Introduction:

Contraceptive behavior in the developing world has changed markedly over the past three decades. Around 1960, only a tiny fraction of couples practiced contraception and knowledge of methods was very limited. In contrast, contraceptive knowledge is now widespread and more than half of married women in the developing world are current users of contraception.

Though the fertility rate has decreased to 2.76 from six since 1960, it is still above the replacement level but this still leaves fertility about 50 percent above the replacement level. To develop a strategy to respond to the concerns of women unmet need, we need to understand the various reasons. Aims & Objectives: It was planned to calculate the unmet need of contraception among nonusers and to find out the factors associated with the non usage of contraception. Materials and methods: An interview schedule was prepared based on the model survey questionnaire recommended by the WHO. Based on the sample size, 600 married women of reproductive age were selected from eligible couple register and unmet need was calculated based on the method adopted in DHS. Results: The prevalence of unmet need of contraception use was found to be 18.7% (113/600). Unmet need for spacing was found to be 11.1% and unmet need for limiting is found to be 7.6%. There was no significant difference between met need and unmet need with age at marriage ($\chi^2=0.4435$, $P=0.8011$). There was significant difference between met need and unmet need with educational status ($\chi^2=10.49$, $P=0.0328$), number of children in the family($\chi^2=41.47$, $P=0.000$), presence of male child in the family ($\chi^2=5.971$, $P=0.0145$) and with perceived availability.

Key words: Met need, unmet need, spacing

ABSTRACT

Introduction: Though the fertility rate has decreased to 2.76 from six since 1960, it is still above the replacement level but this still leaves fertility about 50 percent above the replacement level. To develop a strategy to respond to the concerns of women unmet need, we need to understand the various reasons. Aims & Objectives: It was planned to calculate the unmet need of contraception among nonusers and to find out the factors associated with the non usage of contraception. Materials and methods: An interview schedule was prepared based on the model survey questionnaire recommended by the WHO. Based on the sample size, 600 married women of reproductive age were selected from eligible couple register and unmet need was calculated based on the method adopted in DHS. Results: The prevalence of unmet need of contraception use was found to be 18.7% (113/600). Unmet need for spacing was found to be 11.1% and unmet need for limiting is found to be 7.6%. There was no significant difference between met need and unmet need with age at marriage ($\chi^2=0.4435$, $P=0.8011$). There was significant difference between met need and unmet need with educational status ($\chi^2=10.49$, $P=0.0328$), number of children in the family($\chi^2=41.47$, $P=0.000$), presence of male child in the family ($\chi^2=5.971$, $P=0.0145$) and with perceived availability.

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they discontinue them. The reason for which has to be identified, so that, remedial measures taken to stop discontinuance.³ Rural area has higher unmet need (14.1%) when compared to their urban counterpart, i.e. (9.7%) due to various factors, resulting in large family size. Finding factors which lead to unmet need in rural population and addressing those helps achieve the national goal.³ Unmet need of contraception can lead to unintended pregnancies, which poses risk for women, family, and societies. Reducing which can prevent 20-35 per cent of all maternal deaths. In most developing countries, rural, uneducated and poor married women are more likely to be at risk for unplanned pregnancy than are urban, educated or non poor married women. Those who want to have no more children are considered to have an unmet need for limiting births, while those who want more children but not for at least two more years are considered to have an unmet need for spacing births.⁴ By contrast, with the complicated links between fertility, population growth, and poverty, the benefits of family planning for the survival and health of mothers and children are fairly straightforward. In 2000, about 90% of global abortion-related and 20% of obstetric-related mortality and morbidity could have been averted by use of effective contraception by women wishing to postpone or cease further childbearing.⁵ When a couple discontinues contraception for method-related reasons a rapid switch to a new method is essential to prevent unintended pregnancy. Although about 60% of people do start another type of contraceptive within 3 months, the choice of alternatives is sometimes limited and restricted access or unfamiliarity with other choices (on the part of both the user and provider) can delay the uptake of a new method, thereby increasing the risk of unintended pregnancy. However, contraceptive avoidance, or non-use, remains the dominant cause of unintended births, accounting for 71% of such births in 14 developing countries.⁶ Meeting the unmet need for family planning could prevent an additional 29% of maternal deaths (104 000) per year. If voluntary family planning had been used to its fullest potential and met this unmet need, contraceptive use could have averted well over half of the maternal deaths that could have occurred without any access to family planning. This finding has profound implications for our approach to maternal survival.⁶,⁷,⁸

