

**COMMUNITY-BASED DISTRIBUTION OF
CONTRACEPTIVES IN RAJASTHAN - AN
EXPERIENCE FROM ALWAR DISTRICT**

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ABSTRACT

The study reveals that although the use of conventional contraceptives has certainly gone up in the project area, an evaluation at the end of three years has brought out only a marginal rise in the contraceptives prevalence rate. It has also been observed in the baseline survey of the study that if the Jan-Mangal Project is executed in a right spirit, it would yield the proposed objectives of raising the desired contraceptives prevalence rate. The study has further observed that two-thirds of the rural women are married before the age of 18 years and an equal number of them entered in consummation by this age.

Since the launch of family planning programme in early fifties, its performance in the State of Rajasthan has remained a matter of concern. In the beginning of nineties, the crude birth rate of the State was 33.8 per thousand, the couple protection rate was 29.5 per cent and the mean age at sterilization was 30.7 years¹. Eventually there was an urgent need to launch an effective intervention for population control activities in the State.

Realizing these facts and many other weaknesses in the health and family welfare sector of the State, the State Health Education Bureau and the State Media Cell of the Family Planning was merged and rejuvenated as Information, Education and Communication Bureau (IECB) in Rajasthan. The newly formed IECB made several inputs to set the pace for population control activities. One such major intervention was community-based distribution of conventional contraceptives under the banner of Jan-Mangal Project.

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Jan-Mangal Project focused on popularizing birth spacing methods. Community involvement was sought by identifying and recruiting the enterprising villagers as Jan Mangal Volunteers who could effectively communicate with villagers on the need and practice of conventional contraceptives. It was an effort to overcome the geographical, cultural and bureaucratic barriers in delivering family welfare services in remote rural areas.

Since the basic aim of the Project was to enhance the CPR by 12 per cent, the need was felt to have correct baseline information for future appraisal of the project. Then a survey was conducted in February/March 1993 as a pre-launch activity. This paper presents the major observations of the baseline survey *vis-a-vis* evaluation of the project based on a survey conducted in November/December, 1995.

METHODOLOGY

Alwar district, located in the Eastern part of the State, was one of the identified districts for this project. Two-stage random stratified technique to draw the sample was followed. In the first stage 20 per cent of rural blocks were chosen and in the second stage 10 per cent of villages, where project was to be launched, were taken up. Since the project was proposed for villages with a population between 500 and 5000, the villages were enlisted into three categories such as 500-999, 1000-1999 and 2000-5000. Thus, the primary sampling unit of this study consisted of 22 villages of varying population scattered in three of the fourteen blocks of Alwar district. Secondary sampling unit consisted of eligible couples (women's age 15-49 years) served in clusters from a random point in the sampled villages.

FINDINGS

Baseline Evaluation

Thus 3977 eligible couples were interrogated by a team of competent surveyors within a month (February-March, 1993). The observations were recorded on a pre-designed schedule. A detailed report of the study was submitted to the IEC Bureau of Medical Health and Family Welfare Department in May 1993². The present paper has taken up selected observations which may help us to understand the overall project and findings of end evaluation.

Table 1 shows that almost two-thirds of the rural women are married

before the age of 18 years and an equal number of them enter in consummation by this age. Mean age at marriage gradually decreased with the size of village, being 16.02 years for large, 15.6 years for medium and 15.77 years for small villages. Mean and median age at marriage for overall sample was 15.8 and 16 years respectively. Since girls are married at young ages, they are held back at parents home. They are sent to the in-law's house only after the onset of menarche. This custom is known as *gauna*. Mean and median age at *gauna* for overall sample was 16.52 years and 16 years respectively. Since the girls enter in wedlock and reproductive life at an early age, there is dire need to inform and educate them on issues related to pregnancy and childbirth.

TABLE 1
DISTRIBUTION OF RESPONDENTS ACCORDING TO AGE AT MARRIAGE AND AGE AT CONSUMMATION

	Age at Marriage			Age of Gauna		
Village Population	<18 year	> 18	Mean age (in years)	<18 years	>18	Mean age (in years)
	<u>Per cent</u>			<u>Per cent</u>		
500-999	69.4	30.6	15.77	62.2	37.8	16.95
1000-1999	79.5	20.5	15.60	71.6	28.4	16.63
2000-4999	67.4	32.6	16.02	58.9	41.1	17.01

Table 2 shows the age at the time of first conception. 3437 out of 3977 women (86.42% of total sample) at the time of survey were found to have conceived at least once. Half of them conceived before they could complete 20 years of age. It is amazing that two per cent conceived even before completing 15 years of life. 540 women out of 3977 were found pregnant at the time of the survey giving current pregnancy rate of 13.15 per cent.

The current use of contraception during the survey was found to be 47.72 per cent. Prevalence of tubectomy in the study area was found to be 35.23 per cent. The current rate of practicing condoms and oral pills in larger villages was found to be 5.76 per cent and 1.68 per cent respectively. While the use of oral pills was found to be just double the rate observed in small and medium size villages (2.5% against 1.24%) and there was not much difference in the use of condoms while considering the size of the village (Table 3).

TABLE 2
AGE AT THE TIME OF FIRST CONCEPTION (N: 3437)

Age	Per cent
<14	1.98
15-19	41.31
>20	56.71
Mean	16.4
Median	20.0

Oral Pills Consumers: 67 out of 3977 women (1.68%) were using oral pills. Out of 67 oral pills users, 54 were using it for lesser than one year and only one woman was consuming pills for more than three years. Six out of 67 users (8.9%) were procuring pills from private sources.

Condom Users: 229 out of 3977 EC (5.76%) were using condoms. Not a single amongst them is using condom for more than a year. 203 EC (88.63%) were obtaining these condoms from government outlet. 2079 out of 3977 EC (52.28%) were currently not practicing any of contraceptives (Table 3).

Further analysis of these couples revealed 28.86 per cent demand for condoms and 10.86 per cent demand for oral pills among the current non-users (Table 4).

End-Evaluation

The baseline data provide a great optimism for popularizing conventional contraceptives in the project area. In the baseline survey it was reiterated that if Jan-Mangal Project is executed in a right spirit, it would yield the proposed objective of raising the desired CPR. Although use of conventional contraceptives has certainly gone up in the project area, evaluation at the end of three years has brought out only a marginal rise in respective contraceptive prevalence.

TABLE 3
DISTRIBUTION OF EC ACCORDING TO CURRENT USE OF AT LEAST ONE CONTRACEPTIVE

	500-999	1000-1999	2000-5000	Total
Not using	835 53.25	713 52.04	531 51.11	2079 52.28
Using Oral Pills (per	24 1.53	17 1.24	26 2.50	67 1.68
condom (per	114 7.27	58 4.23	57 5.49	229 5.76
Loop/cu. T (per	11 0.70	26 1.90	17 1.64	54 1.36
Vasectomy (per	35 2.23	12 0.88	25 2.41	72 1.81
Tubectomy (per	522 33.29	528 38.54	351 33.78	1401 35.23
Others (per	27 1.72	16 1.17	32 2.07	75 1.89
Total	1568	1370	1039	3977

TABLE 4
CHOICE OF CONTRACEPTIVES DESIRED BY PROSPECTIVE USERS

Contraceptives	Number	Per cent
Oral Pills	64	10.86
Condoms	170	28.86
Cu.T	43	7.30
Vasectomy	2	0.33
Tubectomy	265	44.99
Others	45	7.64
Total	589	100.00

Alwar district has 1317 villages between the size of 500 and 5000. 106 villages falling in this range did not have any Jan-Mangal volunteer till the end of the project. In all, there were 1323 volunteers in the 1317 villages who were delivering the services as Jan-Mangal volunteers.

Condoms: Distribution of condoms in the district was 1.83 million pieces during 1992-93. With the launch of the project, the traditional distribution of condoms came down to 1.70 million pieces during 1993-94 and subsequently to 1.06 million pieces during 1994-95 - a fall of 7 per cent and 30 per cent respectively over the previous years. While 0.42 million pieces were distributed by Jan-Mangal volunteers during 1993-94, the distribution by them went up to 1.23 million during 1994-95. Thus 54 per cent of total condom distribution in the district was through volunteers during 1994-95. The project has also documented that Jan-Mangal volunteers motivated 11,316 and 9,552 eligible couples during 1994 and 1995 respectively for using condoms as against 7,477 couples motivated for condom use during 1993.

Oral Pills: While 29,450 oral pill cycles were distributed during 1992-93, with the launch of the project, oral pills use went up. During 1993-94, 46,043 oral pill cycles were distributed through traditional outlets and 23,950 cycles were distributed by Jan-Mangal volunteers. In the subsequent year (1994-95), 16,661 cycles were distributed through traditional outlets and 56,296 cycles were distributed by Jan-Mangal volunteers. The later also documented having motivated 5,843 and 4,214 eligible couples during 1994 and 1995 respectively for using oral pills as against 4,643 couples being motivated for the oral pill use during 1993.

Table 5 shows that use of condoms has gone up from 5.8 per cent to 7.8 per cent and oral pills from 1.7 per cent to 3.5 per cent through project efforts. Thus CPR from conventional contraceptive could rise to the order of only 4 per cent over the project period. Concurrently the use of Cut also rose from 1.4 per cent to 3.0 per cent. But the overall CPR has fallen from 45 per cent to 40 per cent. This might be due to curtailment on camp approach and non-availability of tubal rings bringing slackness on sterilization for more than a year. In the baseline survey it was found that a large number of sterilization acceptors are those who have three or more live children besides being aged 30 and above. Although this intervention trial could not make an objective assessment of the quality of conventional contraceptive acceptors but the feedback from volunteers has indicated that more often the acceptors were couples with one or two children. Thus the CPR data of end evaluation should satisfy a keen observer. It seems that Jan-Mangle Project in Alwar district could partially meet the objectives envisaged at the outset of this project.

