A STUDY OF UTILIZATION AND DETERMINANTS OF FAMILY WELFARE SERVICES IN RURAL JAMMU
Bhavna Sahni¹, Shalini Sobti², Vridhee Sharma³, D.S. Jamwal⁴

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ABSTRACT: BACKGROUND: India was the first country in the world to launch National Family Planning Programme in 1952. Ironically, even after 60 years of its initiation, the couple protection rate is far from what is desirable although it has quadrupled from 10.4 percent in 1971 to 44 percent in 1999. The present study was therefore taken up to evaluate the utilization of FW Services at grass root level and to identify the determinants of the same. OBJECTIVES: To assess the utilization and determinants of family welfare services in rural Jammu. SETTING: Rural. DESIGN: Cross-sectional.

METHODS: 10 sub-centres areas, out of the existing 25 in R S Pura Block of Jammu, were randomly selected. To assess the utilization of FW services, the house-hold survey registers maintained at the selected sub centres and updated during RCH survey 2007 were thoroughly scrutinized. This was followed by home-visits of 10% of the couples enlisted in those records for studying the determinants of utilization and reasons for non utilization of these services.

STATISTICAL ANALYSIS: was done using proportions, percentages and Chi Square test. RESULTS: Utilization of FW services was observed among 61.91% of the eligible couples. On further statistical analysis, this utilization was found to be significantly associated with the age of the wife and husband and the number of living children.

CONCLUSIONS: There is still scope for improving the utilization of Family Welfare Services and the predictors identified in the present study for utilization/ non-utilization of the same can be thoroughly scrutinized for planning targeted interventions.

KEY WORDS: Utilization, family welfare, eligible couple, contraceptive, sub-centre, RCH survey, socio-economic status.

INTRODUCTION: In the census figures of 1951, the Planners recognized the potential threat posed by population explosion and the need to take steps to avert it. Hence, India became the first country in the world to formulate a National Family Planning Programme in 1952. After 1952, sharp declines in death rates were, however, not accompanied by a similar drop in birth rates. The National Health Policy, 1983 stated that replacement levels of total fertility rate (TFR) should be achieved by the year 2000. Henceforth, health care of women and children and provision of contraceptive services has been the focus of India’s health services. The Centrally Sponsored and 100% centrally funded Family Welfare Programme provides infrastructure, manpower and consumables needed for improving health status of women and children and to meet all the felt needs for fertility regulation.

The 1994 International Conference on Population and Development (ICPD) provided a forum for countries to commit to making efforts to decrease fertility rates by focusing on women's reproductive health, particularly the need for family planning programs. Six years later, the UN established the Millennium Development Goals in 2000 which are intimately linked with family planning, especially MDG 5 which calls for the reduction of the maternal mortality ratio by three-quarters and for the achievement of universal access to reproductive health by 2015.
The National Population Policy, 2000 (NPP 2000) affirms the commitment of government towards voluntary and informed choice and consent of citizens while availing of reproductive health care services, and continuation of the target free approach in administering family planning services. The NPP 2000 provides a policy framework for advancing goals and prioritizing strategies during the next decade, to meet the reproductive and child health needs of the people of India, and to achieve net replacement levels (TFR) by 2010.

Keeping this background in mind, the present study was taken up to evaluate the utilization of FW Services at the peripheral-most point in the three tier system of health care and to identify predictors of the same.

**METHODOLOGY:** A study to elicit the utilization of Family Welfare services was carried out in RS Pura block which is the rural field practice area of Government Medical College, Jammu. The block is located in the South-West of Jammu City, at a distance of 22 kilometers from GMC, Jammu. There is 1 community health centre, 5 primary health centres, 3 allopathic dispensaries, 25 health sub-centres and 209 villages with an estimated population of 1,80,560.

Out of the existing 25 sub-centres, 10 sub-centres areas were randomly selected for the purpose of study. The house-hold survey registers maintained and updated at sub-centre level during RCH survey 2007 were thoroughly scrutinized for the purpose of the study. The data contained in these records was critically analyzed to find out the extent of utilization of FW services and its association with age of wife and husband and the number of living children. This was followed by home-visits of a sub-sample (10%) of the enlisted couples selected from sub centre records by systematic random sampling. During home visits, utilization of Family Welfare Services was studied with respect to the female partner's literacy level and socio-economic status of the family (using Modified Uday Pareek Scale).

