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A DESCRIPTIVE STUDY OF FAMILY PLANNING SERVICES AND THEIR OUTCOME IN A TRIBAL AREA OF SOUTH GUJARAT

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ABSTRACT

Introduction Tapi district is one of the Tribal district of the Gujarat state having lower crude birth date (CBR) (15.2 per 1000 live births), higher crude death rate (CDR) (6.1 per 1000 population) and variable total fertility rate (TFR). This study was conducted to analyze the activities under National Family Welfare Programme especially tubal ligation operations and cupper T insertion and to disseminate the findings to executive authorities to relook over the data and situation.

Material and method: Data compiled from various records of Maypur Primary Health Centre and annual report from Registrar of State Births and Death Registration analyzed on MS Excel.

Results: Only 57 persons were added in the PHC area in a year as a result of reasonable coverage with tubal ligation and Copper T-380A. Coverage of family welfare services showed higher achievement in permanent method (1.3:1, Tubal ligation: Copper T-380A) overall ratio of permanent versus spacing method (0.5:1, Tubal ligation: Copper T-380A) reported for Gujarat.

Conclusion: there is a need to look into data meticulously and set strategies in a way that it preserves rational of Family Welfare Programme with changing demographic profile in a smaller region.

Recommendations: In a restricted indigenous communities, authority shall address the evidence based need, the desire of the couple and the cost of National Family Welfare Programme.

Keywords: Receding Tribal, Family planning, contraception, tubal ligation, Tapi district.

INTRODUCTION

The need for control of rising population was realized just after independence. In 1951, India became the first country in the world to launch a family planning program.[1]In order to achieve reproductive health, women empowerment is must. Reproductive rights mean women's right to decide whether, when, and how to have children in the social, economical and political conditions that makes such decision possible.[2]

According to MDG (Millennium Development Goals), NPP 2000 (National Population Policy

2000), and vision document it is expected to have population stabilization through an integrated, focused, participatory program meeting, the unmet demands of target population, and provision of assured equitable and responsive quality services.[3]

In year 2007, Tapi district was formed out of some talukas separated from Surat district.[4] Proportion of tribal population is as high as 14%.[5]Tapi district is one of the Tribal district of the state having lower crude birth date (15.2 per 1000 live births), Higher crude death rate (6.1 per 1000 population) and variable total fertility rate (TFR) compare to state figures.[6]

Various method of contraception are not only for birth control but also for reducing maternal morbidity and maternal mortality.[7] In view of only 2 maternal death in Tapi District and demographic scenario in previous 5 years it is time to relook for National Family Welfare Programme activities in a tribal area which aimed at preventing unwanted births.

To what extent it is rational to divert higher amount of various resources towards promoting permanent methods like Tubal Ligation (TL) in such situation? Is it not the time to stop pushing contraception?

Objectives were to assess the activities under National Family Welfare Programme especially tubal ligation operations and Copper T-380A insertion in relation to lower crude birth rate, higher crude death rate and variable total fertility rate.

METHODS

This is a descriptive study using data from various records of Maypur Primary Health Centre in Tapi District of Gujarat State and an annual report of registrar of state births and death registration. Maypur Primary health center was visited and various data collected and compiled from existing registers, records and annexure of Health Department of Tapi district for this study. Data included number of births, deaths, number of eligible couples, mid-year population, number of Copper T-380A insertion and number of Tubal Ligation (TL) for the year 2014.

Data quality was checked by discussion with the Medical officer and paramedical staff. Data entry was made in MS Excel and several demographic indicators were calculated. Hypothesis of receding tribal population was generated after critically analyzing the situation.

RESULTS

Table 1 indicates that Maypur primary health center (PHC) is an average PHC in terms of total population, proportion of eligible couple, pattern of contraceptive acceptance and maternal mortality ratio (MMR). As shown in Table 2 couple protection rate (CPR) is 75%. Almost 25% of couples reported not using any methods of contraception. Large number of couples in this group might be willing for a child.

Table 3 indicates that addition of only 57 persons occurred in PHC area last year as a result of lower number of births, higher number of deaths and high CPR. This PHC did not show any kind of significant migration or disaster during the reference period. Deaths among under five age group children were not high. Vaccination coverage remained good.

Maypur PHC having 34.2 %BPL family showed limited number of children born in its villages ranging from 9 in the smallest village to 57 in largest village last year. Data also reported that out of 3511 eligible couples, 84 adopted Tubal Ligation as permanent method of contraception, 64 used Copper T-380A as a birth spacing method in year of 2014.Demographic events shown in Table 3 suggest a kind of picture towards stabilization of population.

Table 1 Demographic Scenario of a Maypur Primary health center

Total population	**21776**
Eligible couple registered in beginning of the year 2014	3511 (161/1000)
Unprotected couples	875(24.9)
Couples willing to have second child	767(21.8)
Couples not willing to have second child	207(5.89)
Eligible couples without any child	312(8.9)
Eligible couples with single living child	566(16.1)
Eligible couples with two living children	2067(58.9)
Eligible couples with more than two living children	565(16.1)
Reported maternal death in previous 5 yr	2

Figure in parenthesis indicate percentages.

