
10	Himachal Pradesh Social Welfare Advisory Board (HPSWAB)	1 Demonstration Project Balwadis 2 Welfare Extension Project in Border Area 3 Creches (HPSWAB) 4 Supplementary Nutrition Programme 5 Grant-in-Aid - one year programme - Balwadis 6 Mahila Mandal - Balwadis	Run by National and local voluntary organisations (86 units) in the field	Provides funds Supervision

Coordination and Collaboration

Twelve different organizations/departments are responsible for implementing nutrition programmes, seven of which are governmental, and five are voluntary organizations. The Himachal Pradesh Social Welfare Advisory Board supports voluntary organizations, which provides support/funds to 86 registered units (each unit is registered separately). These 86 units are in turn affiliated to 36 national, State or local voluntary organizations. Amongst these, several units carry out nutrition activities and it is recommended that at least nutrition education activities be included in all programmes, which are presently not doing so.

It was observed that most of the personnel were not aware of the other nutrition programmes. Collaboration and intersect oral coordination for the various programmes was found to be absent. This has been recognized as one of the most essential processes for the effective programme implementation. To achieve this it is suggested that several steps be initiated. Firstly, personnel at different levels must be made aware of the different programmes. This may be done through reports and printed communications; as regular planned discussions during routine meetings (discussing one or more themes/programmes in each session); and/or in seminars for this purpose. Secondly, steps for instituting formal and informal mechanisms for collaboration and coordination should be established. There may be committees, working groups, meetings where many persons may participate; whatever be the mechanisms, it is imperative that these should be functional, and not merely on paper.

Monitoring

The performance of most programmes is monitored through periodic reports submitted by the service units. These are compiled at an intermediate level (generally, the district), and collected at the State. Meetings and visits of supervisors are other mechanisms which have been used for monitoring but these are not conducted at any fixed interval.

In fact, reports were submitted for administrative propriety and sanction of funds, rather than for monitoring in the true sense. There seemed to be no action instituted on the basis of the reports. Further, the type of information being routinely asked for in the different programmes from the service units provides no assessment of the quality of services, nor its impact, except in the ICDS. For example, no information was available on the number of days in the year as particular beneficiary was given supplementary nutrition. It is suggested that more meaningful systems of monitoring be introduced in nutrition programmes, for both nutrition education and its supplementation.

Mobility

Transport is available for nutrition services in three out of 19 supplementary

nutrition programmes (ANP, SIAD and ICDS). This poses a major problem for the supervisory staff. Further, due to lack of residential facilities for the functionaries in the field in most of the programmes, the field personnel are greatly disturbed. Nor do they receive any monetary compensation for travel.

For nutrition education activities, separate vehicles are available in four programmes (SHEB, MEU, FPU and Song and Drama Units). In four others (ICDS, MCH, SIAD and GCP) the use of a vehicle for educational activities is available.

It is suggested that mobility for personnel in the field may be improved. Travel allowances should be given in the programmes, where there is no such provision. Supervision, particularly in geographically inaccessible areas, was reported to be almost impossible due to lack of transport.

Some Operational Problems

Officers in different programmes were informed of some operational problems. Also many of these could be bottlenecks in other developmental programmes. The number of top and middle level managers has remained more or less the same, even though the number of service units has increased. (In the ICDS, the number of Child Development Project Officers is in proportion to the number of ICDS projects - this is an exception.) This renders effective supervision very difficult. Vacancies in existing posts in the ICDS have made service coverage difficult. The problem of irregular supplies has been already discussed. No financial support is provided for maintenance activities and equipment which is not repaired or replaced even when it goes out of order. Instructions given are not explicit. For example, directions had been given in a few organizations that they should provide nutrition supplements as in the ICDS scheme; but, no information was given to the officers on the ICDS scheme, and the supplements given therein. Similarly, some medical officers were not aware that they were expected to provide health services in particular nutrition programmes; whereas, the officers at the State level stated that circulars to this effect had been sent.

There is an urgent need to make sure that officers in different programmes are aware of what is required of them. Explicit guidelines should be available to those who are implementing the programmes. Resources for supervision, both manpower and mobility need to be augmented.

Training

Training of personnel in nutrition is basic to effective service delivery. The training given to the personnel implementing nutrition programmes is given in Table 2. The qualitative aspects of training were not studied. It was observed that health workers, health supervisors and lady social workers have not been given any training for nutrition programmes. A comprehensive plan for training of all categories of personnel needs to be developed. Further, personnel from different programmes need to be interact in common forums.

TABLE 2
TRAINING OF PERSONNEL FOR NUTRITION PROGRAMMES

S.No.	Programme	Functionary	Duration*	Place	Inservice Yes/No	it yes Duration	Place
1	2	3	4	5	6	7	8
1	Integrated Child Development Service	Director	-	-	Yes	3 days	National institute of Public Cooperation & Child Development, Delhi
		Child Development Project Officer	8 weeks	National Institute of Public Cooperation & Child Development Delhi	No	NA	NA
		Supervisor	3 months	Delhi Ambala	No	NA	NA
		Anganwadi	3 months	Theog Sunni, Mashobra in Shimla	No	NA	NA
		Medical Officer	-	-	Yes	5 days	Snowdon Hospital Shimla
		Health Supervisor	-	-	No	NA	NA
		Health Workers	-	-	No	NA	NA
2	Special Nutrition Programme	Special Nutrition Officer	-	-	Yes	15 days (once in 1973)	Delhi NA
		Balwadi Workers	One day	-	No	NA	
3	Balwadi attached with community centre	Lady Social Worker	-	-	No	NA	NA
4	Applied Nutrition Programme	Block Development Officer Mukhya Sevika	9 months	Udaipur, Nelokhodi, Baroda	Yes Yes	1 week 1 week	Gram Sevika Training Centre Mashobra Shimla - do
5	Social Input in Area Development	Gram Sevika	1 year	Mashobra Gram Sevika	Yes	7 days	Mashobra, Training
		Balsevika	3 months	Training Centre	NO	NA	Centre NA
		Master Craftsmen	-	Balsevika Training Centre,	Yes	Yet to be given	
		District Block Level	-	Naubhar Himachal Pradesh	Yes	Yet to be given	
		Officials 10 persons	-	State Polytechnic, Sunder			
		Dais - 30 in number	-	Nagar, Himachal Pradesh			

6	Balwadis and Creches"	Balsevikas	9 months	Balsevikas Training Centre, Naubhar. Shimla and Delhi	No	NA	NA
7.	Balwadis and Creches""	Baisevikas	3 months	Guiarat	Yes	1 week	Delhi
8	Balwadis (Kasturba Gandhi Trust Memori	Balsevikas	3 months	Indore	No	NA	NA
9	Anganwadi Training Centre, Thoeg and Sunny	Principal Instructor	-	-	Yes	7 days	National Institute of Public
		Instructors	-	-	Yes	15 days	Cooperation and Child Development. Delhi
							Ambala

*Training given prior to appointment or before implementing the programme.

**Balwadis and creches of six programmes namely Indian Council of Child Welfare (Balwadis), Indian Council of Child Welfare (Creches), Social Input Area Development (Balwadis), Applied Nutrition Programme (Balwadis). Supplementary Nutrition Programme, HPSWAB (Balwadis). and Mahila Mandals (Balwadis) •

***Balwadis and Creches of four programmes namely Parvatiya Adim Jaati Sevak Sangh (Balwadis). Parvatiya Sevak Sangh (Creches). Harian Sevak Sangh (Balwadis) and Harijan Sevak Sangh (Creches)

Continuing Education

In 19 out of 22 supplementary nutrition programmes including supplementation with specific nutrients, preserves or induction training is given to workers at the service units. There is no system, however, for continuing education of personnel at any level. In nutrition education programmes as well, no mechanism has been instituted for continuing education. Some officers have been sent for refresher courses on an *ad hoc* basis.

A detailed plan of action may be developed for continuing education of personnel in different programmes at various levels. This action plan should institute a dynamic process by which the technical competence of nutrition workers is constantly updated, and a system of dissemination of relevant information is established.

Finance

The total budget for nutrition supplementation programmes was estimated to be Rs.127.7 lakhs in which Rs.51.91 lakhs is provided by the Centre and Rs.75.83 lakhs by the State as shown in Table 3. This total does not include the budget for programmes like prophylaxis against blindness due to vitamin A deficiency, prophylaxis against nutritional anemia and National Goitre Control Programme. The cost of food supplements is about half of the total budget for the programmes. Seventy five per cent of the total expenditure on food supplements is through three programmes (ICDS, SNP and MDM). In most of the nutrition education programmes, funds are not provided separately, but given along with the entire programme budget, which includes other activities as well. For the State Health Education Bureau Rs.5,000 is provided per annum for production of materials, and funds allotted in the Mobile Food and Extension Unit for the same purpose is Rs.3,500 per annum.

The financial allocation was stated to be inadequate for covering the beneficiaries in the different programmes. The amount of money provided for nutrition education activities, in particular, for production of nutrition education material, is meagre. Nutrition education, being a very important approach for improving the nutritional status of people, must receive more resources. It is suggested that an exercise be undertaken to promote nutrition education and identify the resource requirement for the same. Further, a detailed study of financing nutrition services and linking allocation of resources to benefit the population needs to be conducted.

Community Participation

There is some involvement of communities in the six programmes out of the 19 supplementary nutrition programmes under Himachal Pradesh Social Welfare

TABLE 3
FINANCIAL ALLOCATION FOR SUPPLEMENTARY NUTRITION PROGRAMMES
(1982-83) IN HIMACHAL PRADESH

S. No	Programmes	Financial Allocation (Rs in lakhs)		Proportion allocated for food in the programme % (1 of 2)	Percentage Financial Allocation in Each	
		Supplementary			Programme for food of total amount for supplementary food (%)	Nutrition Programme of total budget on programmes (%)
1.	Integrated Child Development Services	14.93	42.25	35.0	23.0	33.0
2.	Special Nutrition Programme	22.07	25.18	87.6	34.0	19.7
3.	Applied Nutrition Programme	0.05	16.50	0.3	0.07	12.9
4.	Mid-Day-Meal Programme	11.70	12.00	97.5	18.1	9.4
5.	Creches under ICCW	3.69	5.49	67.21	5.7	4.3
6.	Balwadis under ICCW	1.20	3.51	34.2	1.8	2.7
7.	Creches under PASS	0.147	0.52	28.2	0.2	0.4
8.	Balwadis under PASS	0.41	0.96	42.7	0.6	0.75
9.	Creches under HSS	0.04	0.165	24.2	0.06	0.1
10.	Balwadis under HSS	0.04	0.75	53.3	0.6	0.58
11.	Balwadis under KGTM	---	0.08	-	-	0.006
12.	Demonstration Project Balwadis	0.327	1.27	25.7	0.5	0.99
13.	Welfare Extension Project in Border Areas	0.42	2.93	14.3	0.6	2.3
14.	Creches under HPSWAB	6.92	9.22	75.0	10.7	7.2
15.	Supplementary Nutrition Programme under	0.49	0.56	87.5	0.75	0.44
16.	HPSWAB Grant-in-Aid (one year)	0.79	1.59	49.7	1.2	1.2
17.	Programme - Balwadis Mahila Mandals - Balwadis (HPSWAB)	1.07	4.85	22.0	1.6	3.8
		64.3	127.7	506	100	100

*Budget for SIAD and Balwadis attached with Community Centre have not been included as separate allocations were not available for 1982-83.