TABLE 5
CONTRACEPTIVES PREVALENCE (PERCENT) IN THE PROJECT AREA

Method	Pre-launch (March 1993)	End Project (Dec. 1995)
Tubectomy	35.2	24.6
Vasectomy	1.8	1.1
Cu. T	1.4	3.0
Condoms	5.8	7.8
Oral Pills	1.7	3.5
Total	45.9	40.0

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प्रस्तुत अध्ययन से प्राप्त निष्कर्षों से पता चलता है कि यद्यपि परियोजना-क्षेत्र में गर्भनिरोधकों के प्रयोग का प्रचलन काफी हद तक बढ़ा है परन्तु तीन वर्ष के अन्त में किए गये एक मूल्यांकन से यह भी स्पष्ट हुआ है कि गर्भनिरोधकों की प्रचलन दर में केवल सीमान्त वृद्धि ही हुई है। अध्ययन के बेसलाइन सर्वेक्षण में यह भी देखने में आया है कि यदि जन-मंगल परियोजना का क्रियान्वयन ठीक ढंग से किया गया होता तो गर्भनिरोधकों के प्रयोग संबंधी निर्धारित लक्ष्यों को प्राप्त किया जा सकता था। अध्ययन के निष्कर्षों से यह भी ज्ञात हुआ है कि दो-तिहाई ग्रामीण महिलाओं का विवाह 18 वर्ष से कम आयु में ही हो गया था और उनमें से इतनी ही महिलाओं का इस आयु तक गौणा भी हो चुका था।

REFERENCES

1. MOHFW (1993): Year Book of Family Welfare Programme 1991 -92, Department of Family Welfare, Government of India, New Delhi.
2. SHIV CHANDRA (1993): Baseline Contraceptive Prevalence Survey in Alwar District, Rajasthan; IEC Bureau, Directorate Medical, Health and Family Welfare, Rajasthan, February/March.
3. MEDIA RESEARCH GROUP (1995): An Evaluation of Jan-Mangal Project -Summary and Recommendations; MRG, New Delhi.

A STUDY ON CURRENT STATUS OF PANCHAYATI RAJ INSTITUTIONS IN HARYANA

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ABSTRACT

This article attempts to review the current status of Panchayati Raj Institutions in Haryana State in terms of Policy, Infrastructure and functional aspects. The study revealed that the Haryana Panchayati Raj Act, 1994 incorporated all the provisions of the Constitution (73rd Amendment) Act, 1992. The infrastructure of Panchayati Raj Institutions had been established as per the norms but adequate powers and resources had not been transferred to them by the State Government which was necessary to perform the list of functions under the State Act. Role of president zila parishad in District Planning Committee had not been clarified. Few suggestions have been made by the authors for improvement in the functional aspects of Panchayati Raj Institutions.

The Constitution (73rd Amendment) Act 1992 recognized panchayats as the third stratum of Government at and below the district level. It provides for the formation of Gram Sabha and three tier systems of panchayats at village, block and district levels, comprising elected members. Seats have been reserved for scheduled castes, scheduled tribes and women in all the three tiers. The Panchayati Raj Institutions have been endowed with powers and responsibilities with respect to the preparation of plans and implementation of schemes for economic development and social justice as may be given to them, including those in relation to the matters listed in the eleventh schedule (Govt, of India, 1993).

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The present paper reviews the current status of Panchayati Raj Institutions in local decentralized development planning including health (policy, infrastructure and functional aspects) in Haryana State.

MATERIALS AND METHOD

Secondary data were collected and analyzed as the Constitution (73rd amendment) Act, 1992, Haryana Panchayati Raj Act 1994 and executive orders and circulars of Haryana Government about Panchayati Raj Institution.

Primary data were collected by discussion with senior administrators of Panchayati Raj Institutions at district Gurgaon to know about the functional aspects of the State act. The content analysis of the data collected was done to provide the observations.

OBSERVATIONS

Policy

Haryana Government enacted the Haryana Panchayati Raj Act 1994 in conformity with the Central Act, incorporating all the provisions of the Constitution (73rd Amendment) Act, 1992. The elections to PRIs were held during December 1994. A critical analysis of the Act and relevant guidelines reveal the following salient points:

The positive aspects of the act include: (i) due representation to the weaker sections and women has been given through reservation so that they would not be suppressed, (ii) local bodies would not remain superseded for more than 6 months, (iii) financial issues have been taken care of by the appointment of a State Finance Commission to consider these matters, (iv) local bodies have been constitutionally entrusted with the task of preparing plans for economic development and social justice; and (v) comprehensive area plans involving both the rural and urban areas is to be prepared by the district planning committee.

Areas which need strengthening include: (i) instead of clearly specifying functions and powers of panchayats, they have been left to the discretion of the State Government (243 G) who may or may not give adequate functions and powers to the panchayats, (ii) district planning committee has not been fully dealt with. Regarding composition, 80 per

Cent will be from apex tiers of PRIs and municipalities and rest 20 per cent is left to the States. The selection of chairperson of the committee is left to the State Government. The committee's functions have not been clearly spelt out; and (iii) provision of Sarpanches being members of panchayat samiti has been mentioned in the Act but was later on withdrawn by executive orders, thereby severing the inter-linkage. This needs to be restored. There is no provision for reservation of seats for women from backward classes.

Infrastructure

During the study, the number of Panchayati Raj Institutions in the State of Haryana was 6084 and the number of panchayati raj members in Haryana was 62,964. Women occupied one-third of the seats, conforming to the reserved quota as specified in the State Act (Table 1).

TABLE 1
NUMBER OF PANCHAYATI RAJ MEMBERS IN EACH TIER IN HARYANA STATE
BY SEX

Category of Panchayati Raj Members		Men n (%)		Women n(%)	
Sarpanch	n=5958	3964	(66.5)	1994	(33.5)
Panches	n= 54158	36231	(66.9)	17928	(33.1)
Chairmen Panchayat Samiti	n=110	72	(65.5)	38	34.5)
Members Panchayati Samiti	n-2418	1611	(66.6)	807	33.4)
Presidents Zila Parishad	n=18	11	(68.7)	5	(31.3)
Members Zila Parishad	n=303	201	(66.3)	102	(33.7)

He backward classes also occupied their reserved quota of one member in each panchayat at all the three tiers. All these seats were occupied by the men as there was no reservation for women from backward classes'. The number of scheduled caste members was in proportion to their population in the State as per the Act (Table 2).

TABLE 2
NUMBER OF PANCHAYATI RAJ MEMBERS IN EACH TIER IN HARYANA STATE
BY CASTE

Category of Panchayati Raj Members		Scheduled Caste N (%)		Other N (%)	
Sarpanch	n=5958	1199	(20.1)	4759	(79.9)
Panches	n=54158	11793	(21.8)	42366	(78.2)
Chairmen Panchayat Samiti	n=110	21	(19.1)	89	(80.9)
Members Panchayat Samiti	n=2418	519	(21.5)	1899	(78.5)
Presidents Zila Parishad	n=18	3	(18.8)	13	(81.2)
Members Zila Parishad	n=303	64	(21.1)	239	(78.9)

Functional Aspects

The list of duties and functions is mentioned for 16 government departments and not according to 29 subjects (as required under the central Act) or all the three tiers without specifying the administrative set up to perform the functions and without concomitant resource allocations to take up these activities, lowers to suspend any resolution or order of the panchayats rests with the State Government for all tiers. Power to suspend the chairperson, vice-chairperson and members of the panchayats at all levels rests with the State Government. Power of dissolution of panchayats for all the three tiers rests with the State Government. Power of inspection and supervision of the panchayats at all levels rests with government officials and not with higher level of panchayats. For complaints against any government employee, panchayats can only inquire and submit the report to government officers at the higher level. They have no powers to take any action against them. There is no provision in the Act for empowering the chairpersons of these bodies to supervise and control the working of government employees of PRIs. So the staff working under the panchayat will show loyalty to the State Government rather than to the elected representatives. Regarding preparation of annual plans, no guidelines on the process or methodology of planning have been provided for all the three tiers. The District Planning Committee, to consolidate the plans prepared by gram panchayats, panchayat samitis, and zila parishad and municipal committees and prepare draft development plan for the district as a whole, had not been formed as per Constitution (74th

Amendment) Act, 1992. District Planning Board formed during 1986 was continuing with State Minister as chairman. Instead of quarterly meetings, only one or two meetings were held per year. After the release of grants, proposals were asked from the BDPOs for sanctioning. All the technical staff was under the DDPO, ADC or DC. Transfers were controlled by the government. Confidential reports were written by the bureaucrats. On the recommendations of the State Finance Commission, untied funds had been released to the panchayats for the first time. Gram panchayats were keeping the house tax collected from their areas while Panchayat Samiti and Zila Parishad were not imposing any taxes. Monitoring of programmes and schemes was also done by the ADC and members of the district planning unit. The post of the Cartographer was lying vacant for two years in the District Planning Unit. The judicial functions have not been made a part of the legislation as under the old Act. All the finances are controlled by government officials. Power to sanction withdrawals from Gram fund lies with government officials. The G.P. members are subordinate to BDPO and DDPO directly. The MP local Area Development Scheme (MPLADS) under which each Member of Parliament has the freedom to suggest to the District Collector works to be done up to Rs.1 core/year within his/her constituency, goes against the tenets of decentralised governance. Regarding centrally sponsored schemes (CSSs) (against the spirit of decentralized planning) the centre has been using panchayats as agencies to distribute grants meant for CSS, Common Minimum Programme (CMP) of the centre, the approach to 9th plan has also favored the transferring of CSSs to the States.

DISCUSSION

The study revealed that the list of duties and functions was mentioned for 16 government departments and not according to 29 subjects (as required under the central Act). For complaints against any government employee, panchayats could only inquire and submit the report to government officers at the higher level. They had no powers to take any action against them. Regarding preparation of annual plans, no guidelines on the process or methodology of planning had been provided for all the three tiers. In conformity with the above findings, the author in his critical review of the Haryana Panchayati Raj Act, 1994 also mentioned that bureaucracy and Government had a vital role to play in the functioning of PRIs as all powers of inspection and supervision rest with them². There is no provision in the Act for empowering the chairpersons of these bodies to supervise and control the working of employees of the panchayats concerned. He also wrote that the act did not specify the administrative set-up to perform the functions identified at each level and resource position to take up all these activities. The other study also

Highlighted that the Act provides too much of government control and interference in the working of the panchayats and the Act does not address itself to the relationship between the elected representatives and local level bureaucracy³.