The help of anganwadi worker/ ASHA/ MPHW (F) etc. was taken for carrying out the home-visits.

Couples who were using any temporary / permanent method of family welfare were classified as having 'utilized' family welfare services while those couples who were not using any method of contraception were classified as 'not having utilized' the family welfare services and reasons for non-utilization were also ascertained.

All the data thus obtained for the ten health sub-centres areas was compiled and tabulated. The analysis was done using the standard appropriate statistical techniques which included proportions, percentages and Chi Square test (with Yates correction wherever applicable) using Epi-info 6.04 version.

**Eligibility criteria:** although ‘Eligible couples’ have been defined as those with wife in the age-group of 15-45 years but in the present study Couples with wife in the age group of 18–45 years have been included.

**Exclusion criteria:** Couples with wife less than 18 years and husbands less than 21 years of age in accordance with The Prohibition of Child Marriage Act - 2006.

**Period (with month & year) & place of study:** January to December 2009, RS Pura Block in Jammu, J & K.
OBSERVATIONS:

<table>
<thead>
<tr>
<th>Name of Sub-centre</th>
<th>Population</th>
<th>No. of villages</th>
<th>No. of eligible couples as per RCH Survey 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mamka</td>
<td>3500</td>
<td>5</td>
<td>437</td>
</tr>
<tr>
<td>Choala</td>
<td>5460</td>
<td>5</td>
<td>581</td>
</tr>
<tr>
<td>Jinder Melu</td>
<td>5013</td>
<td>5</td>
<td>224</td>
</tr>
<tr>
<td>Dablehar</td>
<td>7700</td>
<td>5</td>
<td>1067</td>
</tr>
<tr>
<td>Seer</td>
<td>3122</td>
<td>5</td>
<td>565</td>
</tr>
<tr>
<td>Baspur</td>
<td>4250</td>
<td>7</td>
<td>773</td>
</tr>
<tr>
<td>Kirpind</td>
<td>6391</td>
<td>5</td>
<td>1054</td>
</tr>
<tr>
<td>Narhi</td>
<td>5213</td>
<td>5</td>
<td>259</td>
</tr>
<tr>
<td>Chak M Yaar</td>
<td>3252</td>
<td>5</td>
<td>575</td>
</tr>
<tr>
<td>Langotian</td>
<td>4700</td>
<td>7</td>
<td>734</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>48601</strong></td>
<td><strong>54</strong></td>
<td><strong>6269</strong></td>
</tr>
</tbody>
</table>

Table I: Distribution of eligible couples in the selected Sub-centre areas according to RCH Survey 2007.

I) ELIGIBLE COUPLES USING ANY METHOD

<table>
<thead>
<tr>
<th></th>
<th>NO. OF ELIGIBLE COUPLES</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A) PERMANENT METHODS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Sterilization</td>
<td>2345</td>
<td>37.41</td>
</tr>
<tr>
<td>Male Sterilization</td>
<td>25</td>
<td>0.40</td>
</tr>
<tr>
<td><strong>B) TEMPORARY METHODS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral pills</td>
<td>123</td>
<td>1.96</td>
</tr>
<tr>
<td>Intra Uterine Devices</td>
<td>116</td>
<td>1.85</td>
</tr>
<tr>
<td>Condoms</td>
<td>1272</td>
<td>20.29</td>
</tr>
<tr>
<td><strong>II) ELIGIBLE COUPLES NOT USING ANY METHOD</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL ELIGIBLE COUPLES</strong></td>
<td>2388</td>
<td>38.09</td>
</tr>
</tbody>
</table>

Table II: Contraceptive use by the eligible couples.