Advisory Board. This is, perhaps, because these programmes/service centres have been instituted on community demand. They provide buildings for *balwadis* and crèches, seasonal fruits to the children, and manpower, if required. Often, members of the community check to see whether the service centre is functioning smoothly or not. In the other 12 nutrition supplementation programmes, the only support from the community is in the form of provision of building/rooms for feeding centres or storage of food. The community does not participate in any way for the mid-day-meal programme. For nutrition education activities, the people provide space and help to set-up the 'show' sometimes.

Community participation has been identified as one of the most important processes in the successful institution of developmental programmes, including nutrition programmes. It is also believed that people should be involved in identifying problems, planning programmes, setting priorities, generating resources, as well as implementing and monitoring programmes. Such processes were not documented in most programmes. The component of community participation be strengthened.

Several village level organizations (for example, *mahila mandals*) are already involved to some extent in nutrition programmes. Programmes like the DWCRA (Development of Women and Children in Rural Areas) and SIAD (Social Input in Area Development) may be quickly implemented. Often, people do not come forward because they are not aware of what is expected of them, a concerted effort must be made to inform people about the broad objectives and activities envisaged in the programme. Steps to involve the local self-government for nutrition activities may also be taken.

Information Sources and Its Use

A large number of departments had data on various programmes. The nodal departments had, as expected, information on the programme being either implemented or funded through them. This information was largely based on the routine reports submitted. The Department of Planning also had data on all sectors, though it was limited to the overall picture of the respective departments, and their activities. The Directorate of Economics and Statistics has not only compiled some data from different sectors and departments, but has also conducted surveys to provide information on various socio-economic aspects, such as employment, poverty, provision of basic needs to population groups. In addition, the Department of Tribal Development has generated information on districts/areas predominantly inhabited by tribal population. The 1981 Census operation has given valuable information on the demographic characteristics of the people. The National Sample Survey has also collected information and reported on important socio-economic characteristics.

The importance of setting up of an unit where the information may be documented and retrieved cannot be over-emphasised. Much duplication can be

avoided; valuable information which already exists may be used by administrators, planners and researchers. Existing information on programmes is mainly on 'process variables', listing the physical achievements of various sectors, and number of persons benefitted by programmes. Information on the desired impact of most programmes, as well as assessment of whether or not the programmes have actually achieved what they were instituted for, was generally not available. Meaningful analytical studies and exercises on these aspects should be encouraged.

It was stated by various officers that several research studies have been undertaken by different institutions. None of the reports of these studies has been given to them. Taking cognizance of this, the present report has been sent to all the organizations involved with nutrition programmes.

No mechanism of feedback of information to personnel in the field was noted. The routine reports, once collected at the State level should be made available to those who are actually implementing programmes.

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इस पेपर में भारत में वृद्धावस्था की समस्या की विशालता और इसके सामाजिक, आर्थिक व स्वास्थ्य सम्बन्धी परिणामों को निर्धारित करने का प्रयास किया गया है। वृद्ध जनसंख्या की विस्तृतता को जनसंख्या प्रक्षेपणों पर विशेषज्ञ समिति के सैट से लिया गया है जिसमें यह माना गया है कि राष्ट्रीय स्वास्थ्य नीति के जनांकिकी लक्ष्यों को प्राप्त कर लिया गया है। ऐसे वृद्ध लोगों की संख्या का अनुमान लगाया गया है जिन्हें गम्भीर या पुरानी बीमारी के कारण स्वास्थ्य सेवाओं के लिए रोजगार या अन्य आर्थिक सहायता की आवश्यकता पड़ेगी। शारीरिक रूप से अक्षम वृद्धों की संख्या भी दी गई है।

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IMPLICATION OF DEMOGRAPHIC GOALS IN 2000 AD FOR AGING POPULATION IN INDIA

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ABSTRACT

An attempt has been made in this paper to determine the magnitude of the problem of aging in India and its socio-economic and health implications. The magnitude of the aged population has been obtained from the set of Expert Committee Population Projections where it has been assumed that the demographic goals in the National Health Policy are achieved. The number of aged people who will require employment or other economic support on health services because of acute or chronic illnesses have been estimated. The number of old people physically handicapped has also been given.

Aging of population means that the proportion of persons in older age groups is increasing. The process of aging of population first started in the developed countries and has become now a worldwide phenomenon. Though in many countries, people over 65 years are considered as aged, in India people over 60 years of age has been treated as cut off point for this category. Probably the definition of old persons is dependent on the age at which one's productive contribution reduces and the individual tends to be economically dependent. Consideration of the social and economic situation in India would suggest that 60 years as the age for old persons is justified. This paper will, therefore, assume 60 years as the age for consideration of the implications of aging population.

Aging is one of the aspects of demographic transition. According to a research study conducted in 1979, there are two processes in aging - (i) aging at the base; and (ii) aging at the apex. The former is the result of decline in fertility and the latter is caused by mortality decline in older age groups. In India aging has neither been at the base nor at the apex till 1951. The sharp declines in death rates and also in mortality levels in later ages (60 or more) since 1961 had set the process of aging in India. It became a bit fast after 1971 when fertility also started showing decline. This can be noticed by the number of old people (60 or more) as proportion of the total population in the succeeding decades. The demographic goal of reducing net reproduction rate to unity, with crude birth rate to 21 and crude death rate to 9, as

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stated in the National Health Policy, is likely to enlarge further this group (aged 60 or more), both in absolute numbers as well as in their proportion of the total population.

The modernization of the society has shaken the roots of India's traditional family system which used to give economic and emotional security to the old people. Further, the change in values and norms which used to provide a place of honor to the old caused a sense of despair amongst them. The emerging nuclear family has neither the physical space nor the economic resources for their support. It is, therefore, necessary that this problem may be considered and planned for well in advance before it assumes the dimension of a serious nature.

OBJECTIVES

An attempt has been made in this paper to determine the magnitude of the problem of aging in 2000 AD. More specifically, the following:

- i. the proportion and the number of old people in different decades;
- ii. the number of old people who might be working and those who will not be working and thus would require economic support.
- iii. the health problems of these people; and
- iv. the number of people who will be physically handicapped and would require special care.

DATA AND METHODS

The data collected on age composition, economic activity and health status of persons aged 60 and above in Censuses and National Sample Surveys have been used for the present study². For the population numbers in the years beyond 1981, the projections given by the Expert Committee on Population Projections of Government of India have been used³. For projections of the other characteristics, the trend observed in the recent period has been extrapolated.

FINDINGS

Growth of Population Aged Sixty and Above

The decadal per cent increase in population aged 60 and above is given in Table 1. was 22.40 in 1951 -61; this percentage increased to 32.32 in 1961 - 71 and then slightly declined to 30.05 in 1971 -81 According to the Expert Committee on Population Projections, the decadal per cent increase in 1991 - 2001 is likely to be 38.46³. It may be noted that the decadal per cent increase of 60 and above population in the decade 1951 -61 was equal to that of the general population. Since then, population aged 60 and above has been growing comparatively at a much

faster rate. This may imply that the process of aging in India has started since 1961 and this is likely to be felt more in the succeeding decades because of expected steady decline in fertility in future. The expected rate of growth of this population gets almost double in 1991-2001 compared to 1951-61.

TABLE 1
PER CENT DECADEAL INCREASE IN GENERAL POPULATION AND IN
POPULATION AGED 60 AND ABOVE

Decade	General Population			Population Aged and above 60		
	Rural	Urban	Total	Rural	Urban	Total
1951-61	20.54	26.33	21.51	-	-	22.40
1961-71	21.85	38.22	24.80	30.03	45.17	32.32
1971-81	19.67	46.39	25.00	25.93	50.75	30.05
1981-91*	15.54	44.06	22.19	23.28	52.71	28.94
1991-2001*	8.71	41.67	17.77	29.56	68.61	38.46

*Projected

Population Aged 60 and Above in Different Decades

The faster increase in the rate of growth of population aged 60 and above in comparison to that of general population has resulted an increase in the percentages of this population in succeeding decades as shown in Table 2. The percentage of this population was 5.63 in 1961 and increased to 6.20 in 1981 and is likely to be 7.70 in 2001. The increase in this percentage was around ten during 1961 to 1981; that is, it increased by 0.5 per cent per annum during these 20 years^{4, 5, 6}. But the projections for the period 1981 -2001 show that it will increase by 1.0 per cent per annum during 1981 -2001. In other words, the increase in the percentage of older people (60 and above) is expected to double in the next 20 years compared to that in period 1961 -81. Two more facts which are obvious from the table are:

- a. Percentage of rural population aged 60 and above is more than urban areas; and
- b. Females outnumber males in these ages (60 and above) in all Census years.

Though the per cent-wise old population may not be large in India yet their number is alarming. They will be about 75.9 million in 2001 which is almost equal to the total population of Bangladesh in 1980.

TABLE 2
PER CENT OF POPULATION AGED 60 AND ABOVE, EXPECTATION OF LIFE AT 60
(^o e60) AND OLD AGE DEPENDENCY RATIO IN DIFFERENT DECADES

Place of Residence	1961			1971			1981			1991			2001		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Rural	5.71 (10.5)	5.95 (10.5)	582 (21.0)	6.25 (14.1)	6.16 (132)	6.21 (27.3)	6.51 (176)	6.52 (16.7)	6.53 (34.3)	6.97 (21.6)	6.98 (20.7)	6.97 (42.3)	8.30 (27.9)	8.32 (27.0)	8.31 (54.9)
Urban	4.42 (19)	5.11 (18)	4.74 (37)	4.73 (2.8)	5.26 (26)	4.97 (5.4)	4.85 (4.1)	5.42 (4.1)	5.12 (8.2)	5.12 (6.2)	5.78 (63)	5.43 (12.5)	6.06 (10.3)	6.90 (107)	6.46 (21.1)
Total	546 (124)	5.81 (12.3)	563 (24.7)	5.54 (16.9)	6.00 (15.8)	5.96 (32.7)	6.14 (21.8)	6.27 (20.7)	6.20 (42.5)	6.44 (27.8)	6.63 (27.0)	6.55 (54.8)	7.54 (38.2)	7.86 (37.7)	7.70 (75.9)
<i>Oe</i> ₆₀	11.8	13.0	-	13.6	13.8	-	13.8	14.7	-	14.5	15.5	-	15.2	16.4	-
Old Age Dependency Ratio	10.55			11.45			11.47			11.31			12.59		

1. Figures in parentheses indicate actual population (in millions).

2. Old age dependency ratio is defined as population 60 as percentage of (15-59).

Expectation of Life beyond 60 Years

The decline in mortality in all ages particularly in higher ages, has increased the number of years of life for those who survive up to the age of 60. The life expectancy at age 60(*C60) of males and females were 11.8 years and 13.0 years respectively in 1961; this is likely to increase to about 15.2 years and 16.4 years in 2001 as given in Table 2. In other words, males aged 60 in 2001 on an average are likely to live up to the age of 75.2 years and females up to the age of 76.7 years. Thus, number of aged people will be more in 2001 and they are likely to live for more years beyond the age of 60 years. These are the years when they are dependent; and thus there will be need to look after them. They would need economic, emotional and health support during these years. Though the increase in old age dependency ratio (the number of persons aged 60 and above per 100 workers aged 15-59 years) after 20 years (in 2001) will be around 10 per cent yet its burden is likely to be felt more because of: (i) low socio-economic status of majority of the people in this country; and (ii) the disappearance of traditional forms of familial support to old age population.