RECOMMENDATIONS

1. The procedures for release of funds should be simplified.
2. The panchayati raj members at each level need to be provided with adequate resources and clear role along with the responsibilities.
3. Full information needs to be provided about various schemes/ programmes of the government, the financial allocations and procedures for drawl and disbursements to the elected members as well as community members.

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इस लेख में हरियाणा राज्य के पंचायती राज संस्थानों के बारे में उनके नीतिगत पक्षों, ढांचागत पक्षों और कार्यात्मक पहलुओं के संबंध में वर्तमान स्थिति की समीक्षा करने का प्रयास किया गया है। अध्ययन से प्राप्त निष्कर्षों से पता चलता है कि हरियाणा पंचायती राज अधिनियम 1994 में संविधान के अधिनियम 1992 (73वें संशोधन) के सभी प्रावधानों को शामिल कर लिया गया था। पंचायती राज संस्थानों का ढांचा निर्धारित मानकों के अनुसार स्थापित किया गया था, किन्तु राज्य अधिनियम के अर्न्तगत जारी सूची में दिए गये कार्यों के निष्पादन हेतु आवश्यक पर्याप्त अधिकारों एवं स्रोतों का हस्तांतरण राज्य सरकार द्वारा इन संस्थानों को नहीं किया गया था। जिला योजना समिति में जिला परिषद प्रमुख की भूमिका स्पष्ट नहीं की गई थी। पंचायती राज संस्थानों के कार्यकलापों में सुधार लाने के लिए लेखकों द्वारा कुछ सुझाव दिए गए हैं।

REFERENCES

1. GOVT. OF HARYANA (1997), Status Paper on Panchayati Raj in Haryana; Development and Panchayats Department.

2. SINGH SURAT (1995), Haryana New Panchayati Raj Legislation - A Critical Review, *Journal of Rural Development*, Vol. 14(1); 45-52.
3. PRASHANT PREM, MISHRA SURESH, SINGH CHARANJEEV (1996), Popular Participation in Rural Development (Emerging Dynamics of Panchayati Raj Institutions in Haryana) HIPA, Gurgaon; 36-39,108-191.
4. GOVT. OF HARYANA (1994) Haryana Panchayati Raj Act 1994, Haryana Govt. Gazette (Extra) April 22, 1994 (VYSK 2, 1916 SAKA) ; 119-220
5. GOVT. OF HARYANA (1995) Gazette (Extra) Feb 16, 1995 Extraordinary Published by Authority Govt, of Haryana Draft Rules; 283-322.

**A COMPARATIVE STUDY OF AREA PROJECT
FUNDED BY DANIDA IN TAMIL NADU AND
MADHYA PRADESH**

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ABSTRACT

The comparative performance of area project, funded by DANIDA in Tamil Nadu and Madhya Pradesh, with reference to managerial process and infrastructural development, training and manpower development, management information and evaluation system and IEC and community participation is analyzed in this paper. The managerial process, maintenance of equipment and buildings, management information system and IEC and community participation were better in Tamil Nadu as compared to Madhya Pradesh, the study revealed. Further, the project in Madhya Pradesh had no consistency in the leadership as compared to Tamil Nadu.

The Danish International Development Agency (DANIDA), a Department of the Ministry of Foreign Affairs, Government of Denmark, on a request from Government of India in 1978 agreed to support a comprehensive Rural Health and Family Welfare Project in two districts, namely, Salem and South Arcot in Tamil Nadu and eight districts, namely, Bhind, Guna, Morena, Sagar, Shivpuri, Tikamgarh, Gwalior and Datia in Madhya Pradesh based on the primary health care concept as spelled out in the Alma Ata Declaration and the National Family Welfare Policy of the Government of India.

The DANIDA Health Care Project in Tamil Nadu commenced in August 1981 and its first phase ended on October 31, 1987. The first phase of the project in Tamil Nadu had a total budget of Rs.2007.00 million while in case of Madhya Pradesh, the project at the initial stage had a duration of six and half years from

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October 10, 1980 to March 31, 1987. The actual work was started in August 1981 with an outlay of Rs. 187.5 million. However, the project was extended for three more years in Tamil Nadu and two more years in Madhya Pradesh.

The prime objective of the project in both the States was to improve the health and family welfare status of the rural population in the project areas, especially in relation to the needs of the weaker sections and to specifically bring down birth and death rates.

Various project activities were carried out during 1981 -87. In the first three years of the project period, the emphasis was on planning and construction of health facilities, positioning of manpower, provision of furniture, equipment, water supply and drugs and other supply to health services. In the last two years of the project period, the stress was on strengthening of health services delivery and community participation. The activities were training, information, education and communication (IEC), innovative schemes for health care, planning for expanded programme on immunization (EPI), initiatives to strengthen PHCs and improve the drug supply system. The project was implemented by a project organization (PO) at the State and district levels. The implementation of the project was reviewed and guided on a continuing basis by committees established at block, district and State levels.

SPECIFIC OBJECTIVES OF THE PROJECT

- i. To improve the utilization of existing facilities;
- ii. To strengthen the health and family welfare infrastructure, and Increase the coverage through the health sub-centre (HSC) system;
- iii. To improve the referral system from village and HSC level to Primary health centre (PHC) and from taluk level hospital to district level hospital; and
- iv. To improve the quality and coverage of system by
 - a. Strengthening of health and family welfare management;
 - b. Improving professional skills of primary health care personnel;

- c. Reorienting health and family welfare staff towards community work;
- d. Creating demands within the community for health and family welfare services; and
- e. Creating awareness in the community of its own health needs and to mobilize the local resources in solving their health problems.

The objectives were pursued in accordance with the Government of India model plan for creating facilities and providing services under the Area Project in both the States. To meet the above objectives, activities such as (i) development of a project organization at State and district levels, (ii) renovation and construction of HSCs, lady health visitors quarters, training facilities, and staff residence; (iv) in-service training and manpower development; (v) logistics, drugs and equipment; (vi) drinking water and sanitation; (vii) alternative health and family welfare activities through innovative schemes; (viii) community contingency funds, and (ix) evaluation and monitoring of project were undertaken in the project areas.

Keeping the specific objectives of the project in view, the authors examine in this paper the comparative performance of Area Development Project funded by DANIDA in Tamil Nadu and Madhya Pradesh in regard to (i) managerial process and infrastructural development; (ii) training and manpower development; (iii) management information and, evaluation system; and (iv) IEC and community participation in both the States in order to learn a lesson from the project so as to replicate the same in other States.

METHODOLOGY

The study was conducted in 1991-92 in two States, namely, Madhya Pradesh and Tamil Nadu, funded by DANIDA, a bilateral agency. The staff involved at different levels in these two States was interviewed with reference to managerial process and infrastructure development, training and manpower development, management information system and IEC and community participation. Secondary information from records maintained at different levels was also collected. Besides, the observation technique was used to ascertain whether the physical facilities (civil works) created under the project are optimally used or not and properly maintained or not by the concerned authorities at different levels.

In addition to the information and staff available at State headquarters *i.e.*, Madras and Bhopal, one district from each State; *i.e.* Gwalior and Salem were selected for the study. From each district, one primary health centre and one sub-centre were selected. Thus, Bhandera PHC, and a sub-centre near Bhandera from Gwalior district, and Panamarathu Patti PHC and Dashanaickan Patti sub-centre were selected for the study from Salem district. The selection of the district was purposive.

FINDINGS

Managerial Process and Infrastructural Development

In order to ensure proper planning, co-ordination and implementation of various programmes in both the States, at least five committees were constituted to look after the specific functions. The committees are (i) Central Project Advisory Committee at Central level; (ii) State Project Co-ordination Committee at State level; (iii) District Project Implementation Committee at district level; (iv) Block Project Implementation Committee at block level; and (v) Village Welfare committee at village level. In case of Tamil Nadu in addition to these five committees, two more committees, namely; District Project Team and Block Project Team were constituted to look after the training of the district and block respectively¹.

The Project Director was the head of the implementation wing in Tamil Nadu and was responsible to the Chief Secretary in respect of all aspects of the project management. He is an IAS officer, senior to the Health Secretary and directly gets the sanctions from the Chief Secretary who is the Chairman of the State-Co-ordination Committee. He enjoys the powers of department and thus can sanction many things at his own level. Even for getting the sanction of the Government, the Project Director constituted a committee known as Empowered Committee, consisting of the Chief Secretary, Secretary (Finance), Secretary (Planning and Development) and Secretary (Health and Family Welfare). This facilitated the issue of Government orders very fast and the work of the project was very quick.

There was no consistency in the leadership to the project activities in Madhya Pradesh. The leadership of the project in Madhya Pradesh was changed at least four times during the project period. The background of team leader also underwent a change. The first three incumbents to the post of Project Director were from Indian Administrative Service. Then the post of the Project Director was

given to a person of medical background in 1987.

In regard to the infrastructure development, a lot of civil works in terms of construction and renovation of health institutions, staff quarters and provision of other facilities at the grass root level were reported to be achieved in both the States. For example, the project area had 700 HSC in 1981 but at least 1490 HSC on the norm of one HSC per 5000 population were required for effective coverage of the population in the project area.

Fourteen PHCs were upgraded as CHCs during the project period in Madhya Pradesh. In addition, a good institutional-cum-residential complex has been developed for District Training Centre, Bandera, and Madhya Pradesh.

The overall location of the building is satisfactory in Tamil Nadu, except for 16 per cent of the HSCs building which were outside the inhabited area. During the visit to some HSCs the authors observed that the buildings were well maintained in all respects in Tamil Nadu while the maintenance of most of the buildings constructed and renovated during the project period, was observed to be very poor in Madhya Pradesh.

The number of health sub-centre existed in 1980 during baseline survey was 607 which was increased to 1312 at the end of the project in 1987 in Madhya Pradesh. This is as per the norms of the requirement of the population to be covered.

Training and Manpower Development

Training of health personnel at different levels was an important activity of the projects in both the States. The objectives of giving training were mostly to (i) build up a well knit functioning team at the Health Sub-Centre; (ii) upgrade the professional skills of the supportive staff at the PHC, and (iii) improve, administrative and managerial skills of supervisors at different levels.