Materials and methods:

Sample size:
Is considered for calculation of sample size at 95% CI (Z=1.96) and limit of accuracy kept at 20% of 14.1% (the rate of prevalence of unmet need for contraception based on NFHS-3 (2005--2006 ) N = Z²pq/d² and has been rounded off to 600.

Sampling procedure:
Initially Tirunindravoor PHC was randomly selected in Thiruvallur HUD. It has five sub centers namely Kosavanpalayam, Tirunindravoor, Lakshmipuram, Nemilicherry, Dasapuram. Among these, Lakshmipuram HSC was randomly selected by lottery method. List of all married women of reproductive age with their register no (Lakshmipuram HSC) was obtained from eligible couple register from VHN. It had 1933 married women of reproductive age. Based on the sample size, 600 married women of reproductive age were selected from eligible couple register by random selection and unmet need was calculated based on the method adopted in DHS. An interview schedule was prepared based on the model survey questionnaire recommended by the WHO. The developed schedule had four parts comprising of the background characteristics of the respondent, marital status and fertility, knowledge and attitude to contraception and use of contraceptives and perceived availability and accessibility of contraceptives. The questionnaire was pretested among 40 married women in HSC Nemilicherry. Based on observations made during the pre testing, the questionnaire was modified. Data collection was done by house-to-house visit. The investigator along with a VHN approached at least 15 respondents every day. Mostly the women who were to be interviewed had been informed previously. Even then unable to find a woman, she was revisited at the
next possible time and interviewed. After obtaining their informed consent orally, relevant information was obtained from the respondent using the pretested, structured questionnaire. Questions were asked in the local language and the questionnaire filled on the spot. At the end, any misconception or queries were clarified and the respondent was thanked for sparing the time.

**Standard formulation of unmet need:**
In this formulation the unmet need group included all fecund women who are married or living in union—and thus presumed to be sexually active—who were not using any method of contraception and who either did not want to have any more children or wanted to postpone their next birth for at least two more years. Those who wanted to have no more children are considered to have an unmet need for limiting births, while those who wanted more children but not for at least two more years are considered to have an unmet need for spacing births.10

**Results:**
Among the study population of 600, prevalence of unmet need of contraception use was found to be 18.7 % (113/600). Unmet need for spacing was found to be 11.1% and unmet need for limiting was found to be 7.6%. Reasons for unmet need: lack of knowledge-36%, low perceived risk-24%, fear of side effects- 20%, lack of choice- 9%, opposition from partner- 8%, religious belief-2%, others-1%.

**Reasons for stopping:**
Among the 33 respondents who had reported to have used contraceptives and have now stopped, the reasons were to become pregnant in 20 among them, 12 for health reasons and 1 due to non-approval of husband.

**Reasons for non usage:**
Among the 173 respondents who were never users, the reasons attributed to non-usage were as followed. Breast feeding/postpartum- 22, Want to become pregnant- 46, Lack of knowledge-26, Opposition from partner- 15, Fear of side effect-59, Religious Belief- 3, Donor know-2. There was no significant difference between met need and unmet need with age at marriage(x²=0.4435, P=0.8011). It was seen that greater proportion of unmet need for spacing (59/67) was seen in age group 20-29. In the age group 30-39, only 30 respondents had unmet need for limiting. There was significant difference between met need and unmet need (p=0.0000) and also between unmet need for spacing and limiting (p =0.0000) among different age groups (fig.1).