Requirement of Economic Support

Most of the people in a country like India (where saving potential is very poor and no social security system exists) keep on working till they are forced to quit either because of handicaps, poor health or non-availability of job opportunity. This situation is apparent from the work participation rates for people of age 60 and above as given in Table 3. It shows that 63.71 per cent males and 10.2 per cent females of age 60 and above were working in 1981. This is very advanced age for a country where expectation of life at birth is only about 55 years.

It may be noted that there is a gradual decline in their participation rates over the decades. If this trend is assumed to continue in 1991 and 2001, there is likely to be about 51 per cent aged males and about 11 per cent aged females in rural area requiring work places in 2001. Similarly, the percentage of such requiring work places in urban areas though comparatively lower than in rural areas, yet will be quite significant. In absolute numbers about 18 million aged males and about three and half million aged females in this country, who will be about 21 per cent of population aged 60 and above, will require work places in 2001. This number is much higher than the number of aged workers in 1981.

The decline in their participation rates means more non-workers in the succeeding decades. According to an estimate, there is likely to be about 72 per cent non-workers which in absolute number come to around 55 million as shown in Table 4. A majority of these people may not have adequate savings to support themselves. The family system which was to provide support to them, is in the process of getting weak. This is likely to worsen their living conditions. Under these circumstances, it would be expected that the National Government would come to their rescue and provide subsistence to them, so that they may be able to have a reasonable level of living.

TABLE 3
WORK PARTICIPATION RATES FOR MAIN WORKERS. AGED 60 AND ABOVE BY
PLACE OF RESIDENCE AND SEX

Place of Residence	1961			1971*			1981*			1991*			2001*		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Rural	79.89 (8.4)	24.31 (2.5)	52.04 (109)	77.52 (10.9)	11.49 (15)	45.48 (124)	67.59 (119)	11.29 (19)	40.09 (13.8)	58.93 (12.7)	11.09 (23)	35.34 (15.0)	51.38 (14.3)	1090 (2.9)	31.14 (17.3)
Urban	58.44 (1.1)	11.42 (0.2)	35.20 (1-3)	55.35 (15)	6.46 (02)	31.48 (1.7)	47.49 (1-9)	5.75 (0.2)	26.74 (2.1)	40.75 (2.5)	5.12 (03)	22.71 (2.8)	34.96 (3.6)	4.56 (0.5)	19.29 (4.1)
Total	76.61 (95)	22.38 (2.7)	49.49 (12.2)	73.82 (12.4)	10.64 (1.7)	43.16 (14.1)	63.71 (13.8)	10.19 (2.1)	37.48 (15.9)	54.98 (15.4)	9.76 (26)	32.55 (17.8)	47.45 (17.9)	9.35 (3.4)	28.27 (21.3)

*This excludes data on Assam.

Figures in parentheses are actual population (in millions).

TABLE 4
PER CENT OF POPULATION AGED 60 AND ABOVE NON-WORKERS* AND NEED
ECONOMIC SUPPORT BY PLACE OF RESIDENCE AND SEX

Place of Residence	1961			1971			1981			1991			2001		
	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T
Rural	20.11 (2.1)	7569 (80)	47.96 (10.1)	2248 (3.3)	88.51 (11.7)	54.52 (14.9)	32.41 (5.7)	88.71 (14.8)	5991 (20.5)	41.07 (89)	88.91 (18.4)	64.66 (27.3)	4862 (13.6)	89.10 (24.1)	6885 (37.7)
Urban	41.56 (08)	88 58 0 6)	64.80 (2.4)	44.65 (13)	93.54 (2.4)	68.52 (3.7)	52.51 (2.3)	94.25 (3.8)	73.26 (61)	59.25 (37)	94.88 (6.0)	77.29 (97)	68.04 (6.7)	95.44 (10.2)	80.71 (16.9)
All	23.39 (2.9)	77 62 (96)	50.51 (12.5)	26.18 (4.5)	89.36 (14.1)	56.84 (18.6)	36.29 (8.0)	89.81 (18.6)	6252 (26.6)	45 02 (126)	90.24 (24.4)	67.45 (37,0)	52.55 (20.3)	90.65 (34.3)	71.73 (54.6)

Note: Figures in parentheses indicate population (in millions) •This includes marginal workers too.

Requirement of Support of the Health Services

Old people, after infants, children and mothers are most vulnerable to diseases, The data on prevalence of sickness and duration of sickness among aged collected in National Sample Survey in its 28th Round analyzed and presented in Tables 5.1 and 5.2, show that 28.78 per cent among aged in rural areas and 25.57 per cent among them in urban areas, were sick by temporary ailments at a time'. As regards their duration of sickness they remained sick, on an average, for more than nine days at a time.

TABLE 5.1

PREVALENCE RATE OF TEMPORARY AILMENT IN CASE OF PERSONS AGED 60 AND ABOVE BY PLACE OF RESIDENCE AND SEX - ALL INDIA

Place of	Male	Female	All
Rural	31.32	25.96	28.78
Urban	26.05	25.06	25.57

TABLE 5.2

AVERAGE DURATION (DAYS) OF TEMPORARY AILMENT IN CASE OF PERSONS AGED 60 AND ABOVE BY PLACE OF RESIDENCE AND SEX - ALL INDIA

Place of	Male	Female	All
Rural	10.39	8.00	9.37
Urban	7.85	12.32	9.99

Data on prevalence of chronic diseases amongst the aged population shown in Table 5.3 revealed that 7.40 per cent in rural and 7.89 in urban areas were suffering from one or other chronic disease. While considering the overall morbidity among aged population, it showed that 40.57 per cent males and 30.30 per cent females in rural areas and 35.50 per cent males and 31.45 per cent females in urban areas were either temporarily sick or suffering from one or other chronic disease at a point of time.

TABLE 5.3

PREVALENCE RATE OF CHRONIC DISEASES IN CASE OF PERSONS AGED 60 AND ABOVE BY PLACE OF RESIDENCE AND SEX – ALL INDIA

Place of Residence	Male	Female	All
Rural	9.25	5.34	7.40
Urban	9.45	6.39	7.89

If assumed that these prevalence rates of sickness amongst the aged population do not change substantially (which is not a very un-realistic assumption) in next 20 years, the number of persons aged 60 and above who would require health services in 1991 and 2001 would be by place of residence and sex are shown in Table 6.

TABLE 6
NUMBER OF PERSONS AGED 60 AND ABOVE (IN MILLIONS) WOULD NEED
HEALTH SERVICES BY PLACE OF RESIDENCE, SEX AND YEARS

Place of Residence	1991		2001	
	Male	Female	Male	Female
Rural	87	6.5	11.3	8.4
Urban	2.2	2.0	2.2	2.2
Total	10.9	8.5	13.5	10.6

This shows that about 24 million aged persons would be sick at a point of time in 2001. In other words, a huge infrastructure would be required to take care of their health need. The health problems and needs of this group are different. The expansion of health services in future would have to take note of the upcoming demand.

Requirement of Support for People Physically Impaired

Data on physical impairment in case of aged population, collected in National Sample Survey in its 36th Round analyzed and presented in Table 7 shows that 10.8 per cent of population aged 60 and above was physically impaired¹. Approximately, half of them were visually disabled. The rest were either suffering from hearing disability, speech disability or locomotors disability. Assuming this rate of impairment among old will remain more or less same in next 10 to 20 years, the number of aged persons in 2001 who will have one or other types of physical impairment will be approximately double of the present number as shown in Table 8.

This number has to depend on the Government for their support. There is a need that they should come in consideration while formulating plans for next 10 to 20 years.

DISCUSSION AND CONCLUSIONS

A population may be defined as aged when the proportion of population aged 64 and over in the population exceeds 7 per cent (UN: 1956). According to this, India's

TABLE 7
ESTIMATED NUMBER OF PERSONS AGED 60 AND ABOVE PHYSICAL IMPAIRED
PER 100.000 PERSONS BY PLACE OF RESIDENCE, SEX AND NATURE OF
IMPAIREMENT - ALL INDIA

Place of Residence	Visually Disabled			Hearing Disability			Speech Disability			Locomotor Disability		
	M	F	T	M	F	T	M	F	T	M	F	T
Rural	4573	7155	5863	2660	2597	2628	345	225	285	3079	2154	2617
Urban	3291	4968	4156	2432	2305	2366	360	209	262	2444	2060	2246

TABLE 8
NUMBER OF PEOPLE AGED 60 AND ABOVE (IN MILLIONS) BY TYPE OF
PHYSICAL IMPAIRMENT PLACE OF RESIDENCE AND SEX

Type of impairment	M	F	M	F
Visual Disability				
Rural	1.00	1.50	1.30	1.90
Urban	0.20	0.30	0.20	0.30
Hearing Disability				
Rural	0.60	0.50	0.70	0.70
Urban	0.10	0.10	0.10	0.20
Speech Disability				
Rural	0.60	0.40	0.08	0.05
Urban	0.20	0.01	0.02	0.01
Locomotor Disability				
Rural	0.67	0.43	0.86	0.57
Urban	0.15	0.13	0.15	0.14

population is not aged now, nor it will be by the turn of this century. But in India where expectation of life at birth (0e_0) has been low, people with age 60 and above should be considered old. Though the proportion of these in total population has been increasing over decades, the pace has not been large enough to create alarming situation. But the size of population makes the numbers very large. The number, according to the Expert Committee on Population Projection will be 76 million in 2001. There is a need to take these large numbers into consideration while planning for the future years.

The following are the important findings and their implications:

1. The rate of growth of the older population (60 and above) is likely to be double in 1991 -2001 compared to 1951 -61. That is, it will come to the level of 38.46 per cent in the decade 1991-2001 from the level of 22.40 per cent in 1951-61.