Prior to the start of DANIDA Project in both the States, the infrastructure and health manpower were very weak. Though, there was a shortage of all categories of personnel at different levels before the beginning of the project, the project authorities geared-up its training programme and trained the health workers (Male and Female), and Health Assistants (Male and Female) as per the requirements of Health Sub-Centres and primary health centres in both the States. As a part of health manpower development, the institute named Health Manpower

Development Institute was established in Salem district of Tamil Nadu and a District Training Centre was established in Bhandera in Madhya Pradesh. These institutions were responsible for training of different categories of personnel in the respective State.

In case of Tamil Nadu in order to impart in-service training to field functionaries in the local environment, the District Training Team was constituted, including one Medical Officer, one Public Health Nurse and one Social Scientist/Health Educator. This District Training Team conducted training needs assessment of every level of worker before initiating on the job training. Then a need-based curriculum was developed for both male and female health workers. Accordingly, the training of these functionaries was completed by 1985.

The Training Coverage by HMDI: Medical Officers, staff of Community Health Centre like Block Health Supervisor, Community Health Nurse and Block Extension Educators were trained at institutional level³. The field-based training coverage was done by the field training team which conducts training of multipurpose Health Supervisors and Assistants, Sector Health Nurse and Village Health Nurse and Faculty Dais. All the other staff of the PHCs also get rural orientation at HMDI like Staff Nurse, Pharmacists, Computer, Store Keeper, Female Nursing Assistant, Laboratory Assistant, Driver, Watchman and Sweeper.

Rural Health Training Centre: There are nine rural health training centre in the project area and each is attached to PHC for practical training in rural setting for basic training and in-service training of categories like Medical Officer, Health Supervisor (Male and Female), Health Workers (Male and Female) and other functionaries having community health orientation as a part of their curriculum. In both the States, training was given to IEC personnel at different levels.

As far as the training was concerned, the training conducted by the project district of Tamil Nadu is better than the project district of Madhya Pradesh.

Management Information and Evaluation System

In order to effectively utilize the project inputs and measure project performance, a monitoring and evaluation unit was formed as a part of project organization in Tamil Nadu and Madhya Pradesh.

The common objectives of the project were: (i) to ensure project activities are properly implemented; (ii) to undertake selected studies with a view to building up strategies in programme operation; (iii) to establish specific management information and evaluation system; and (iv) to identify and implement innovative approaches to service delivery and demand generation through experimental activities.

Tamil Nadu Monitoring the progress in each component of area project at district level was the responsibility of District Project Officer and Chief Medical Officer was the overall in charge of the district. But this responsibility was further delegated to the DHOs looking after the District Health Units and monitoring of all health and family welfare programmes in their areas. In all, twelve different reports were submitted by DHOs to State Directorates and these were utilized by the State Programme Officers to monitor stock positions, redeployment of stock, expenditure, performance, etc. The Chief Medical Officer reviewed the progress every month with DHOs and District Project Officer utilizing information provided about physical targets and achievements under the project.

At district level, Collector conducted the bi-monthly review of the Project with District Project Officer, District Project Team, District Project Implementation Committee and District Project Coordinating Committee. Similarly, at block level, BDO convened a fortnightly review meeting with Block Project Implementation Committee and Block Project Team.

At the State level the responsibility was with Project Director who was a senior IAS officer and he forwarded quarterly reports on performance and monthly expenditure statement, as per GOI formats and rules of GOTN to GOI and DANIDA. At the State level the project was monitored every month by the Health Secretary in a review meeting. A State Project Coordinating Committee (SPCC) with Chief Secretary as Chairman and Health Secretary as Vice-chairman and Project Director as Member-Secretary with officials from other departments in the State was constituted. The functions of this committee were related to the approval of annual project plan and budgets, secure inter-sectoral coordination and review the progress in district implementation plans. The committee also assisted the district project teams to overcome problems and difficulties in implementation process. It was to meet at least twice a year failed to exercise effective control.

The Empowered Committee examined various proposals on the basis of clearance from SPCC and accorded specific financial sanctions. The role of this Empowered Committee and SPCC was not effective for the review of progress in

area project. The SPCC had acted at times distinctly. It approved the proposals which were not sound and turned down those which were good and more effective. It failed to monitor crucial aspects of certain components and resolve inconsistencies between model plan of GOI for Area Project and that of GOTN.

At the Central level during pre-implementation phase an independent MEG was jointly set up by the GOI and DANIDA under the Chairmanship of Director (Evaluation), Department of Family Welfare, GOI, to monitor the project on some selected indicators to ensure that the different components of the project are being carried out according to the plan and guidelines under the plan. For this purpose, MEG had set up a comprehensive monitoring and evaluation system in relation to major objectives of the programme. It designed baseline survey, monitoring formats and organized mid-term and final evaluation by contracting the tasks to various agencies. The group established liaison with project regarding the information requirement at various levels by conducting meetings twice a year. The group prepared annual report on the progress of the project and the operation of intersectional approach for GOI, MP, TN and DANIDA. It also reviewed the utilization of funds provided for monitoring and evaluation activities in pursuit of project objectives.

The MEG reported half yearly to Central Project Advisory Committee (CPAC) providing details about Meg's activities, progress in development and use of monitoring tools and its recommendations to overcome some of the difficulties. The feedback was provided by MEG to the project authorities. But all these efforts continued for initial couple of years and MEGs role of systematic assessment of the project and further suggestions for improvement on continuing basis became non-functional and thus rounded up. This had deprived the project of potentially valuable source of feedback.

Madhya Pradesh: An independent Monitoring and Evaluation Group (MEG) was established at the central level during the pre-implementation phase to develop and design the evaluation system, consisting of the three components: a baseline survey, monitoring and evaluation.

The Monitoring and Evaluation Unit of the Project Organization was to work together with the existing health system at State and district levels for effective introduction of MIES in conformity with Government of India guidelines. It was observed that the Monitoring and Evaluation Unit functioned independently and as a result they could not get information about health and family welfare performance in project districts in a routine way but had to collect the same from

The SBHI and D&E Cell of the State Directorate of Public Health and Family Welfare. Similarly, reports and information on project activities were not automatically sent to the concerned departments of the State Directorate.

At the district level the functioning of health and family welfare activities were monitored and controlled by the DGHS and DFW. The district project officer had practically no authority to monitor these activities. Thus, the team observed lack of coordination at the State and district levels. In such a situation, the monitoring and evaluation unit had very restricted role in the implementation of effective management information system in the project districts.

Limitations of MIS in Both of the States

The project monitoring at various levels was in hardware component and not much attention was given to the software to improve the quality in each of the activities undertaken in the project. This was due to the lack of delegation of responsibility for monitoring the service component by the Project Director at State level and Project Officer at district level. Secondly, the project organization functioned independently of other related divisions such as D&E Cell, SBHI, State Bureau of Economics, etc. involved in collection, compilation, processing and presentation of statistics related to health and family welfare activities in the State. In the process, the role of M&E Unit was restricted and it could not assess the real change in the programme in project districts, if any, during the project period. There was hardly any exchange of information among these units dealing with statistics in health and family welfare.

Information, Education and Communication and Community Participation

The IEC strategy and community participation in both the States of DANIDA assistance was similar. The emphasis was on community awareness, particularly among the poorer sections of the community to enable them gain access to better health. The stress was on inter-personal communication, however, it was supplemented by group and mass communication approaches.

As part of IEC and community participation, the activities such as health need assessment survey, community and group meetings to socialize and sensitize the people about the project, village health planning workshops to identify and priorities the health and health related activities were undertaken in Madhya Pradesh and Tamil Nadu². And village health committees and village contact team were also formulated in both the States⁴. Besides, the IEC and community

Participation under DANIDA in Tamil Nadu went ahead one step further by establishing District Communication Action Group at district and Block Communication Cells at block levels.

The strategy adopted in community participation in DANIDA health care programme in Tamil Nadu is really remarkable as compared to Madhya Pradesh. For example, two low-cost health sub-centre buildings were constructed in one block in Salem district with the involvement of local community utilizing their land, labor and materials. Of course, the building was locally designed and Rs.15000 was also met from the public contribution. It is also interesting to note that to promote local community participation in health and family welfare related activities and to organize projects selected by the community in Tamil Nadu for its own benefit community welfare fund was utilized. Most of the programmes were relating to the provision of protected water supply, improvement of drainage facility, provision of urinals and latrines, rising of kitchen gardens and income generating activities.

A great deal of IEC materials for communication activities were developed and distributed to the health functionaries at different levels in both the States.

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Lkkjk'k

इस लेख में तमिलनाडू और मध्य प्रदेश राज्यों में डेनिडा द्वारा वित्तपोषित क्षेत्र-परियोजना की प्रबन्धन व्यवस्था, संगठनात्मक विकास, प्रशिक्षण एवं जनशक्ति विकास, प्रबन्धन, सूचना एवं मूल्यांकन प्रणाली और सूचना, शिक्षा तथा संचार और सामुदायिक सहभागिता के संदर्भ में परियोजना के निष्पादन की तुलनात्मक समीक्षा की गई थी। अध्ययन से पता चलता है कि प्रबन्धन व्यवस्था, उपकरणों एवं भवनों का रख-रखाव, प्रबन्धन सूचना प्रणाली और सूचना, शिक्षा एवं संचार तथा सामुदायिक सहभागिता की स्थिति मध्य प्रदेश की अपेक्षा तमिलनाडू की अपेक्षा मध्य प्रदेश में परियोजना-नेतृत्व में सामंजस्य नहीं पाया गया था।

REFERENCES

1. GUPTA, J.P. et. al. (1992) Evaluation of the Functioning of Area Development Projects in Health Sector in India for Improving the Health Care Delivery System, NIHFWS, and New Delhi.
2. Quarterly Progress Report for Area Project, Madhya Pradesh (1987).
3. HMDI (1990) Performance of District Training Team, Salem.
4. HANDOUTS (1989) Community Mobilization in DANIDA Health and Family Welfare Project, Madhya Pradesh.