Table 1 shows normal distribution of proportion of eligible couples with number of children if plotted using histogram. There were 875 couples who reported not using any family planning

method at the beginning of the year. Health worker also reported 207 couple not willing to have second child and as many as 767 couple reported willing to have second child. (3.7:1, couple willing to have second child couples not willing to second child)

Table 2 Demographic Rates for year 2014 for Maypur Primary health center

Crude birth Rate(CBR)	11.48 /1000 live births
Crude death Rate(CDR)	8.8 Deaths/1000 population.
Couple protection rate	75.1 %
Birth registration rate	73.2 %
Death registration rate	93.7 %

Table 3 Demographic Events Reported by Maypur Primary health centre in the year 2014

Total live births	250
Total Deaths all Age group	193
Death of children under 5 year	7
No. of person added in one year	57
Children born in the smallest village , Andharvadi (population=759)	9
Number of children born in the largest village, Borakhdi(population=5117)	55
In migration and out migration	NS*
Vaccination coverage for UIP vaccines	78 - 95%
Institutional delivery rate	100%
BPL families under PHC area	1525(34.2%)
Ratio of coverage for tubal ligation and Copper T-380A insertion	1.3:1

* Not significant

DISCUSSION

Maypur Primary Health Centre (PHC) is a smaller PHC situated in south Gujarat covering population of 21776 and providing basic preventive, promotive and curative health services with sizable inputs from state government on providing family planning services. Data collected by health workers indicate that last year only 250 live births have taken place and as many as 193 deaths occurred in all age groups due to various reasons. It has resulted into addition of only 57 new persons in a year in that community. Thus only 0.26% of total population have been added in this area as compare to 1 % of national population as per last census.[8]

Smallest village had 7 new births last year and largest one had 50 new births at the end of the year. Thus at PHC level not many individuals were added last year. A time series over 27 years carried out by Sachin H Mumbare at el reported replacement level of 2.1 TFR by the year 2020 for rural area.[9]

Coverage of family welfare services in this area showed relatively higher achievement in permanent method (1.3:1, Tubal ligation: Copper T). This is in contrast to overall ratio of permanent versus spacing method (0.5:1, Tubal ligation: Copper T) for Gujarat[3]. The intrauterine Contraceptive device (IUCD) is the most frequently used reversible family planning method in the world.[10, 11] IUCD provided for National Family Welfare Programme is Copper T-380A. However, its usage is low in many developing countries with a majority of women prefer female sterilization for birth control.[12] Unlike female sterilization where long term injuries and fatalities are known to occur, [13] IUCDs are relatively safer. Newer IUCDs like the Copper T-380A provide a longer period of protection and has a failure rate of 0.8% in the first year of its insertion.[14] It is also one of the safest contraceptive devices.[15] A major advantage of the Copper T-380A is that provision of the method is in the hands of female paramedical workers. This can significantly enhance access and reduce dependence on skilled doctors, costly equipment and more complex technology. Even though nurse-midwives are permitted to insert Copper T.[16]

Service providers seem to have assumed that couples who wish to limit family size can use only sterilization.[17] It is well known that various method of contraception are not only for birth control but also for reducing maternal morbidity and maternal mortality.[7] In view of only 2 maternal death in previous 5 years it is time to relook for Family Welfare Programme activities in such a tribal area which aimed at preventing unwanted births.[5]Mussie Alemaye et al noted that the vast majority of maternal and newborn deaths can be prevented with proven interventions to ensure that every pregnancy is wanted using modern contraceptive and every birth is safe.[18] IUCDs are highly effective, safe and relatively inexpensive modern methods of contraception that may offer advantages for some women over other long-term methods, such as sterilization.[19,20]

Dubiwak R, et al mentioned choice of contraception methods is not uniform across all countries. Literatures says that there is significant variation exists in choice of contraception among regions and countries. In

Africa most mothers rely on short-term contraceptives such as pills and injectable or traditional methods while in Asia and Latin America permanent methods mainly male and female sterilizations are commonly used. Long-term Methods of contraception are recommended for its effectiveness and efficiencies in countries like Ethiopia where high fertility rate is a concern.[21] Tapi district reported consistently low figure for Total Fertility Rate (TFR) reaching as low as 2.7 only.[22] Hence permanent methods are not required here.

To what extent it is rational to divert higher amount of various resources towards family welfare programme activities in such situation? Is it not the time to stop pushing contraception? In view of family planning being a way of thinking and living that is adopted voluntary upon the basis of knowledge attitudes and responsible decision by individuals and couples, proactive search of cases and camps of tubal ligation operation should be holdback. In addition there is a need to explore perception of couple towards Copper T-380A as an alternative to permanent method of contraception like tubal ligation operation.

Such situations suggest the reduction in need of active and costlier efforts for contraceptive activities like TL camps in a stable tribal region and possible switch over from operative intervention of tubal ligation to easier Copper T-380A insertion as and when demanded.

Data from Maypur PHC showed evidence that spacing method of family planning has also been almost equally adopted by the tribal couples. In fact currently newer IUCD (intra uterine contraceptive devices) can be retained for more than 5 years in a women once inserted.[23] Relative low proportion of childhood mortality, promising vaccination coverage and lower number of registered BPL families make ground for decreasing birth control activities. Family planning Programs are likely to be most successful when they reach beyond the conventional boundaries of service provision to influence and alter the cultural and familial factors that limit voluntary contraceptive use.[24]

CONCLUSION

Demographic situation of a tribal PHC Maypur, warrants to look into data meticulously and set the targets and strategies of family planning in a way that it preserves rational of family welfare programme with gradually changing demographic profile in a smaller region. There is a need to switch over from operative procedure to non-invasive spacing methods for contraception and also reducing the efforts for cases and camps.

RECOMMENDATIONS

Activities related to contraception under family welfare programme especially in a restricted indigenous communities shall address the evidence based need, the desire of the couple and the cost of programme.

LIMITATIONS

Data from single Primary Health Centre were analyzed and used rather than those from whole District. A few indicators like Life expectancy at birth and Life expectancy at specific at specific age would be more useful.

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