2. Though the percentage of 60 and above population will increase to 7.70 in 2001 from the level of 5.63 in 1961, the numbers are going to be very large (76 million) in 2001, about the size of Bangladesh of 1980.
3. People who survive upto the age of 60 in 2001 are likely to live for another 15 to 16 years when they would require all basic amenities of life. They are dependent during these years, and they would need economic, health and emotional support to lead a healthy life. This could be a problem because of (i) low socio-economic status; and (ii) the disappearance of traditional forms of familial support to old age population.
4. About 18 million aged males and about 3.5 million aged females in the country would require work places in 2001. These numbers are much higher than the working population of 60 and above of 1981. This means that more job opportunities would have to be created.
5. There are going to be about 55 million non-worker in 60 and above population. A majority of these people may not have adequate savings to support themselves. The family system which was to provide support to them, is becoming weak. This is likely to worsen their living conditions. Under these circumstances, it would be expected from the Government to provide them subsistence.
6. The number of old people who would require health services in 1991 and 2001 will be 19 million and 24 million respectively. Since, the health needs of these people are different than others, it is a felt need to give due consideration while planning health services specifically for these people.
7. Quite a large number of old people will be physically handicapped and there will also be a need to rehabilitate these physically handicapped people.

In other words, it is expected that number of people in old ages is going to be large. These people have unique problems of their own; and further those problems may get worse because of family relationships. Therefore, the Government may have to take these numbers into consideration while making plans for the future years.

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अल्मा-आटा सम्मेलन को सम्पन्न हुई सात वर्ष बीत चुके हैं और हमारे पास सब 2000 तक सबके लिए स्वास्थ्य के लक्ष्य तक पहुंचने के लिए मुश्किल से 15 वर्ष शेष बचे हैं। प्राथमिक स्वास्थ्य रक्षा के सभी विशिष्ट घटकों जैसे समुदाय सदस्य, समुदाय नेता, सरकारी स्वास्थ्य रक्षा कार्यक्रमों,

प्राइवेट मेडिकल प्रेक्टिशनर, गैर-सरकारी एजेंसियों और बहु-क्षेत्रीय विकास कार्यक्रमों तथा स्वास्थ्य रक्षा तंत्र में उनकी भूमिका पर विस्तृत अध्ययन करने का यह उचित अवसर है। इससे स्वास्थ्य नीति और प्रशासन के क्षेत्र में प्रयासों को सुग्रावाही बनाने में सहायता मिलेगी।

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EVALUATION OF HEALTH CARE SYSTEM: SOME GUIDELINES

S. Siva Raju*

ABSTRACT

Seven years have already passed since the Alma Ata Conference and we are left with hardly 15 years for reaching the goal of 'HEALTH FOR ALL B Y 2000 A.D.' It is high time to conduct comprehensive studies based on all vital components of primary health care viz. community member, community leader, government health care programmes, private medical practitioners, non-governmental agencies and multi-sect oral developmental programmes and their respective role in health care system, which in turn, will help the personnel on the health policy and administrative front to streamline their efforts for achieving the goal.

Health care for the preservation and promotion of health's one of the most basic human rights, as declared in the Universal Declaration of Human Rights (Article 25). Disease is something of an individual experience but its origin is less a function of individual process (life style, congenital weaknesses, and so on) than it is a result of social structures and situations'. Gone are the days when health was treated as mere absence of disease. It has been recognized now that health is one of the vital indicators of quality of human life. Health is not only a function of medical care, but the overall integral development of society - cultural, economic, educational, social and political. In fact, it has been realized that the totality of human development, a holistic view of health encompasses the physical, mental, social and spiritual well-being of the individual.

Primary health care (PHC), the concept evolved at Alma Ata Conference in 1978 to achieve the goal of 'Health for All by 2000 A.D.' is defined as "essential health care based on scientifically sound and socially acceptable methods and technology made universally accessible to individuals and families in the community through their full participation and at a low cost that the community and country can afford to maintain at every stage of their development, in a spirit of self-reliance and self-determination². Thus, comprehensive PHC involves many issues like community participation, social structure, political factors, and availability of

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technological tools, indigenous health practices and linkages between new and old technological systems for curative and preventive health services in the community. All the member-countries which endorsed the Alma Ata declaration have been asked to evolve their own health policies by taking into consideration the local situation. Seven years have already passed since the conference and we are left with hardly 15 years for reaching the goal. It is most appropriate now to look into the existing patterns of health care system, especially in the developing countries, which in turn will help to evolve a suitable model of comprehensive health care system.

A thorough review of existing literature on the health care system in India shows that most of these studies were centered around the government health sector only. No doubt, majority of these studies have evaluated the various health care programmes launched by the government like, functioning of government health centres^{3,4}, the implementation of multi-purpose health workers programme^{5,6}, community health volunteer schemes^{7,8} and also measured the extent of utilization of some specific health care programmes either individually or along with other programmes^{9,10}. However, as only 10 to 20 per cent of the population are utilizing government health programmes and the rest 80 to 90 per cent of the population prefer either home remedies or private medical practitioners during their ill health^{11,12}. There is an urgency to conduct comprehensive studies focusing on both the governmental and non-governmental health sectors and with the inclusion of various components of primary health care, in order to get a total coverage of health care system. Based on this objective, an attempt has been made in this paper to provide vital components of health care system. This will help the personnel on the health policy and administrative front to streamline their efforts for achieving the goal of 'Health for All by 2000 A.D.'

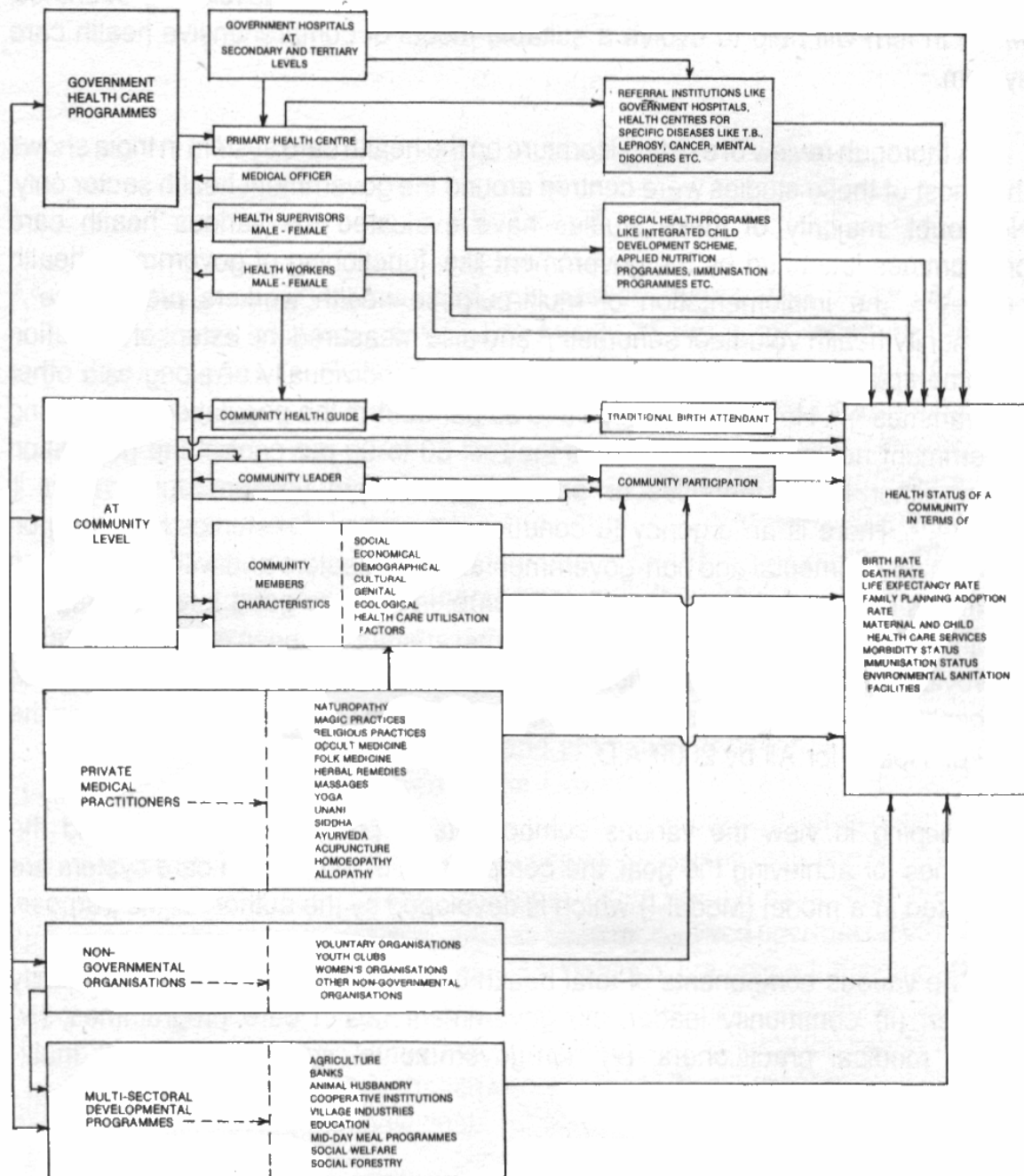
Keeping in view the various components of primary health care and the guidelines for achieving the goal, the components of total health care system are presented in a model (Model-I) which is developed by the author for the purpose.

The various components of total health care system includes: (i) community member; (ii) community leader; (iii) government health care programmes; (iv) private medical practitioners; (v) non-governmental agencies; and (vi) multi-sect oral developmental programmes.

COMMUNITY MEMBER

Understanding the behaviour of the community member in terms of his socioeconomic, demographic, cultural and other such factors should be a foremost task for the personnel concerned, before introducing any developmental programme in the community. The community member, the ultimate consumer of the health care services, plays a pivotal role in the health care system. The following are some of the aspects in assessing the involvement of the community member in the existing health care system:

MODEL - 1 : COMPONENTS OF HEALTH CARE SYSTEM



- i. his socio-economic, cultural and demographic characteristics;
- ii. his perception of various systems of medicine - advantages and disadvantages of each system; diseases curable under each system; his experiences regarding changes of various systems;
- iii. the healer - from whom he mostly seeks service for treatment - which system of medicine he uses, duration of usage, reasons for preferring a particular system of medicine, his perception of the healer's behavior - his status in the society, his ability to build a rapport, his friendly and pleasant talk, time spent with the patient, privacy provided to the patient, his approach in diagnosing the disease, charging fee for treatment, etc.;
- iv. ecological factors, such as, the distance between his house and the health centre/healer's residence from where he receives treatment; his perception of the distance; type of transport facilities available and their frequency for approaching the healer during illness;
- v. his level of satisfaction with the existing government health care centres and his assessment of the performance of peripheral health workers like, community health guides, traditional birth attendants, health workers (male and female) regarding their field visits and their preventive, promotive, curative and referral services pertaining to various health care programmes, such as, immunization, nutrition, environmental sanitation, communicable diseases, maternal and child health (MCH) care, family planning, registration of vital events and treatment for chronic and minor ailments in his family as well as in the community;
- vi. the suggestions, if any, he gets regarding health care activities from the community leaders and if so, his level of satisfaction towards their suggestions;
- vii. his participation in the community developmental programmes in the past and his level of readiness to participate along with other community members in various activities aimed at for the benefit of community in general;
- viii. his knowledge of the existence of the various voluntary organizations in the community and their nature of activities with special reference to health sector, and
- ix. his knowledge of the existing multi-sectoral developmental programmes in the community and the advantages he derived, both quantitatively and qualitatively, from these programmes.