**QUANTITATIVE ANALYSIS (KNOWLEDGE
PRACTICE AND COVERAGE) OF MATERNAL
AND CHILD HEALTH SERVICES
IN A RURAL COMMUNITY**

R.C. Goyal*

ABSTRACT

The knowledge, practice and coverage (K.P.C.) of Maternal and Child Health (MCH) services provided in six primary health centre (PHCs) of Ahmednagar district in Western Maharashtra are assessed in this study. It was observed that mothers between 21 and 30 years of age accounted for 81.39 per cent and around 60 per cent of them were educated. Nearly three-fourth of mothers was labourers. The complete knowledge regarding various MCH services except family planning methods was lower than the practice and coverage. Mothers having correct knowledge regarding various family planning methods were ranging between 43.61 per cent and 86.67 per cent but only 66.11 per cent had practiced. Target-oriented approach has resulted in better practice and coverage.

A significant achievement has been made in India in implementation of various Maternal and Child Health (MCH) activities through governmental and non-governmental organizations (NGOs) and international organizations (WHO, US AID, UNICEF, UNDP, UNFPA, etc.). The implementing agencies often face shortage of health professionals trained in appropriate project monitoring and evaluation techniques. Without proper training and experience, field staff members are unable to assess changes in health behavior, practices and coverage of the beneficiary population. No matter, how good work is being done by an implementing agency, others may not appreciate the agency as successful

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Unless the activities are documented properly. Therefore, an analytical study was carried out to help the programme managers.

MATERIALS AND METHOD

A predesigned and pretested questionnaire was administered to 360 mothers, having children lesser than 2 years of age who attended MCH sessions at 30 sub-centre in six primary health centers, under PVOH-II Scheme run by Pravara Medical Trust, Loni, Ahmednagar, during June 1996 - August 1996. 12 mothers were selected randomly from each sub-centre and included in the study. Data were collected by Medical Officers posted in mobile clinics on breast feeding, nutrition, immunization, pneumonia, diarrhea, ante-natal care (ANC), intra-natal care (INC), post-natal care (PNC), family welfare and other related issues. Data were compiled and analyzed. The information on immunization, ANC, INC, PNC and FP were confirmed by MCH cards available with mothers wherever possible.

FINDINGS

Table 1 reveals that majority (81.39%) of mothers having children lesser than two years of age were between 21 and 30 years of age and 8.5 per cent were below 20 years of age. Literacy was up to the tune of 60 per cent. 73.61 per cent of mothers were landless labourers. A little more than half (51.11%) were infants.

Knowledge

Majority (55.83%) of mothers were in favour of weaning the child after 6 months of age followed by weaning after 4 months (28.89%) and after 12 months (10.56%), Table 2.

Knowledge regarding signs and symptoms of diarrhoea was good (55%) while for dehydration ranged between 19.17 per cent and 23.89 per cent. Cough was the most common (38.89%) symptom taken into consideration for pneumonia followed by cough and fever (36.67%), fast breathing (28.61%), chest in drawing (21.67%) and unable to drink/eat (5.55%), Table 2.

TABLE 1

DISTRIBUTION OF MOTHERS HAVING CHILDREN LESSER THAN TWO YEARS OF AGE

	Number	Per cent	Cumulative	
			Number	Per cent
Age in years				
<20	29	8.05	29	8.05
21-25	153	42.50	182	50.56 -
26-30	140	38.89	322	89.44
31-35	20	5.56	342	95.00
35-40	13	3.61	355	98.61
41-45	5	1.39	360	100.00
Educational Status				
Illiterate	142	39.44	142	39.44
Upto 4th standard	118	32.78	260	72.22
5th-10th standard	86	23.89	346	96.11
Above 10th standard	14	3.89	360	100.00
Occupation				
Agricultural labourers	177	49.17	177	49.17
Labourers excluding	88	24.44	265	73.61
Others	33	9.17	298	82.78
Only housewife	62	17.22	360	100.00
Children (Age in months)				
-0-6				
-7-12	103	28.61	103	28.61
-13-18	81	22.50	184	51.11
-19-24	86	23.89	270	75.00
	90	25.00	360	100.00

TABLE 2
KNOWLEDGE REGARDING WEANING, DIARRHOEA AND PNEUMONIA

Services	Number	Per cent
Weaning		
After 4 months	104	28.89
After 6 months	201	55.83
After 12 months	38	10.56
Do not know	17	4.72
Diarrhea and dehydration (multiple answers)		
Loose motions lesser than three	158	43.89
Loose motions more than three	188	55.00
Loose motions with blood	49	13.61
Sunken eyes	70	19.44
Dry mouth and tongue	86	23.89
Dry and loose skin	69	19.17
Two or more of above	209	58.05
Do not know	8	2.22
Pneumonia (multiple answers)		
Cough	140	38.89
Fever and cough	132	36.67
Fast breathing	103	28.61
Chest in drawing	78	21.67
Unable to eat/drink	20	5.55
Two or more of above	106	29.44
Do not know	13	3.61

62.78 per cent of mothers had right knowledge about measles immunization (9-12 months) and as many as 17.50 per cent did not have any idea about age at which measles immunization is to be given. Only 36.11 per cent of mothers could tell correctly the use of T.T. immunization during pregnancy but 95 per cent had an idea that it protects mother/child/both. 86.67 per cent of mothers were knowing about tubectomy followed by vasectomy (79.16%), copper T. (51.94%), oral contraceptive pills (47.50%) and condom (43.61%), Table 3.

TABLE 3
KNOWLEDGE REGARDING MEASLES, T.T. MMUNISATION AND FAMILY PLANNING METHODS

Services	Numb	Per cent	Cumulative	
			Numb	Per cent
Measles				
Lesser than 9 months	43	11.94	43	11.94
9-12 months	226	62.78	269	74.72
More than 12 months	28	7.78	297	82.50
Do not know	63	17.50	360	100.00
T.T. immunization				
To protect against Tetanus				
Only mother	78	21.67	78	21.67
Only child	134	37.22	212	58.89
Both	130	36.11	342	95.00
Do not know	18	5.00	360	100.00
Family Planning Methods (multiple answers)				
Tubectomy	312	86.67		
Vasectomy	285	79.16		
Contraceptive	171	47.50		
Oral pills				
Copper T	187	51.94		
Condom	157	43.61		
Do not know	18	5.00		

Practice and Coverage

88.83 per cent of mothers received two doses/booster dose of tetanus toxin during their pregnancy. 68.61 per cent attended at least three ANC and undergone ANC checkup, 54.72 per cent received 100 iron and folic acid tablets and only 18.06 per cent had their diet more than usual during pregnancy, Table 4.

TABLE 4
ANTENATAL CARE PRACTICES

	Number	Per cent	Cumulative	
			Number	Per cent
Tetanus toxoid immunization				
Tetanus toxoid 1	32	8.89	32	8.89
Tetanus toxoid 2 or 3	318	88.33	350	97.21
0	10	2.78	360	100.00
Ante-natal visits				
		11.11	50	13.89
1	40	16.67	148	41.11
2	60	68.61	345	95.83
3	247	3.61	360	100.00
0	13			
Iron and Folic Acid Tablets				
Received 50 tabs.	50	13.89	50	13.89
Received 75 tabs.	98	27.22	148	41.11
Received 100 tabs, or more	197	54.72	395	95.83
Received 0 tabs.	15	4.17	360	100.00

Table 5 indicates that 74.17 per cent of mothers had deliveries by trained personnel while 24.44 per cent were delivered by untrained elderly personnel in the house. More than 3/4 (75.94%) of mothers either visited sub-centre or health worker visited during her post-partum period at least once. Only 3.33 per cent of couples practiced permanent method of family planning and majority (62.78%) were practicing one of the spacing methods, commonest being copper T insertion (25.56%). Nearly (33.89%) were not using any of the family planning methods.

Table 6 highlights the feeding practices followed by the mothers for their children. Only 28.33 per cent of mothers initiated breast feeding within one hour of delivery. Majority (56.11%) of mothers claimed that their children received exclusive breast feeding up to 4 months of age and 8.33 per cent have given

Persistent breast feeding, *i.e.*, beyond 20 months. Only 11.39 per cent of mothers started weaning at right age, *i.e.*, after 4 months but majority (49.17%) after 6 months of age. More than usual feeding during diarrheal episodes was given by 15.28 per cent of mothers while 24.45 per cent fed lesser than usual and 5.83 per cent stopped completely.

TABLE 5
INTRA-NATAL, POST-NATAL AND FAMILY PLANNING SERVICES

Services	Number	Per cent	Cumulative	
			Number	Per cent
Delivery by trained personnel				
Elderly women in house	88	24.44	88	24.44
Trained <i>dai</i>	130	36.11	218	60.55
ANM	77	21.39	295	81.94
Doctor	60	16.67	355	98.61
Do not remember	5	1.39	360	100.00
PNC visits				
Visit by health worker	135	37.50	135	37.50
Visited health centre	70	19.44	205	56.94
Both	68	18.89	273	75.83
Not visited	87	24.17	360	100.00
Family planning services				
Tubectomy	9	2.50	9	2.50
Vasectomy	3	0.83	12	0.83
Contraceptive	61	16.94	73	20.27
Oral pills				
Copper T	92	25.56	165	45.83
Condom	73	20.28	238	66.11
Nothing	122	33.89	360	100.00

TABLE 6
FEEDING PRACTICES

Services	Number	Percent	Cumulative	
			Number	Percent
Breast-feeding after birth				
Within 1 hour	102	28.33	102	28.33
1-8 hours	133	39.94	235	65.28
After 8 hours	125	34.72	360	100.00
Exclusive breast-feeding				
Up to 4 months	202	56.11	202	56.11
Up to 12 months	76	21.11	278	77.22
Up to 20 months	52	14.45	330	91.66
20 months and above	30	8.33	360	100.00
Introduction of semi-solid/solid foods				
After 4 months	41	11.39	41	11.39
After 6 months	177	49.17	218	60.56
After 9 months	62	17.22	280	77.78
After 12 months	80	22.22	360	100.00
Feeding during Diarrhoea				
Same as usual	160	44.44	160	44.44
More than usual	55	15.28	215	59.72
Lesser than usual	88	24.45	303	84.17
Stopped completely	21	5.83	324	90.00
Only breast-feeding	36	10.00	360	100.00

The immunization coverage among children (0-24 months) for BCG (89.16%), DPT3 (84.45%), OPV3 (85.06%) and Measles (72.28%). The dropout rate was only 8.28 per cent, Table 7.