**Table 1: Factors affecting unmet need**

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Met Need N=394</th>
<th>Unmet Need N=113</th>
<th>D.F</th>
<th>P - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Age in years</td>
<td></td>
<td></td>
<td>6</td>
<td>HS</td>
</tr>
<tr>
<td>x²= 74.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.Age at marriage</td>
<td></td>
<td></td>
<td>2</td>
<td>NS</td>
</tr>
<tr>
<td>x²= 0.4435</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3.No of living children in the family</td>
<td></td>
<td></td>
<td>3</td>
<td>HS</td>
</tr>
<tr>
<td>x²= 41.477</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4.Presence of male child in the family</td>
<td></td>
<td></td>
<td>1</td>
<td>HS</td>
</tr>
<tr>
<td>x²= 5.971</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. Educational status of the participants</td>
<td></td>
<td></td>
<td>4</td>
<td>S</td>
</tr>
<tr>
<td>x²= 7.580</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Perceived availability</td>
<td></td>
<td></td>
<td>1</td>
<td>HS</td>
</tr>
<tr>
<td>x²= 130.49</td>
<td></td>
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</table>

HS- Highly Significant NS- Not Significant S- Significant
In a non-contraception society, the individual women’s need to limit reproduction increases with age and parity level, while birth-spacing needs generally occur early in her reproductive career. Women who had achieved their desired family size had a need for curtailing additional births. Such women were usually older. Biological sub-fecundity and at later ages infecundity reduced and eliminated their risk of pregnancy. Accordingly, there existed a nonlinear association between unmet need and age of women (Tauseef et al 1993). There was significant difference between met need and unmet need with educational status ($x^2=10.49$, $P=0.03288$), number of children in the family ($x^2=41.47$, $P=0.000$), presence of male child in the family ($x^2=5.971$, $P=0.01454$) and with perceived availability (table 1).

Discussion:
India had the largest number of married women with unmet need, 14.1%. The unmet need for contraception in Tamilnadu was 9.1% (NFHS-3). In this study, the unmet need of contraception was 18.1 %, which was higher than that of state data. Unmet need for spacing was found to be 11.1% and unmet need for limiting was found to be 7.6%. This showed that there was greater demand for family planning, which has to be targeted to achieve a higher contraceptive usage to decrease the net reproduction rate to less than 1. The overall awareness for any contraceptive was 92.3% among the respondents. There was significant difference between the contraceptive users and non users with the knowledge status. Many studies indicated that lack of sufficient knowledge contribute to more than two-third of all unmet need\textsuperscript{11, 12, 13}. In this study also we found 43 women with unmet need attributed lack of knowledge as a reason, while 33 said fear of side effects/ health reasons. Lack of choice as a reason was also noted, the reason for which has to be identified. Opposition from husband was also found to be a reason for unmet need\textsuperscript{14, 15}. This showed the influence of husbands in decision making regarding the fertility of their wives. It was noted 12% of mothers, the reason for unmet need was opposition from husband, families and communities. Only 2% of women in ICRW study said they could leave home to obtain contraceptives without consultation or approval from others in the household. There was no significant difference among met need and unmet need with age at marriage.

Conclusion:
In general, data on unmet need provide the way forward by helping to pick up the obstacles in society and weakness in services that need to be overcome. Women need to be counseled on the full range of available methods/side effects, so that, they can choose the method that best matches their individual circumstances and intentions and can change methods when they need to\textsuperscript{16, 17}. Anxiety and apprehension over the use of spacing method of contraception must be attended to. Rural women in this study wanted to finish of the family as quick as possible and wanted to have permanent method of contraception, as they were keen on getting the maternity benefits provided by the government. This leads to decrease in the interval between first and second order birth, complicating maternal anaemia. Women who are post partum, breastfeeding or approaching menopause need counseling on their likelihood of becoming pregnant and on the family planning methods that might be appropriate for them. Programs should be planned so as to improve interpersonal relations between clients and providers and to ensure periodic follow-up of clients to reduce the number of women who stop using contraception. Programs should focus on men as well as women, creating an environment in which both sexes can seek services and encouraging men to discuss family planning with their wives.

Conflict of Interest: Nil

Source of fund: None declared

References:
2. Kishore J. National health programmes of India. 5\textsuperscript{th} ed: 263-5.