COMMUNITY LEADER

In most of the developing countries, nearly three-fourth of the population live in rural areas. Majority of this section of the population is characterised by low socio-

economic status. These people, generally, depend on certain influential persons in the community for their day-to-day life activities and often seek solutions for their problems especially during ill-health. These influential persons may be formal or informal leaders of either sex. In rural areas, it is highly essential to utilize these leaders for any developmental programme to succeed as they act as very effective change-agents amongst the community members.

The following aspects have to be taken into consideration in evaluating the extent of involvement of the community leader in the health care system:

- i. his socio-economic, cultural and demographic background;
- ii. his perception of various systems of medicine and the systems he suggests to the community members to utilise during their ill-health and his own preference for a particular system of medicine during ill-health of his family members and the specific reasons for choosing that systems;
- iii. his assessment of various government health centers; his extent of cooperation to health staff in implementing various health care programmes and his level of satisfaction regarding the functioning of peripheral health staff in his community;
- iv. his habit of having meetings with community members and assessment of discussions on various aspects including health, his contributions as change- agent in promoting various health care programmes viz., environmental sanitation, communicable diseases, immunization, nutrition, MCH care, family planning, and registration of vital events among the community members;
- v. his knowledge of the existing multi-sect oral developmental programmes; his extent of cooperation in implementing these programmes in the community and his level of satisfaction with their implementation; and
- vi. his assessment of the important needs of the community; his efforts in fulfilling them and his level of satisfaction with the governmental efforts in this regard; his level of readiness in involving the community members to participate in various activities aimed at for the benefit of the community, in general.

GOVERNMENT HEALTH CARE PROGRAMMES

Government health care programmes are aimed at providing preventive, promotive, curative, and rehabilitative and referral services to the population.

In the course of their implementation, new health care programmes are launched, older programmes are discontinued or modified and infrastructural health facilities are improved. In spite of all these efforts on the part of the government, these health care programmes do not fully reach the ultimate consumers. A proper

understanding of the activities carried out by various government health personnel will be highly useful in enhancing the image of the government health sector in the minds of the public. In this context, the activities of the various health personnel who work at various levels and the existing health care facilities provided by government have to be taken into consideration. Some of them include:

- i. The health worker's: (a) routine job functions; (b) involvement in promoting various health care programmes in the community; (c) extent of involvement with other health staff in working as a team in carrying out various health care programmes; (d) type of guidance that he provides to the health staff working in his jurisdiction and the guidance he gets from his superiors in carrying out health programmes in the area; (e) suggestions and problems regarding the implementation of various health care programmes in his area and the possible solutions which he renders for those problems; (f) activities during outbreak of epidemics, family planning camps and other such health camps; and (g) activities at health care centres for improving the curative aspects of the health care system have to be assessed based on his/her expected job functions.
- ii. As the referral system is one of the vital components in the total health care system, special care has to be taken by the government staff concerned to maintain a proper referral system. A proper feedback from these hospitals will enhance the credibility of the health staff in their respective communities. Assessment of the functioning of various referral institutions at regular intervals helps to maintain an effective referral system.
- iii. Depending on the health status of the communities, the government sometimes implements special health care programmes like Integrated Child Development Scheme, Applied Nutrition Programmes, Immunization Programmes, etc. Usually, these schemes are aimed at benefitting a specific section of the population in a particular region. These special schemes have to be evaluated periodically.
- iv. The extent of cooperation and coordination existing between the government and non-government health sectors have to be assessed so as to make efforts for maximum utilization of non-governmental organizations in health sectors.
- v. The extent of involvement of various multi-sect oral developmental programmes in the community and the mutual cooperation existing between health and non-health sectors have to be studied because the health care is one of the indicators of quality of life.

PRIVATE MEDICAL PRACTITIONERS

The review of the studies, hitherto, conducted on private medical practitioners of various systems of medicine^{13,4}, reveals the important place of the private medical practitioners in the health care system, especially in the rural areas of the

most of the developing countries. By realizing their importance, the WHO declaration on primary health care also stressed the need for their effective involvement in the delivery of health care system². There are various systems of health care services, viz. naturopathy, magic practices, religious practices, unani, siddha, occult medicine, folk medicine, herbal remedies, massages, yoga, acupuncture, homoeopathy and allopathy. All these systems may not be available in a particular community and also each system of medicine may have its own limitations and advantages. Further, each system may have an advantage in usage for specific types of diseases only. So, it is highly appropriate to take into consideration the limitations and advantages of each system of medicine before making any effort in integrating different systems of medicine.

The following are the some of the aspects to be considered in evaluating the role of private medical practitioners:

- i. his socio-economic, cultural and geographical characteristics;
- ii. the system(s) of medicine which he practices including training he had before practicing the system(s);
- iii. the facilities which he provides to the patients in his clinic/the place of his practice;
- iv. the availability of transportation facilities for the patients to visit him and for him to visit the patient's houses;
- v. his mode of treating the patient - type of diseases mostly he treats, mode of diagnosing and prescribing the medicine, the main advantages and disadvantages in the system(s) as per his views and contribution in making the patients aware of the preventive and promotive aspects of various diseases;
- vi. his habit of referring the complicated cases beyond his limit to other practitioners - the type of diseases with specific reasons for recommending and also the type of diseases with reasons, usually referred to him by other practitioners; and
- viii his extent of cooperation to the government health personnel during the implementation of various health programmes in the community and the type of encouragement he needs from the government related to his private practices and the system(s) of medicine which he practices.

NON-GOVERNMENTAL AGENCIES

The involvement of non-governmental agencies in promoting the health status is highly appreciable especially in the underdeveloped countries, where the majority of the population lives below poverty line. Some of the other agencies, though not directly involved in health care, they too contribute in one way or the other to improve

the quality of human life. They include projects to improve nutrition, food production, housing, potable water supply etc. In short, their helping conditions are conducive for the protection, promotion and maintenance of health and the prevention of illness. Voluntary organizations, youth clubs, women's organizations and community developmental organizations are some of the non-governmental organizations whose activities and problems are to be assessed to know their extent of involvement in improving the quality of life of the people.

Serious thinking is necessary on the part of the government in this context, for extending necessary support to the non-governmental organizations and the ways to utilize these agencies in improving the socio-economic and health status of the people.

MULTI-SECTORAL DEVELOPMENTAL PROGRAMMES

It has been recognized that health is a function of overall integrated development of the society and thus, health status is one of the indicators of quality of life. Health cannot be achieved where poverty and misery abounds, where food and potable water is scarce, where housing is inadequate and where health and community services are lacking. Such are the conditions existing in most of the developing countries today. It has been established by several studies^{5,16} how socio-economic status influences the health status of a community. It has been significantly found in Kerala State of India that status of women and high literacy among both sexes, together with good infrastructural health facilities acted as the major factors responsible for the State's significant achievements in the health care sector¹⁷.

Agriculture, banks, animal husbandry, cooperative institutions, village industries, social welfare, education and social forestry are some of the developmental programmes which are usually being implemented in the rural communities either individually or collectively. As the utilization of these multi-sect oral programmes will improve the socio-economic status of the community members, a proper thinking has to be made in integrating the propagation of various health care programmes with these developmental programmes. Further, as staff working in these developmental programmes have a very high credibility among the masses due to their services directly useful to improve the socio-economic status of the community members, it is appropriate to ask them to include health as a subject under discussion, whenever possible, during the process of involving the community members in various multi-sect oral programmes.

From the discussion it is clear that the determinants of health status of a community are very complex. A proper understanding and optimum integration of the components of health care system depending on the socio-economic and cultural background of each community, will make a clear cut path that helps us to reach the destination of 'Health for All by 2000 A.D.'

जटिल संरचना वाले घरों में शिशु के आहार में जल्दी अर्ध-ठोस भोजन आरम्भ करने को हतोत्साहित किया जाता है। केन्द्रीय परिवारों में 47 लगभग शिशुओं को छह माह के भीतर अर्ध-ठोस भोजन देना आरम्भ किया गया। इसके विपरीत केन्द्रीय विस्तृत परिवारों व जटिल संरचना वाले परिवारों में यह प्रतिशत क्रमशः 32 और 275 पाया गया। शिशु को अर्ध-ठोस आहार देने और बाद में शिशु को आहार-पान कराने की आदतों पर स्वास्थ्य शिक्षा का मां के व्यवहार पर काफी प्रभाव देखा गया है। यह देखा गया है कि घर की संरचना और प्रसव के स्थान का शिशु को अर्ध-ठोस शीघ्र आरम्भ कराने में मां के शैक्षिक स्तर की अपेक्षा स्वास्थ्य शिक्षा अधिक महत्वपूर्ण भूमिका निभा सकती है। केन्द्रीय परिवारों में मां शिशु को अर्ध-ठोस आहार उपयुक्त आयु में दिलाने के लिए अधिक उन्मुख होती हैं।

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HOUSEHOLD STRUCTURE, WEANING BEHAVIOUR AND HEALTH EDUCATION INTERVENTION

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ABSTRACT

Household with complex structure discourages the early introduction of semi-solid food into the diet of child. In nuclear households about 47 per cent of the children were introduced to the semi-solid food within the age of six months. In contrast to this, in nuclear households extended and household with complex structure, the percentages were 32 and 27.5 respectively. Health education exerts a noticeable influence on mother's behavior in the introduction of semi-solid food to the child and subsequently, the child-feeding practices. It was observed that structure of household and place of delivery have got an independent effect on the introduction of semi-solid food to the child. If the household structure is controlled, health education can play a more vital role in promoting an early introduction of semi-solid food to the child than the educational level of mothers. Mothers in the nuclear households are more prone to include semi-solid food into the diet of child at an appropriate age.

Weaning is the process by which food rather than breast-milk is introduced into the diet of child. In the above process household is expected to play a much greater role. Scientists have stated that family does not only consist of mates and there, of springs but grand-parents, relatives and grand children are also the part of it, which is sometimes called as a household¹. Various other social scientists have expressed that numerous structural and functional changes are taking place in today's household pattern^{2,3,4}. Authors of other studies have also observed that from the birth of the child, the grandmother looks after the baby^{5,6}. It was observed by them that the bride's mother often instructs her daughter to become sub-servant in her new home particularly to her mother-in-law. Such practices can be largely responsible for child-feeding differentials.

Researchers have also demonstrated that at the age of six months the mother should start giving some semi-solid food to the child^{7,8}. However, in our traditional households these innovations are not likely to get more importance. The present

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study began with two vital questions and that is (i) to what extent there exists a relationship between the type of the household and mother's opinion regarding the age of the child at which semi-solid and solid food should be started and (ii) how far the said relationship can be modified through health education.]