Table 8 reveals the treatment practices for diarrhea and ARI. Nearly 40 per cent of mothers used .ORS/HAF during diarrhea while for ARI 85 per cent of mothers sought the advice/treatment from Health Worker/Health Centre/Private Practitioner, etc.

TABLE 7
IMMUNISATION STATUS OF CHILDREN

Immunization	Number	Per cent	Remarks
BCG (N360)	321	89.16	
DPT 1 (N-328)	302	92.07	Children above 1 and 1/2 months
II	294	89.63	
III	277	84.45	
B (N=90)	72	80.00	Children above 18 months
OPV1 (N-328)	304	92.68	Children above 1 and 1/2 months
II III	295	89.64	
	279	85.06	
B (N=90)	72	80.00	Children above 18 months
Measles (N-101)	74	72.28	Children between 9-12 months
Dropout rate	25	8.28	DPT 1 -3/DPT 1

N= Number of children eligible for the immunization.

TABLE 8
TREATMENT PRACTICES FOR DIARRHOEA AND ARI DISEASES

Services	Number	Per cent	Cumulative	
			Number	Per cent
Diarrhoea				
Exclusively - ORS	78	21.67	78	15.00
HAF	67	18.61	145	40.28
Glucose	17	4.72	162	45.00
Antidiarrhoeal drug	58	16.11	220	61.11
Combination of above	138	38.33	358	99.44
Do not know	2	0.56	360	100.00
Pneumonia				
Home treatment	54	15.00	54	15.00
Health worker	20	5.56	74	20.56
Health centre	129	35.83	203	56.39
Private practitioner	137	38.05	340	94.44
Others	20	5.56	360	100.00

DISCUSSION

The present study showed that only 8.05 per cent of mothers were below the age of 20 years which is in conformity with earlier studies^{1, 2}. Illiteracy rate was low (39.44%) in the present study as compared to other studies^{3, 4, 5}.

Nearly 29 per cent of mothers had knowledge about weaning to be started after 4 months of age and 56 per cent said to be started after 6 months while Nita Yagnik reported these figures as 49.8 per cent and 30 per cent respectively⁶ and L. A. Bhatt et al. reported that 57.21 per cent of mothers had poor weaning knowledge and only 2.43 per cent had right knowledge about weaning⁷.

Knowledge regarding signs and symptoms of dehydration was ranging between 19 and 23 per cent. Only 28.61 per cent of mothers told fast breathing as one of the symptoms of pneumonia while 21.61 per cent told chest in drawing which is far below the expected level, may be due to emphasis given on treatment than signs and symptoms of dehydrations and pneumonia during health education sessions.

Knowledge about right age for (measles) immunization was 62.78 per cent, use of tetanus toxoid in preventing both mother and child from tetanus 36.11 per cent and family planning methods ranged between 43.61 per cent for condom and 86.67 per cent for tubectomy.

The present study showed the tetanus toxoid vaccination coverage during pregnancy was 88.83 per cent as compared to studies conducted by J. Verma *et al.* (67%)⁸, R.K. Gupta (77%)⁹, O.P. Agrawal *et al.* (66%)¹, Nita D. Yagnik (70.8%)⁶ and NHFS, Maharashtra (65.47%)⁵.

68.61 per cent of pregnant mothers had undergone at least three antenatal checkups which were higher than studies conducted by O.P. Agrawal *et al.* (42%) and Nita D. Yagnik (71.97%)⁶. For prevention of anemia, nearly 55 per cent of mothers received 100 iron and folic acid tablets as per recommendations under CSSM programme. The study showed higher coverage than the studies of Nita D. Yagnik (35.6%)⁶ and O.P. Agrawal *et al.* (10.9%)⁶. Only 18 per cent of mothers took extra diet during their pregnancy which has to be improved by proper nutrition education and persistent motivation. A total of 75 per cent deliveries were conducted by trained personnel which shows higher coverage than figures quoted by O.P. Agrawal *et al.* (12.8%)⁶, S. Jaswal *et al.* (20.8%)³, N. Bhardwaj *et al.* (9.4%)⁴, R.K. Gupta *et al.* (33.8%), and NHFS, Maharashtra (62.9%)¹⁰. But it was

Lower than what was reported by Nita D. Yagnik (76.3% in ICDS area)⁶. Almost 76 per cent had post-natal check-up at least once after delivery as compared to the study conducted by Nita D. Yagnik (53.2% in a ICDS area)⁶.

The family planning practice coverage was 66.11 per cent in this study which is well beyond Health for All targets of 60 per cent while other studies reported 54 per cent and 57.5 per cent respectively^{10, 5}.

The present study showed only 28.33 per cent of mothers started breast feeding within one hour of delivery as compared to figures reported by Surekha Kishore *et al.* (7.5%)², Anmol K.Gupta *et al.* (10.02% - Urban, 11.28% - Rural) and S.P. Zodpey *et al.* (None)¹². The practices of exclusive breast feeding found to be 56.11 per cent in the present study which was more than S.P. Zodpey *et al.*¹². Nearly 49.17 per cent of the mothers started weaning their children after the age of 6 months while 11.39 per cent started after four months of age. Other studies reported 61 per cent after 6 months, 2 per cent before 4 months (Surekha Kishore *et al.*)¹⁴, 30 per cent between 6-9 months and 49.8 per cent between 4-6 months (Nita D. Yagnik)⁶. Only 15.28 per cent of mothers gave more feeding during diarrhoea and usual feeding by 44.44 per cent which needs to be emphasised.

The immunization coverage in the study area was better (BCG-89.16%, DPT3-84.45%, OPV-86.06% and Measles-72.68%) with dropout rate was only 8.28 per cent, lesser than the 10 per cent of accepted level by WHO. The NHFS, Maharashtra (1993) figures showed BCG-84.7 per cent, DPT3-81 per cent, OP3-79.8 per cent and Measles-59.3 per cent. We have achieved the target set for 2000 AD except for the measles. Under the CSSM programme, mild and moderate cases of ARI (Pneumonia) were to be treated at household level but present study showed that 85 per cent of mothers sought the help of health personnel, this means that the need for extensive health education drive among the mothers is utmost important.

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प्रस्तुत अध्ययन में पश्चिमी महाराष्ट्र के अहमद नगर जिले के छह प्राथमिक स्वास्थ्य केन्द्रों में प्रदत्त मातृ-शिशु स्वास्थ्य सेवाओं से संबंधित ज्ञान, व्यवहार और उनके कवरेज का ऑकलन किया गया है। अध्ययन से प्राप्त निष्कर्षों से पता चलता है कि 21-30 वर्ष की आयु वर्ग की महिलाओं की संख्या 81.39 % थी जिनमें लगभग 60% माताएं शिक्षित थी। लगभग तीन-चौथाई माताएं मजदूर थी। परिवार नियोजन विधियों को छोड़कर विभिन्न

मातृ-शिशु स्वास्थ्य सेवाओं के बारे में उन्हें व्यवहार और कवरेज की तुलना में पूर्ण ज्ञान नहीं था। परिवार नियोजन की विभिन्न विधियों के बारे में सही जानकारी रखने वाली माताओं का प्रतिशत 43.61 और 86.67 के बीच पाया गया था, जबकि केवल 66.11% माताओं द्वारा इनको व्यवहार में लाया गया था। लक्ष्योन्मुखी एप्रोच से व्यवहार और कवरेज पर अच्छा प्रभाव पड़ा था।

REFERENCES

1. O.P. AGRAWAL, RAKESH KUMAR, ANITA GUPTA AND H.S. TIWARI (1997) Utilization of Ante-natal Care Services in Peri-urban Area of East Delhi, *Indian Journal of Community Medicine*: 22(1):29-32.
2. SUREKHA KISHORE, B.S. GARG, J.S. MATHUR AND S. NAYAL (1995) Determinants of Breast Feeding Practices in Rural Community of Wardha, *Ind. Jr. of Maternal and Child Health*: 6(1) :11-13.
3. S. JASWAL AND J.GULATI (1992) Situational Analysis of ANC Practices in Rural Punjab: *Ind. Jr. of Maternal and Child Health*: 3(1):16.
4. N. BHARDWAJ. M. YUNUS, S. BADRUL HASAN, and ZAHEER (1990) Role of Traditional Birth Attendants in Maternal Care Services - A Rural Study: *Ind. Jr. of Maternal and Child Health*: 1 (1):29-30.
5. HEALTH STATISTICS, MAHARASHTRA STATE: DIRECTORATE OF HEALTH SERVICES (1996) Maharashtra, Health Intelligence and Vital Statistics Bureau - Pune.
6. NITA D. YAGNIK (1993) Health and Development of Mothers through System of ICDS: *Ind. Jr. of Maternal and Child Health*: 4(1)11-1.
7. I.A. BHAT, G.M. DHAR AND S.MEHNAZ (1992) Study on the Impact of Maternal Knowledge and Practice on Nutritional Status of Infants: *Ind. Jr. of Maternal and Child Health*: 3(1):12-15.
8. J. VERMA, R.K SACHAR, VED PRAKASH, G.D. JAIN AND R. SEHGAL (1990) Missed Opportunities for Immunization: *Ind Jr. of Maternal and Child Health*: 1(1):27-28.

9. R.K. GUPT AND ANIL KUMAR (1996) Maternal Care among Slum Dweller in Delhi: *Ind. Jr. of Maternal and Child Health*: 7(3): 78-81.
10. MHFS, GOVT. OF MAHARASHTRA (1993).
11. ANMOL K. GUPTA, RAJESH SOOD, AJAY VATSAYAN, DINESHWAR K. DHADWAL, SURENDRA K. AHLUWALIA AND RAJESH K. SHARMA (1997) Breast Feeding Practices in Rural and Urban Communities in Hilly District of North India., *Indian Journal of Community Medicine*, 22(1):33-37.
12. S.P. ZODPEY, S.G. DESHPANDE, N.D. VASUDEVA (1996) Breast Feeding Practices in a Tribal Community of Melghat Region in Maharashtra State: *Ind. Jr. Pub. Health*, 40(4): 120-125.
13. P. KAUR AND N. KAUR (1996) Breast Feeding Practices in Varanasi District (U.P): *Ind. Jr. Pub. Health*: 40(2): 62-63.
14. SUREKHA KISHORE, B.S. GARG AND S. NAYAL (1993) Weaning and Supplementation Practices in Rural Community: *Ind. Jr. of Maternal and Child Health*: 3(3):73-75.
15. D. NANDAN AND S.K. MISHRA (1996) Delivery Practices in West Uttar Pradesh, *Ind. Jr. of Pub. Health*: 40(1):20-21.