<table>
<thead>
<tr>
<th>Age- Group of Wife</th>
<th>Using any method (%)</th>
<th>Not using any method (%)</th>
<th>Total Eligible Couples</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-25 years</td>
<td>377 (29.87%)</td>
<td>885 (70.13%)</td>
<td>1262</td>
</tr>
<tr>
<td>26-35 years</td>
<td>1910 (65.73%)</td>
<td>996 (34.27%)</td>
<td>2906</td>
</tr>
<tr>
<td>36-45 years</td>
<td>1594 (75.87%)</td>
<td>507 (24.13%)</td>
<td>2101</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3881 (61.91%)</strong></td>
<td><strong>2388 (38.09%)</strong></td>
<td><strong>6269</strong></td>
</tr>
</tbody>
</table>

Table III: Contraceptive use among the eligible couples according to the age of wife.

\[ \chi^2 = 740.09; \text{df} 2; \text{p value} < 0.01; \text{Highly Significant} \]
Age-Group of Husband  | Eligible Couples using any method (%) | Eligible Couples not using any method (%) | Total Eligible Couples  
|---------------------|---------------------------------------|------------------------------------------|------------------------  
21-25 years         | 47 (16.32%)                           | 241 (83.68%)                             | 288                    
26-35 years         | 1244 (50.61%)                         | 1214 (49.39%)                           | 2458                   
36-45 years         | 1945 (73.87%)                         | 688 (26.13%)                             | 2633                   
46-55 years         | 637 (73.05%)                          | 235 (26.95%)                             | 872                    
56 years & above    | 8 (44.44%)                            | 10 (55.56%)                              | 18                     
Total               | 3881 (61.91%)                         | 2388 (38.09%)                           | 6269                   

Table IV: Usage of contraceptives according to the age of husband

\[ \chi^2 = 594.86; \text{df} 4; \text{p value} < 0.01; \text{Highly Significant.} \]

Contraceptive method used  | \leq 2 children (%) | \geq 3 children (%) | Total  
|---------------------------|--------------------|--------------------|-------  
Tubectomy/ vasectomy       | 682 (28.78)        | 1687 (71.22)       | 2370  
Intrauterine device        | 81 (69.83)         | 35 (30.17)         | 116   
Oral pills                 | 93 (75.61)         | 30 (24.39)         | 123   
Condoms                    | 928 (72.96)        | 344 (27.04)        | 1272  
None                       | 1894 (79.31)       | 494 (20.69)        | 2388  
Total                      | 3678 (58.67)       | 2591 (41.33)       | 6269  

Table V: Utilization of different contraceptive methods according to number of living children.

\[ \chi^2 = 1420.66; \text{df} 4; \text{p value} 0.000001; \text{Highly Significant.} \]

Female Education  | Utilization of Family Planning Services | Total females  
|------------------|----------------------------------------|---------------  
Utilized (%) | Not utilized (%) | Total  
|----------------|---------------|--------  
Up to 10\textsuperscript{th} | 159 (42.29) | 217 (57.71) | 376  
10\textsuperscript{th}- Inter | 167 (83.08) | 34 (16.92) | 201  
Degree & above | 50 (100.00) | 0 (0.00) | 50   
Total           | 376 (59.97) | 251 (40.03) | 627  

Table VI: Female partner’s literacy and utilization of Family Welfare Services

\[ \chi^2 = 2.54; \text{df} 2; \text{p value} > 0.05; \text{Not Significant.} \]

Socio- Economic Status  | Utilization of Family Planning Services | Total females  
|------------------------|----------------------------------------|---------------  
Utilized (%) | Not utilized (%) | Total  
|----------------|---------------|--------  
BPL, Lower, Lower middle  | 67 (28.63) | 167 (71.37) | 234  
Middle class | 234 (75.73) | 75 (24.27) | 309  
Higher middle, Upper class | 75 (89.29) | 9 (10.71) | 84   
Total           | 376 (59.97) | 251 (40.03) | 627  

Table VII: Socio-Economic status and utilization of Family Welfare Services

\[ \chi^2 = 5.54; \text{df} 2; \text{p value}>0.05; \text{Not Significant.} \]
Contraceptive use among the eligible couples was found to be 61.91%. Among the couples using spacing methods, majority had ≤ 2 children while among the 2730 couples using permanent methods, 71.22% had ≥ 3 children. On statistical analysis of the Sub centre records, the association of age of the wife and husband, & number of living children, with utilization of FW services was found to be highly significant.