MATERIALS AND METHODS

This study deals with a sample of 300 children and their mothers. The sample was drawn from two different sources. A sample of 100 children and their mothers was drawn who were born in the Christian Medical College, Ludhiana. The mothers of these 100 children were repeatedly exposed to health education regarding breast feeding and supplementary feeding practices, scientifically recommended. The sample of remaining 200 children was drawn who were born at home and were almost deprived of the said health education advices. Both these sample were drawn through stratified random sampling method. For collecting the data, both the primary and secondary sources of information were used. A structured schedule developed for this study was used for collecting data from primary sources. The study universe was delimited to the city of Ludhiana.

For determining the impact of health education and relationship of changing household structure on the breast-feeding and supplementary feeding practices, the household of all the respondents as stated were classified into three groups, viz. nuclear, nuclear extended and household with complex structure (two or more married pairs)⁹. The classification used is given in Table 1.

TABLE 1
CLASSIFICATION OF HOUSEHOLDS INTO DIFFERENT CATEGORIES

I Nuclear Household	Husband+Wife and Children
II Nuclear Extended	Husband+Wife+Children+one of the parents father or mother with or without one or more sibling
III. Household with complex structure	Husband+Wife+Children+Grand Father and Grand Mother or borthers/and his/their wife or wives or brother and his/their wife/wives with either of the parents

Similarly, a socio-economic scale was prepared on the basis of respondents educational level, economic level of the family and occupational level of their husbands as documented^{10, 11} and shown in Table 2.

TABLE 2
THE SCALE OF SOCIO-ECONOMIC LEVEL

Occupational prestige categories	Scores	Total Scores	SEG	Educational Level	Scores	Economic Level	Scores
1 and II	100	300	I	Graduate and above	100	Rs 100 and above	100
III	80	240-299	II	Under-graduate	80	Rs.601-1000	80
IV	60	180-239	III	9-16th	60	Rs.401-600	60
V	40	120-179	IV	6-8th	40	Rs.301-400	40
IV and VII	20	60-119	V	5th and less	20	Rs.300 and less	20

ANALYSIS OF DATA

Keeping in view the existing literature and the hypothesis (1) adopted, first of all efforts were made to study the household structure by the introduction of semi-solid food to the child. Accordingly, in Table 3, the structure of the household has been compared with the introduction of semi-solid food to the child.

TABLE 3
THE RESPONDENTS BY TYPES OF HOUSEHOLD AND CHILDREN ABOUT 4 MONTHS BY AGE AT WHICH THE SEMI-SOLID FOOD WAS STARTED TO BE GIVEN TO THEM

Type of Household	0-16 weeks	17-24 weeks	25-32 weeks	33-40 weeks	41 weeks and above	Each total total number of cases 100 per cent
Nuclear	8.4	38.6	26.5	12.0	14.5	83
Nuclear extended	-	31.8	31.8	18.2	18.2	22
Household with complex structure	-	27.5	24.6	25.4	22.5	142
Total per cent and number	(2.8)7	(31.6)78	(25.9)64	(20.2)50	(19.4)48	247

It can be noted from the Table 3 that in nuclear households about 47 percent of the children were introduced to the semi-solid food within the age of six months. In contrast to this, in nuclear extended and household with complex structure, the percentages are 32 and 27.5 respectively. In comparison with the nuclear household, more respondents who came from the household with complex structure discourage the early introduction of semi-solid. The above results support our specific hypothesis (1) 'mothers in the nuclear households are more prone to include the semi-solid food into the diet of the child than those who live in the households with more complex structure'. The differentials in the introduction of semi-solid food between the nuclear households and households with complex structure are quite noticeable. To a certain the validity of the above hypothesis, X^2 (qui-square) test was applied which shows that our hypothesis is statistically significant ($p \leq 0.05$). From the analysis, it is established that household structure plays an important role in the child weaning practices. The results are in conformity with the authors of other studies^{12, 13}. The second hypothesis attended in relation to the household structure and health education is influence of household with complex structure on the inclusion of semisolid food into the diet of child. The structure of the household was controlled to find

out the association between the place of delivery and the age at which semi-solid food was introduced into the diet of the child.

TABLE 4
THE RESPONDENTS BY TYPE OF HOUSEHOLD, PLACE OF DELIVERY AND CHILDREN 6 MONTHS BY AGE AT WHICH THE SEMI-SOLID FOOD WAS STARTED TO BE GIVEN TO THEM

Type of household	0-16 weeks	17-24 weeks	25-32 weeks	33-40 weeks	41-48 weeks	Place of delivery and each total number of cases 100 per cent Home Hospital	
Nuclear	43 13.8	31.9	23.0 47.2	17.0 30.6	23.4 5.6	47 8	36
Nuclear extended -		26.7	26.7	20.0	26.7	15	
			42.9	42.9	14.3		7
Household with complex structure		21.9	20.0 43.2	27.6 37.6	30.5 18.9	105	37
Total number	2(1.2)	42(25.1)	36(21.6)	40(23.9)	47(28.1)	175	
and percentage	5(6.2)	36(45.0)	28(35.0)	10(12.5)	(1.2)		80

A higher percentage of the mothers, who delivered their children in the hospital introduced the semi-solid food to them within five to eight months of their age than those who delivered at home as shown in Table 4. It is noticeable that after the mother's exposure to health education, the negative effect of complex structure of the household has decreased a great deal. The health education exerts a favourable influence on mothers' behaviour, even in the complex households which are usually more orthodox and traditional in context to the introduction of semi-solid food to the child and subsequently on the child feeding practices. As evident from the above analysis that in the household with complex structure semi-solid food was introduced into the diet of the children about 68 per cent after the age of eight months among the children born at home while 19 per cent in the case of children born in the hospital.

The above data support our hypothesis that health education minimises the negative influence of household with complex structure on the inclusion of semisolid food into the diet of child. To determine the effectiveness of above hypothesis (2), X^2 (qui-square) test was applied which shows that it is statistically significant ($P < 0.05$).

The data also show that a very few respondents, who were exposed to health education, postponed the inclusion of semi-solid food into the diet of their children,

after the age of six months. These findings not only agree with the observations of other researchers but also add to it^{9,14}. Further scientists have also observed that the higher socio-economic level of the mother also has a positive relationship with the age at which the semi-solid food is introduced to the child^{9,15}. It will, therefore, be interesting to control the socio-economic level of the mother and structure of the household and then to simultaneously single out the impact of health education on the introduction of semi-solid food to the child.

When the socio-economic level and the structure of the household are held constant, the difference between home and add hospital deliveries, in regard to the inclusion of semi-solid food into diet of the child has witnessed different trends. These differentials between the said two type of deliveries are more operative among the mothers who have attained higher socio-economic level and have the nuclear household as given in Table 5. It is re-established that the achievements of health education in the context of timely inclusion of semi-solid food into the diet of the child also depends upon the socio-economic level and structure of the household to which the mother belongs. The above findings are not only in confirmity with a similar findings of other authors but also go much-beyond to it^{6,8}.

TABLE 5

THE PERCENTAGE OF RESPONDENTS WHO INTRODUCED THE SEMI-SOLID FOOD TO THEIR CHILDREN BY THE 6 MONTHS OF THEIR BIRTH, THEIR SOCIO-ECONOMIC LEVEL, STRUCTURE OF THE HOUSEHOLD AND THE PLACE OF DELIVERY

Socio-economic level		Low			High	
Household	Nuclear structure	Nuclear extended	Household with two or more than two married pairs	Nuclear	Nuclear extended	Household with two or more than two married pairs
Place of delivery						
Home	25.6%	25.0%	13.8%	33.3%	33.3%	27.3%
Hospital	36.0%	33.3%	22.2%	52.9%	42.0%	35.0%

N.B. The above differentials between the home and the hospital been determined by working at the proportionate of hospital deliveries.

It can be noted that when the level of socio-economic grade of the mother and structure of the household are controlled, the impact of place of delivery can be easily recognised. The above results are in agreement with the conclusions drawn by other scientists". Although the low socio-economic level of the mother and complex structure of the household are the negative correlates of an early inclusion of semi-solid food into the diet of the child, yet the mothers' exposure to health education promotes the timely inclusion of semi-solid food markedly.

SUGGESTIONS

It is, therefore, suggested that the health officials must fully organize health educational activities regarding child feeding care, especially in the joint families to promote healthy feeding practices among the children.

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Lkkjk'k

इस अध्ययन में ग्रामीण क्षेत्रों की सामाजिक सोपान-तंत्र के दो विभिन्न वर्गों-समुदाय और निर्धन की दंपतियों की अभिप्रेरणा प्रक्रिया पर विभिन्न संचार माध्यमों के प्रभाव पर प्रकाश डाला गया है। दोनों वर्गों पर विभिन्न संचार माध्यमों का एक सा प्रभाव नहीं होता है। समृद्ध लोगों के मामले में उनके सहवर्गी लोग मुख्य भूमिका निभाते हैं जिसके बाद परिवार नियोजन कार्यकर्ताओं और जनसंचार माध्यमों का क्रम आता है जबकि निर्धन वर्ग की दम्पतियों को परिवार नियोजन अपनाने के लिए प्रोत्साहित करने में परिवार नियोजन कार्यकर्ताओं का प्रथम स्थान होता है। इस पेपर में संचार सहवर्गी तथा जनसंचार माध्यमों की महत्ता तथा पात्र दंपतियों को परिवार नियोजन के लिए प्रेरित करने पर उसके प्रभाव को समझाने को विस्तृत प्रयास किया गया है।

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MOTIVATIONAL FACILITIES FOR FAMILY PLANNING ACCEPTANCE IN A RURAL SET-UP: A MICRO STUDY

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ABSTRACT

This study highlights the effects of different communication media on the process of motivation of couples in the countryside belonging to two distinct classes of the social hierarchy - the rich and the poor. The effect of different communication channels on the two groups is not the same. In the case of rich people peers play a major part followed by family planning personnel and mass media in motivating couples to accept family planning whereas in the case of poor family planning personnel occupied first place followed by the peers and mass media. A detailed attempt is made hereunder to explain the importance of communication media and its impact on the motivation of eligible couples to accept family planning.

The rapid growth of population is one of the challenging problems facing mankind today. This tremendous increase is mainly the consequence of rapid decline in death rates and more or less steady birth rates in the developing countries of the world. Death control without simultaneous birth control may prove to be disastrous. The problem of controlling human fertility is not merely a matter of immunology or physiology. More basic and important than either of these factors is psychology of emotions and motivations'.