**REPRODUCTIVE HEALTH OF WOMEN IN A
DECLINING FERTILITY: A STUDY OF
MARRIED WOMEN IN KERALA**

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ABSTRACT

The results reveal that 81 per cent of deliveries were conducted in hospitals. Educated women take more care of their reproductive health than the illiterates. The study has shown that there is a high potential for improving the health status of women if reproductive health is achieved through reducing the birth rates and increasing the age at marriage. The improvement in the health status of women can save expenditure on health as well as the reproductive health of women. Then the women can spend more time on economic activities and family development.

The general criteria adopted for reproductive health of women is that it is a state of complete physical, mental and social well-being and not merely an absence of disease or infirmity in all matters relating to the reproductive system and its functions. In the country, today, the importance of reproductive health has been widely recognized as an influential factor in determining fertility and contraceptive practices among couples. Studies have brought out that poor reproductive health is a matter of behavioral concern and there is no autonomy for women. Therefore, a comprehensive reproductive health policy may include services that would help women to attend to unwanted pregnancy and contraceptive practices.

The remarkable achievement of low fertility in recent times in the State has also helped in the improvement of health conditions of the population, particularly the female population. The major reason for this is the fast developing health

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Sector in terms of wide dispersal of hospital facilities, both in rural and urban areas. The per capita expenditure on health in the State (excluding family planning) has increased from Rs.19.13 in 1980-81 to Rs. 46.2 in 1985-86, and from Rs. 98.53 in 1993-94 to Rs.130.06 in 1994-95. In 1994, there were 147 government hospitals with 29135 beds, 52 community health centre's with 2797 beds, 940 PHCs with 5371 beds, 5094 sub-centers and 54 dispensaries in the State.

Therefore, it can be said that a sprawling infrastructure for health in the State, most remarkably in the private sector, the extension of educational facilities, equitable distribution of health and family planning services and their accessibility are important factors for widespread acceptance of contraception and reproductive health care. The impact of these infrastructural developments on the demographic change and health care are discussed below both at micro and macro levels with data for the State and households.

OBJECTIVE

The main objective of the study was to explore the reproductive health behavior of women in the context of declining fertility in the State.

MATERIALS AND METHOD

Data for micro level analysis were gathered from a repeat survey conducted in four villages in Palakkad district, Kerala, during September-October 1996 which has a moderately low fertility and mortality rates as compared to other districts in the State. The infrastructural development for health is also at an average level in the district. The sample households were selected on the basis of purposive sampling so as to include all socio-economic classes and wide dispersal of population. The selected households have been studied, using a reproductive health schedule. The method of investigation was basically a case study approach. As there is no scope for any rigorous statistical analysis due to too small sample households, the facts gathered have been presented in quantitative terms, wherever necessary.

FINDINGS

Macro Level Changes in Demographic and Reproductive Health Indicators

The birth and death rates in kerala have registered a tremendous decline

during the last three decades. The birth rate in 1994 was 17.3, and the death rate was 6 per 1000 population. The average birth interval was 36 months in 1993. The rate of medical attendance at birth was 92.3 per cent. The reproductive health index in Kerala was 85, while in India it was 42 (Population Foundation of India, 1996). The couple protection rate was 47.33 per cent in 1993.

The infant mortality rate has reduced from 66 in 1961 to 17 in 1991 in Kerala while in India as a whole it has changed only from 114 to 91 per 1000 live births during the period (Table 1).

The mean age at marriage among females has increased from 19.8 to 21.9 years during 1961-81 and the rate of change in age at marriage with respect to India has been only from 14.5 to 18.7 years during the period. Similarly, the expectation of life at birth has risen from 50 to 72.8 years for females in Kerala while in India the rate of change has been from 40.6 to 61.7 years during the period. These rates invariably show the demographic conditions of population which is comparably advanced like any developed country. The reasons for these changes are due to the accompanying factors of changes in socio-economic and health care conditions of the people.

Changes in the Socio-Economic Indicators

The most influential factor in the reduction of fertility in the State is the rise in literacy; female literacy had risen from 38.9 per cent to 86.9 per cent in Kerala during 1961-91 while it has changed only from 13 to 32.4 per cent in India during the period (Table 1). The educational enrollment rates also have increased. The middle school enrollment ratio in 1993 was 100.6 per cent. An overall increase in the educational level of women has been observed in the State.

This has changed their status in the society and has helped them to have greater autonomy for decision-making with respect to their reproductive behavior and fertility. The educational advancements among women have increased their employment opportunities. The female labor participation rate has increased from 19.7 per cent in 1961 to 28.0 per cent in 1991 in Kerala whereas the respective rate in India has changed only from 11.9 per cent to 22.7 per cent during the period. The increased participation of women in the labor force has secured them an economic independence which indirectly has helped them achieve good health and well-being.

TABLE 1
DEVELOPMENT INDICATORS OF WOMEN IN KERALA AND INDIA 1961-1991

S. No.	Characteristics	KERALA				INDIA			
		1961	1971	1981	1991	1961	1971	1981	1991
1.	Female population	8.5	10.8	12.9	14.7	14.7	21.3	26.4	33.1
2.	Sex ratio (females per 1000 males)	1022	1016	1032	1040	941	932	934	933
3.	Literacy rate	64.9	77.1	84.6	94.4	34.4	39.5	24.8	52.6
	Male	38.9	54.3	65.7	86.9	13.0	18.4		32.4
	Female								
4.	Infant mortality rate (per 1000 live births)	66	61	37	17	114	138	119	91
5.	Married couples (per 1000 women)	-	151	140	-	.	170	165	-
6.	Child women ratio* (per 1000 women)	700	550	409	-	659	655	546	-
7.	Mean age at marriage (Years)	26.2	26.7	27.7	-	20.0	22.4	23.4	-
	Male	19.8	21.1	21.9		14.5	17.2	187	
	Female								
8.	Expectation of life at birth (years)	46.2	60.5	60.6	66.9	41.9	46.4	54.1	60.6
	Male	50.0	61.1	62.1	72.8	40.6	44.7	54 7	61.7
	Female								
9.	Proportion of female workers to total female	19.7	13.5	16.6	28.0	11.9	19.8	19.7	22.7

Source: Women in Kerala, Department of Economics and Statistics, 1991, Government of India. **Notes:** *Children in the age group of 0-4 years.

Reproductive Morbidity and Health Care

Reproductive morbidity relates to pregnancy, child birth, abortion, HIV and reproductive tract infections (RTI). The NFHS data, 1992-93, provide some information on the conditions of reproductive morbidity and health care. The per cent of mothers received ante-natal care from doctors or other health personnel is 97.5 per cent in Kerala while in India it is 49 per cent. The per cent of mothers who had received tetanus toxoid injection is 89.8 per cent in Kerala and 53.8 per cent in India. The per cent of mothers who were assisted for delivery by a doctor is 80.4 per cent in Kerala and 21.6 per cent in India. Those births which were attended by traditional birth attendants are 8.3 per cent in Kerala, and 35.2 per cent in India (Table 2). The nurses or midwives attended 12.6 per cent of births in India, while they attended only 9.3 per cent of births in Kerala. This shows that the delivery care of women in Kerala is attended more by a doctor than by the paramedical personnel. The maternal mortality, therefore, is very less (one in 3000 live births) in the State and also the child survival rate is very high.

TABLE 2

DEMOGRAPHIC AND HEALTH INDICATORS (KERALA-INDIA) (1992-93)

S.No	Mortality and Health	Kerala	India
1.	Infant mortality rate	23.8	78.5
2.	Under-five mortality rate	32.0	109.3
3.	Per cent of births whose mothers received ante-natal care from a doctor or other health professional	97.5	49.1
4.	Received 2 or more tetanus toxoid injections	89.8	53.8
5.	Per cent of births whose mothers were assisted at delivery by:	80.4	21.6
	Doctors	9.3	12.6
	Nurse/Midwife	8.3	6
	Traditional birth attendant		35.2
6.	Per cent of children 0-1 month who are breast fed	100.0	97.8
7.	Per cent of children 12-13 months who are breast fed	87.1	89.2
8.	Are chronically undernourished (stunted)	27.4	
9.	Are acutely undernourished (wasted)	11.6	17.5

Source. NFHS Report on Kerala and India 1992-1993.

Almost all the women (100%) breast feed the children aged 0-1 year in Kerala while only 97.8 per cent of children are breast feed in India as a whole (Table 2). The per cent of children chronically undernourished (or stunted growth) are 27.4 in Kerala and 52 in India. The per cent of children acutely undernourished (wasted) are 11.6 in Kerala and 17.5 in India as a whole.

The above rates invariably illustrate the higher levels of pregnancy and delivery care of women in Kerala as compared to India in general.

Micro Level Changes in Demographic and Health Care Indicators

At the micro level analysis a detailed study of 53 women in the reproductive ages is attempted.

Socio-Economic Characteristics of Mothers

Nearly half of the women in the sample were below 30 years of age. The highest proportions of the women were in the age group of 35+ which indicates that the sample should have a group of women who had almost completed their child bearing, being a declining fertility population.

Of the women, 49 per cent were currently married and 7.5 per cent were widowed, divorced or separated. 70 per cent of women belonged to Hindu religion. 23 per cent were Muslims and 7 per cent were Christians.

The literacy level of the women is high 87 per cent. The above rates are largely representative of the State level population in rural areas. The income distributions of the families vary from Rs.5000 to 24,000 annually. About 45.5 per cent of the families have an average annual income varying between Rs.9000 and Rs. 10,000. The average annual income of the family works out to be Rs.6000 which shows that majority of the families are not well off. The household members in most of the cases are engaged in agricultural occupations.