On conducting house to house visits 627 (10 %) of the couples were contacted and but no significant association of female partners’ literacy level & socio-economic status of the family with the utilization of these services was seen.

Among the females who reported non-utilization of Family Welfare services, it was observed that the main reasons were lack of awareness of the importance of family welfare services, non-availability of health staff and irregular availability of contraceptives at the health care facilities, fear of side-effects, inconvenience, desire for more children and unsuitable timings of government health care facilities for working mothers belonging to poor families.

**DISCUSSION:** The records of eligible couples were reviewed and all the relevant information was analyzed from the house-hold registers maintained at sub-centre level and updated during RCH Survey 2007. It was observed that out of 6269 eligible couples enlisted in the ten sub-centre areas, 37.41% of females and 0.40% of males had undergone sterilization as against national figures of 37.3% and 1% female and male sterilizations respectively (NFHS-3, 2005-06) 7. These observations prove that the participation of men in the family welfare programme is dismal as regards to permanent methods. Among the temporary methods, condoms were the most commonly used (20.29%) followed by oral pills (1.96%) and IUD’s (1.85%). Thus, 61.91% of the eligible couples were using some method and 38.09% were not using any method of contraception. Similar results have been reported by Singh and Arora 8 with 38% and 0.4% females and males who had undergone tubectom and vasectomy respectively, followed by usage of 2% oral pills and 2% IUD’s. An ICMR task force study 9 also reported similar findings with 34.2% eligible couples using permanent methods of contraception. Other similar studies 10,11,12,13 also reported that permanent methods were used by 41.3%, 27%, 38.6% and 18% of eligible couples respectively. However, various other studies 14,15,16,17,18,19 reported that 40.65, 28%, 28%, 35%, 45.83% and 75% eligible couples respectively were using some method of contraception.

In the present study it was observed that usage of family welfare methods increased with increasing age of women and the association was found to be highly significant at p value < 0.01. This finding is in accordance with the observations made in other studies 10,12,18.

When the results for the utilization of family welfare methods among the eligible couples were analyzed according to number of living children, it was observed that 71.22% of the couples who had undergone sterilization had 3 or more children and majority of the couples who were using temporary methods or who were not using any method had 2 or less than 2 children. A study carried out in rural North India 8 reported that 92% of eligible couples using permanent methods had 3 or more children, and most of the condom or oral pill users had 2 or less than 2 children. The present results are in accordance with the observations of the study on fertility pattern and family planning practices carried out in a rural area in Dakshina Kannada 16 which reported that 71% of women with three or more children were acceptors of permanent methods. Another study 14 reported that contraceptive users had an average of 3.9 living children while non-users had 1.9 living children.
This is in contrast to another study which reported that high parity was associated with non use of contraceptives.

The findings of this study indicate a shift in the choice of the preferred contraceptive by eligible couples even in rural areas, as permanent methods were being used by most of the couples with 3 or more living children and temporary methods by most of the couples with 2 or less living children.

It was felt necessary in the current study to enquire the reasons for non-utilization of FW services among the sub-sample of registered eligible couples who were contacted by house-to-house visits. The major reasons cited in the present study were lack of awareness of the importance of family welfare services, non-availability of health staff and irregular availability of contraceptives at the health care facilities, fear of side-effects, inconvenience, desire for more children and unsuitable timings of government health care facilities for working mothers belonging to poor families. Other similar studies also reported desire for more children, side effects of contraceptives, failure rates as major reasons for partial and non-utilization of family welfare services.

From the study, it has been concluded that there is still scope for improving the utilization of Family Welfare Services and the predictors identified in the present study for utilization/ non-utilization of the same can be thoroughly scrutinized for planning targeted interventions.

REFERENCES:

1. http://planningcommission.nic.in/plans/planrel/chapter/planrel%5Ffiveyr%5Fvol2/v2c3-5.htm


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