As a consequence of this unprecedented growth of population in recent years, the developing countries including India are suffering from limping economies. Population spurt has influenced unfavourably the per capita incomes and standards of living and thus aggravated the poverty and malnutrition, if not hunger, in almost every developing country. All the developing Afro-Asian and Latin-American countries are finding it as a Herculean task to match their limited resources with this alarming increase in their population. They are also very much aware and quite conscious of the fact that whatever progress they achieve in the sphere of economic development is being nullified by the unwanted and excessive births. India is no exception to this phenomenon. For instance, in India, between 1960 and 1982 the gross domestic product went up by 113 per cent, but the increase in per capita income was only 27 per cent because of the 64 per cent rise in population during the

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period. Therefore, there is a great urgency in the effort to control this rapid population growth in the developing countries through voluntary acceptance of family planning by all the eligible couples to bequeath a bountiful and peaceful world to posterity.

Realizing the problems of rapid population growth, the Government of India launched a nation-wide formal programme of family planning in 1952, renamed it as "Family Welfare" in 1977, as an integral part of its developmental plans to achieve the goal of bringing down the birth rate to a desired level of 25 per thousand by the end of 1983-84. We are still far away from the targeted goal. In spite of all the sincere efforts, publicity, planning, official drive and spending of hundreds of crores of rupees on family planning programmes, the Government has not achieved the modest targets of protected couples set forth by itself during any plan quinquennia except during the period of national emergency. The result is that the decadal growth rate of population for 1971 -81 at 24.8 per cent, was hardly below that for 1961-71. This clearly shows that family planning in the country has not been successful in curtailing the birth rates to the desired level and thus failed in bringing appreciable slackening in the rate of natural increase. Thus, the 1981 census provisional count of 684 million people proved to be a source of anxiety. Besides, this very large population base and large net additions in absolute numbers to this base, another source of worry to population planners is the youthful population. Forty per cent of total population in the country is below 15 years of age.

One of the important reasons for this rapid population growth is the failure to bring down fertility level during the successive Five Year Plans². The set targets to achieve fertility decline during different plans did not materialise. This may be due to the excessive importance given to family planning in the urban areas where only 20 per cent of the population lives, and the relative negligence of family planning in the rural areas where about 80 per cent of the population resides. The family planning programme may be said to have begun at the wrong end where it is needed less. Indeed, as (Late) Mrs. Indira Gandhi has put it, it is "in the villages that the babies are born" So the villages should be the centers or the basis for the family planning activity and the eligible couples in the villages should be the prime target, instead of towns, where there are more birth control facilities in the Government hospitals as well as in specialized private clinics.

Taking the programme of birth control to villages is indeed difficult. Not only are the villages deficient in basic health and medical facilities, but they are also plagued by poverty, lack of privacy, ignorance and superstition, besides, lack of easy means of communication. Since, the rural poor cannot afford to go to the city clinics, the contraceptive services must be taken to the villages, apart from motivating the rural masses to plan their families.

The success of family planning programmes will mainly depend on the sustained efforts of the different communication media. Effective propaganda and publicity through different communication media are necessary to educate people

on family planning methods and the benefits of small families and to motivate them for adopting family planning methods. Motivation sets in motion the process of acceptance of any innovation, may be social, cultural, industrial, agricultural or family planning. So, appropriate motivational facilities through effective and suitable media of communication will facilitate to achieve the desired birth rate. The targeted birth rate planned to be achieved by the turn of the century is the net reproduction rate of one³.

The Indian family planning programme is wholly voluntary and being implemented within the democratic framework with freedom of choice to couples on the number of children they wish to have, the time and the method of family planning they like to adopt. It has undergone several changes since its inception in the early fifties. Starting with a clinic-centred approach it slowly developed into a mass programme with an extension approach with greater emphasis on community participation and voluntary acceptance of the small family norm. The emphasis on mass communication became a logical strategy to create awareness and seek support of the community for popularization of the family planning programme.

The present micro-level research study attempts to analyse and highlight the motivational facilities provided by the family planning programme through different media of communication in a rural setting *vis-a-vis* voluntary and popular acceptance of family planning by the rich and the poor, representing two distinct groups one socially and economically advantaged and the other socially and economically disadvantaged in general. Almost all the rich people are land owning class and the poor are landless agricultural laborers in the area of study.

OBJECTIVES

The overall objective of the present study is to identify and describe the various communication and motivation facilities existing in a Taluk covered by a Primary Health Centre/Centres offered under Family Planning Programme and their influence on the adoption of family planning in a rural set-up. The specific objectives are: (i) to explore the various motivational facilities provided under the Family Planning Programme; (ii) to assess the role of different motivational facilities -different media of communication in the diffusion of family planning information and in the motivation of eligible couples to accept contraception; and (iii) to suggest suitable motivational measures for wider, voluntary and popular acceptance of family planning.

HYPOTHESIS

The hypothesis framed for the present study is summed-up as follows:

- (i) the greater the degree of motivational facilities, the greater will be the level of acceptance of family planning.

METHODOLOGY

Area of Study

The area selected for the study is Venkatagiri Taluk in Nellore District of the Coastal Region of Andhra Pradesh for a detailed micro level study of the problem. The boundaries of the Samithi and the Taluk are one and the same. Venkatagiri Taluk consists of 195 revenue villages spread-over an area of 982.8 square kilometers. Its total population as per 1981 census was 1,14,636. Out of the 195 villages of the Taluk about 25 per cent of the villages are selected for the study.

Respondents

The respondents are drawn from two distinct classes - the rich and the poor, representing two different strata in the socio-economic hierarchy of the villages. The rich are socially and economically advanced group whereas the poor are socially and economically backward group.

Sample Design and Size

The size of the sample design for the study is 1,200 respondents belonging to the couples in the reproductive age, equally distributed between the two sexes of the two groups selected for the study. The sample is chosen by a stratified random sampling procedure. As the villages in the study area vary according to the size of population and facilities of communication, it is likely that more number of one or the other category of villages may be represented while selecting a sample of villages by the simple random technique. So to overcome this difficulty, the villages are classified into four strata or groups on the basis of their population. The first group or stratum would consist of villages with a population of less than or equal to 1000, the second group from 1001-1500, the third from 1501-2000 and the last over 2000. About 25 per cent of the villages from each of the above four groups are selected at random. As such the sample of villages for the study comes to about 50 out of the total of 195 villages.

In each group of the classified villages, the couples in the reproductive age are enumerated. The total number of couples in the reproductive age in the 50 selected villages is 1860 among the rich and 2110 among the poor. About one-third of the couples that are in the reproductive age are selected for the study from each category on the basis of proportionate random sampling from the four groups of villages. It comes to roughly 600 couples from each category. From the 1200 couples so selected a male spouse and a female spouse are alternately selected for the investigation from the two categories. This selection of equal number of male and female respondents is helpful to elicit the reaction of both the sexes towards the availability and the impact of motivational facilities on family planning.

Collection of Data

A schedule consisting of five parts is used for the collection of data. The first part of the schedule deals with the identification and general background of the respondents while the second part deals with the demographic and socio-economic data and maternity history. Questions related to knowledge and practice of family planning methods are included in the third part while the fourth and the last part deal with the media of communication viz. family planning personnel, peers and mass media and their influence on motivation. To assess the reliability and validity of each item of the schedule, it is pre-tested on a sample of 60 respondents selected from the two categories, i.e. 30 each. The data collected are analyzed and presented in two-way table. T test is also employed to pinpoint the importance of different communication media with reference to the adoption of family planning methods.

COMMUNICATION MEDIA

The Different Communication Media

Communication is the process by which an idea is transmitted or diffused from a source to a receiver, with the intent to change his behaviour and attitude⁴. Communication is more than mere transmission of information. Its aim is to establish or create commonness between the source of information and its receiver. In family planning, it has to establish this rapport between the family planning worker and the person to whom his message is directed.

Communication channels are the means by which a message is transmitted from a source to a receiver⁵. The family planning programmes in India utilise three types of communication channels: mass media, inter-personal communication, and integrated media to diffuse family planning information and to motivate the eligible couples to accept family planning. It is so in the area of present study.

Mass media channels are all those means of transmitting messages that involve a mass medium such as newspaper, magazine, film, radio set, television set and so on. But the limitations of mass media in a country like India and especially in the rural areas are too well known to need enumeration. Briefly, they are the result of the size and dispersion of the potential audiences, the diversity of languages, the wide spread illiteracy, scarcity of radio sets, cinema theatres and the virtual absence of television in the rural areas.

Inter-personal channels are those that involve face-to-face transfer of message between a source and a receiver. These persons may be family planning personnel, adopters, friends, neighbours, relatives, teachers, village leaders and the like.

Integrated media are very effective for family planning motivation because of

the cumulative effect of communication messages given by a judicious combination of mass media and inter-personal channels. These media may include home or clinic visits, group discussions, films, newspapers, pamphlets, radio sets and others or a combination of two or more of these media. These media can bring home the urgency of adoption of family planning among the couples whom the family planning workers aim to reach.

Of these three media of communication, the inter-personal channel occupies the most prominent position in the dissemination of information related to family planning in the study villages. The other two media have secondary importance to the respondent couples hailing from the countryside.

The First Source of Communication

Of the different media of communication those which have served as the first source of information to the respondents are ascertained. For this purpose, each respondent is asked to list out the various sources from where family planning information was first obtained. Their answers are analysed and tabulated. Table 1 shows the first source of information to the respondent couples belonging to the rich and the poor classes.

Table 1 makes it clear that mass media as the first sources of information have been useful to impart information to 20.33 per cent and 15.00 per cent of men and women in the rich and 14.67 per cent and 13.00 per cent of men and women in the poor groups respectively. In other words, mass media served as the first sources of information for more number of men than women. Individually taken, radio as a medium of mass communication takes the pride of place followed by cinema and printed material. Whereas radio has become the first source of information for more number of women than men in the two groups, cinema and printed material have become the first sources of knowledge for more number of men than women in the two groups the rich and the poor.