TABLE 3
HOUSING AND LIVING CONDITIONS

Characteristics		No. of Women	Per cent
1.	Electricity Yes No Total	18 35 53	33.96 66.04 100.0
2.	Type of House Kutcha Semi-pucca Pucca Tiles Total	11 03 14 25 53	20.75 05.66 26.42 47.17 100.0
3.	Bathing habits Regular Alternative days Once in 3-4 days Occasionally Total	47 06 - - 53	88.68 11.32 - - 100.00
4.	Washing Clothes Every day Once in two days Once in a week Fortnightly Seldom Total	43 10 - - - 53	81.13 18.87 - - - 100.0
5.	Source of Drinking Water Well water (protected) Well water (unprotected) Handpump Piped water Others Total	23 - 03 25 02 53	43.40 - 05.66 47.17 03.77 100.0
6.	Sanitation Facility (Place of passing stools) Open field Around the house, toilet Total	48 05 53	90.57 09.43 100.00

Housing and Living Conditions

73.59 per cent of women live in pucca houses with tiled roofs, 6 per cent live in semi-pucca houses and 21 per cent live in kutcha houses. Only 34 per cent of the houses have electric power supply.

As far as the hygienic conditions were concerned, 89 per cent of women take regular bath and the remaining take bath on alternative days. Also 81 per cent of women wash clothes every day and the remaining do it once in two days.

Toilet facilities are not available in the house premises in most of the cases. 91 per cent of women reported no such facilities whereas the remaining households have had such convenience.

Drinking water is no problem for most of them. 43.4 per cent use well-water and 47 per cent of women use piped water for drinking (Table 3).

The Fertility and Contraceptive Practice

The average number of children among sample women in the age group 15-24, is 1.5 which shows that the number of children among the younger couples is less. Whereas, the average number of children in all age groups of women in the sample is very low. It can be said that the average number of children per family will be 2 when fertility is completed. 74 per cent of women have used contraception to limit the family size. 26.42 per cent have used temporary methods, 41.5 per cent were sterilized and 5.7 per cent of them used the method of abstinence. 42 per cent of women who had already completed their fertility were mainly from the age groups of 35+ and 25-29 (Table 4).

Reproductive Morbidity and Treatment Availed

The hospital attendance data show that 54.72 per cent of women did not go to government hospital for treatment of any disease. Whereas 15.09 per cent of women reported to have received treatment as in-patients. 13.2 per cent of women were treated as out-patients. About 17 per cent of women have taken private hospital services (Table 4).

TABLE 4
TOTAL NUMBER OF LIVE BIRTHS OF WOMEN BY AGE AND CONTRACEPTIVE USE

No. of Births	15-19	20-24	25-29	30-34	35+
None	05 (71.4)	0	01 (7.7)	0	0
1	0	07 (70.0)	02 (15.3)	02 (33.3)	0
2	02 (28.6)	02 (20.0)	06 (46.2)	01 (16.7)	05 (31.3)
3	0	01 (10.0)	03 (23.1)	02 (33.3)	05 (31.3)
4	0	0	01 (7.7)	01 (16.7)	05 (31.3)
5+	0	0	0	0	02 (06.1)
Total	07 (100.0)	10 (1000)	13 (100.0)	06 (100.0)	17 (100.0)
Use of Contraception				No. of women	Per cent
Use of temporary family planning methods				14	26.42
Sterilized				22	41.51
Abstinence				03	05.66
Gynaecological problems				-	-
Widowed/separated				02	03.77
Others				12	22.64
Total				53	100.0
Kind of Treatment				No. of women	Per cent
OPD				07	13.21
In-patient				08	15.09
OPD/In-patient				-	-
Others				09	16.98
NA				29	54.72
Total				53	100.0
Main Source of Treatment				No. of women	Per cent
Govt, hospital				23	43.40
PHC				01	01.90
Private				09	17.00
Others				20	37.70
Total				53	100.0

Among the sample women, 81 per cent reported as they had normal delivery while other women had undergone caesarian operations for delivery. 80 per cent of women had normal pregnancy. Only 2 per cent had reported that they have under-weight babies. No still births or premature births have been reported. There were no health complications during delivery among 85 per cent of cases. Only 4.4 per cent of women reported bleeding complications. 11 per cent of women reported to have suffered delayed expulsion of placenta.

In general, the reproductive health care of women is well undertaken by resorting to medical facilities in majority of cases. Most of the women did not report any health complications which shows that the ante-natal care has been well attended to. The low level reproductive morbidity condition is existing among the sample women. The expenditure during pregnancy and delivery by these women was lesser than Rs. 500 according to 41.51 per cent. 19 per cent of women spent money in the range of Rs 501 to 1000. 11 per cent of the women spent an amount of Rs. 1000 to 2000 for delivery and pre-natal care. 21 per cent of women did not report any expenses on this. However, majority of the women have spent money on delivery and pre-natal care for medicines, transport and medical care in the case of private hospital services availed (Table 5).

TABLE 5
PERCENTAGE DISTRIBUTION OF CURRENTLY MARRIED
WOMEN BY REPRODUCTIVE MORBIDITY AND TREATMENT
CHARACTERISTICS

Kind of Treatment	Number of Women	Per cent
Pregnancy/Delivery and Expenditure (Amount Rupees)		
<500	22	41.51
501-1000	10	18.87
1001-1500	03	05.66
1501-2000	03	05.66
2001-2500	01	01.89
2501-3000	01	01.89
3501	02	03.77
Others	11	20.75
Total	53	100.00
Ante-natal Care Received from		
In the community by the ANM	05	09.0
Sub-centre/PHC or other government facility	03	05.7
Private health centre	13	24.5
Community/government centre	19	35.9
Government/private	-	
Community/private/government	04	07.6
Did not receive any ANC	09	17.0
Total	53	100.00

The pregnant women receiving ante-natal care in the home are encouraged by the antenatal care providers to have medical assistance during delivery. Most of the women had received ante-natal care, either from public or private hospitals. 36 per cent reported to have received ante-natal care from government hospitals, 7.6 per cent from government or private hospitals, 15 per cent from ANMS or other Para-medical staff in PHCs and 24.5 per cent received from private hospitals. This shows the extent of involvement of private hospitals in ante-natal, as well as in post-natal care of women in recent times. Private health care is confined only to those who can afford to pay the cost. However, the role of private clinics and hospitals in the State is increasing for providing reproductive health care (Table 5).

CONCLUSION

In this study, the various dimensions of reproductive health care of women both at the macro and micro levels have been explored. The general development in the socio-economic sectors has helped people to assume more responsibility in the case of reproductive health and control of birth rates which ultimately resulted in bringing down the infant and maternal mortality in the State to a large extent. Alternatively, the reduction in the mortality levels at all age groups has indirectly helped in the fertility decline. However, care of reproductive health does not originate on its own, unless, it is accompanied by a change in the socio-economic conditions of the women, literacy and educational levels, empowerment of women, living standards and provision of health facilities.

It was found that more than one-fourth of children reported were of very low weight which indicates the nutritional deficiency of the rural women. The antenatal care of mothers in terms of periodic check-ups at clinics by the nurses or doctors and prophylaxis against anemia and other nutritional deficiency disease are important at the PHC level which have helped the women to take care of their reproductive health. However, the facilities for delivery and after care services are limited at the PHC level. Therefore, women go to the talk hospital for better facilities. This calls for expansion of service facilities offered at PHCs, by providing more infrastructure, medical manpower, medicines, and transport and quality services. This is important because majority of the rural folks cannot afford to go in for the private clinics. Therefore, it is important to educate the mothers attending the private clinics on the problems of reproductive health care through extension programmes.

The present study highlights the demand for expanding the MCH facilities

delivered by PHC so as to provide specialized services relating to reproductive health care of women. The programme of post-natal care of mothers and child needs to be extended to the field level. For this, the scope of PHCs and sub-centre which provide the minimum health programme needs to be enhanced by incorporating specialized services for reproductive health care of women. In urban areas these services are available while the rural folks who comprise 70 per cent of population in the State are not able to have it. Efforts should be made to strengthen the MCH services in rural areas.

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प्रस्तुत अध्ययन से प्राप्त निष्कर्षों से पता चलता है कि 81% प्रसव अस्पताल में कराये गए थे। निरक्षर महिलाओं की अपेक्षा शिक्षित महिलाएं अपने प्रजनन स्वास्थ्य का अधिक ध्यान रखती थीं। अध्ययन से प्राप्त निष्कर्षों से स्पष्ट हुआ है कि जन्म दर में कमी लाकर और विवाह की आयु बढ़ाकर प्रजनन स्वास्थ्य स्तर को बेहतर बनाया जा सकता है। महिलाओं के स्वास्थ्य स्तर में सुधार लाकर, स्वास्थ्य पर किए जाने वाले व्यय में कमी लाने के साथ-साथ महिलाओं के प्रजनन स्वास्थ्य पर किए जाने वाले व्यय में भी कमी लाई जा सकती है। इस प्रकार महिलाएं आर्थिक गतिविधियों तथा परिवार के विकास के लिए अधिक समय दे सकती हैं।

REFERENCES

1. ASARI, V. GOPALAKRISHNAN AND C. JOHN (1993) Determinants of Desired Family Size in Kerala. Report Series, 95-1, Population Research Centre, University of Kerala,
2. ELEZABETH.LEE (1994) Conveying Concerns: Women Write on Reproductive Health. Population Reference Bureau, Washington, USA.
3. KERALA SASTRA SAHITYA PARISHAD (1991) The Health Status of Kerala - A Study, Thiruvananthapuram.
4. NFHS REPORT ON INDIA (1992-1993), (1995) Population Research Centre and UPS, Mumbai.

5. SHIREEN J. JEJEEBHOY (1989) Reproductive Motivation: A Comparison of Wives and Husbands in Maharashtra, India. *Studies in Family Planning*, Vol.20 (5).
6. SHIREEN J. JEJEEBHOY AND SUMATI KULKARNI (1996) Reproductive Health Information Needs in India: Has NFHS Filled the Data Gaps, *Journal of Family Welfare*, **Vol.** 42 (1).
7. SRINIVASAN, K (1995) Regulation, Reproduction in India: Population Efforts. Results and Recommendations, Sage Publications, New Delhi.
8. STATE PLANNING BOARD (1995) Economic Review, Planning Board, Government of Kerala, Thiruvananthapuram.