Family planning personnel also comprise an important source of spreading family planning information to the people in the rural areas. For the first time, 35.00 per cent of men and 22.00 per cent of women among the rich and 35.67 per cent of men and 30.67 per cent of women among the poor received information on methods of family planning from family planning workers. This indicates that the family planning personnel are concentrating more on the poor than the rich. Among the family planning staff, the Medical Officers occupy the last place, followed by Block Extension Educators, Multipurpose Health Supervisors - Male and Female, Multipurpose Health Workers - Male and Female and Community Health Volunteers in diffusing the relevant information and motivating couples to accept family planning. The community health volunteers are the last cadre in the official hierarchy of the personnel working in the primary health centre of the panchayat samithi, but occupy the first place in educating and motivating people to accept family planning. This last

cadre of workers has been a recent innovation on the model of Chinese bare-foot doctors to serve in the villages. They have been trained in the maintenance of health, sanitation, treatment of minor ailments and contraceptive technology. The

TABLE 1
RESPONDENTS' FIRST SOURCE OF INFORMATION/COMMUNICATION - CLASS-
WISE

First source of information	Rich		Poor	
	Male	Female	Male	Female
1. <i>Mass Media</i>	61 (20.33)	45 (15.00)	44 (14.67)	39 (13.00)
a. Radio	26 (8.66)	31 (10.33)	25 (8.33)	26 (8.67)
b. Cinema	17 (5.67)	9 (3.00)	17 (5.67)	12 (4.00)
c. Printed material (Newspapers, magazines etc.)	18 (6.00)	5 (1.67)	2 (0.67)	1 (0.33)
2. <i>Inter-personal Channel</i>				
a. Family planning personnel:	105 (35.00)	66 (22.00)	107 (35.67)	92 (30.67)
i Doctor: Male & Female	7 (2.33)	2 (0.67)	6 (2.00)	3 (1.00)
ii. Block Extension Educator	12 (4.00)	2 (0.67)	7 (2.33)	2 (0.67)
iiii Multi-purpose Health Supervisors: Male & Female	18 (6.00)	7 (2.32)	21 (7.00)	15 (5.00)
iv. Multi-purpose Health Workers: Male & Female	29 (9.67)	20 (6.67)	29 (9.67)	22 (7.33)
v Community Health Volunteers: Male & Female	39 (13.00)	35 (11.67)	44 (14.67)	50 (16.67)

b. Peers:	134 (44.67)	189 (63.00)	149 (49.66)	169 (56.33)
i. Adopters	59 (19.67)	63 (21.00)	58 (19.33)	74 (26.67)
ii. Friends	39 (13.00)	34 (11.33)	29 (9.66)	33 (11.00)
iii. Neighbours	21 (7.00)	29 (9.67)	19 (6.32)	27 (9.00)
iv. Relatives	7 (2.33)	12 (4.00)	8 (2.67)	9 (3.00)
v. Spouses, teachers and local leaders	8 (2.67)	51 (17.00)	35 (11.67)	26 (8.66)
Total N	300	300	300	300

jurisdiction of a Community Health Volunteer is a viable unit covering an area of 1,000 population. These para-medical workers are selected from among the local people and hence know the real problems and feelings of the people. They can easily approach and convince their counterparts in the country-side about the advantages of small family and the need for planning their families.

Apart from the family planning personnel, peers from the most important first source of information on family planning and of its different methods. They are responsible to impart information to 44.67 per cent of men and 63.00 per cent of women among the rich and 49.66 per cent of men and 56.33 per cent of women among the poor. Again, among the peers only the satisfied adopters occupy a place of pride as the first source of information for men as well as women in the two groups. Neighbors and relatives as sources of information are important for women rather than men in the two groups. Friends as a source of information are significant to the respondent couples among the rich rather than among the poor. Although spouses, teachers and local leaders also act as sources of information for all the respondents in the two strata, the importance of spouses is more than that of the teachers and local leaders.

It can be pointed out from the table that inter-personal communication forms the most significant source of information and mass media the least in disseminating information on contraception in rural areas. Recent researches also reported the same results⁶. In general, more number of men received information than women

from mass media and family planning workers but more number of women received information from peers. This may be due to illiteracy and inhibitions of the social system. Ladies are not freely approached by the male workers of family planning. In fact, as the family planning workers and other persons with the knowledge of family planning are men, they hesitate to meet ladies and educate them about the benefits of family planning and the need for the acceptance of small family norm.

Table 2 while explaining the different media as first sources of family planning information to each group as a whole, also supports the above findings.

Table 2 reveals that 28.50 per cent of the rich and 33.17 per cent of the poor reported that they got information about family planning as a first source through family planning personnel. This shows that the effect of family planning workers is more on the poor than the rich. The T test also shows that the degree of difference between the two class groups is statistically significant ($T = 2.1465$, significant at 1 per cent level). This indicates that the effect of family planning staff is significantly more effective on the poor than on the rich. On the other hand, the influence of peers and mass media as first sources of information on family planning to both the groups is almost equal. This is also supported by T test values that are not significant in the case of both the media ($T = 1.3176$ for peers and $T = 1.4107$ for mass media).

In brief, of the three different media, peers are the most important first sources of communication in disseminating information on family planning to all the respondents of both the class groups, constituting more than 50.00 per cent, followed by family planning workers and mass media.

TABLE 2
RESPONDENTS' FIRST SOURCE OF INFORMATION BY

First source of information	Rich	Poor	Difference T value
Family Planning Personnel	171 (28.50)	199 (33.17)	2.1465**
Peers	323 (53.83)	318 (53.00)	1.3176 NS
Mass Media	106 (17.67)	83 (13.83)	1.4107 NS
Total N	600	600	

**Significant at 1 per cent level.

NS: Not significant

INFLUENCE OF COMMUNICATION MEDIA ON THE ADOPTION OF FAMILY PLANNING

The Most Important Sources of Influence

Now, the question is whether the first sources of information comprise the most significant sources for decision-making and adoption of family planning. In order to ascertain whether a particular medium of communication which has formed the first source of information has also become the most significant source for decision-making or not, the number of contacts that have taken place between a source and the respondent couples is identified and quantified. In other words, the number of contacts is taken as an index of motivation created by different media of communication relating to family planning. Table 3 provides the quantitative details of this subject.

Table 3 demonstrates that for 34.59 per cent of the total number of 266 male and female adopters among the rich, the most important source of influence for their

TABLE 3

INDEX OF FAMILY PLANNING MOTIVATION ACCORDING TO THE MEDIA OF COMMUNICATION AND ADOPTION STATUS

Index of family planning motivation with reference to communication media	Adopters	Rich Non-Adopter	Adopters	Poor Non-Adopter
a Communication by Family Planning Personnel:				
No contact	-	302 (59.44)	-	297 (550)
One contact	9 (9.79)	154 (30.32)	4 (666)	156 (28.89)
Two contacts	31 (33.69)	33 (6.49)	23 (38.34)	73 (13.52)
Three or more contacts	52 (56.52)	19 (375)	33 (55.00)	14 (2.59)
Total N	92	508	60	540
Mean	(2.47)	(0.55)	(2.48)	(0.64)

b Communication by Peers

No contact	-	77 (16.73)	-	96 (16.41)
One contact	2 (1.42)	183 (39.79)	-	247 (42.66)
Two contacts	39 (27.86)	144 (31.31)	3 (15.00)	174 (30.05)
Two or more contacts	99 (70.72)	56 (12.17)	17 (85.00)	63 (10.88)
Total N	140	460	20	580
Mean	(2.69)	(1.39)	(2.89)	(135)

c. Communication by Mass Media

No contact	-	294 (51.94)	-	322 (54.03)
One contact	-	212 (37.46)	-	191 (32.05)
Two contacts	7 (20.59)	42 (7.42)	1 (25.00)	70 (11.74)
Three or more contacts	27 (79.41)	18 (3.18)	3 (75.00)	13 (2.18)
Total N	34	566	4	596
Mean	(2.79)	(0.99)	(2.75)	(0.62)

decision-making is family planning personnel. As the number of contacts increased, the level of adoption of one family planning method or the other also has increased. The average number of contacts between the family planning personnel and the adopters among the rich is 2.47 whereas the same between the family planning personnel and non-adopters among the rich is only 0.55. For 71.44 per cent of the total number of 84 male and female adopters among the poor, family planning workers are the most important sources for the adoption of family planning. Interestingly, the average number of contacts of adopters among the poor with the family planning workers is more than that of adopters among the rich with the family planning workers. It indicates that the family planning workers are concentrating a little more on the poor than the rich.

Peers also comprise a major source of contact. In fact, 52.63 per cent of the total adopters among the rich and 23.80 per cent of total adopters among the poor said that the important source for their adoption of family planning methods is peers. The average number of contacts of adopters with peers is more than that of non-adopters with peers. The average number of contacts of adopters with peers among the poor (2.85) is more than the average number of contacts between adopters and peers among the rich (2.69).

Mass media are important sources of influence for decision-making and adoption of family planning by the rich respondents, but they are almost the last sources of influence to the poor. The figures support this fact. Actually, 12.78 per cent adopters among the rich as against 4.76 per cent of the adopters among the poor, mass media formed a source of influence for their contraceptive practices. However, it may be noted here, that compared with the influence of other media that of mass media is very insignificant. As in the case of the average number of contacts between the adopters and family planning personnel and peers, the average number of contacts between adopters and mass media is also more than that of non-adopters with mass media in the two groups. The average number of contacts of the rich adopters (2.79) is a little more than that of the poor adopters (2.75).

Table 4 further supports the above inferences. According to the figures in the

TABLE 4
THE MOST IMPORTANT SOURCE OF INFLUENCE IN DECISION-MAKING TO
ADOPT FAMILY PLANNING

Most important source for decision-making and adoption	Rich	Poor	Difference T Value
Family Planning Personnel	92 (34.59)	60 (71.43)	6.4798**
Peers	140 (52.63)	20 (23.81)	4.8361**
Mass Media	34 (12.78)	4 (4.76)	1.1375 NS
Total N	266	84	

** Significant at 1 per cent level of significance.

NS=Not significant.

table, 34.59 per cent of the rich as against 71.43 per cent of the poor reported that family planning personnel comprise the most important source for their decision-making and adoption of some method of family planning. These percentages disclose that the effect of family planning staff is more on the poor than on the rich. It is also found that the difference is statistically significant ($T = 6.4798$). In other words, the influence of family planning workers is significantly more effective on the poor than on the rich.

The above table further reveals that to 52.63 per cent of the rich and to 23.81 per cent of the poor peers are the most important sources for their adoption of different family planning methods. This shows that the significance of peers, on the rich is more than that of the poor. The 't' value obtained is 4.8361 which is significant at one per cent level. This means that the effect of peers as sources for decision-making and adoption of family planning is more effective on the rich than on the poor.

The influence of mass media on the adopters from the two groups is apparently significant but statistically insignificant. For 12.78 per cent of the rich and 4.76 per cent of the poor mass media are the most important sources for their decision-making and adoption. This shows that the influence of mass media is more on the rich than on the poor. Nevertheless, the 't' value obtained is not significant. This may be due to the small number of adopters among the Harijans.

Thus, the foregoing analysis of data related to the influence of communication media on the respondents supports the hypothesis that 'the greater the degree of motivation facilities, the greater will be the level of acceptance of family planning'. Indeed, the inter-personal communication media have motivated more number of couples to accept one family planning method or the other than any other media. Therefore, effective propaganda and publicity through different communication media are necessary to educate people, especially the poor, on family planning methods and the benefits of small families and to motivate them for adopting family planning methods.

Lkkjk'k

हिमाचल प्रदेश में पोषण कार्यक्रम विभिन्न सरकारी और गैरसरकारी एजेंसियों के माध्यम से कार्यान्वित हो रहे हैं। यह अध्ययन के दौरान अनेकों प्रबंधात्मक मुद्दों की पहचान की गई। अर्न्तविभागीय सहयोग और समन्वय, निरंतर शिक्षा, गतिशीलता, बेहतर मानीटरिंग और सामुदायिक सहभागिता आदि ऐसे कुछ क्षेत्र हैं जिन पर ध्यान केन्द्रित करने की आवश्यकता है।

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