Unmet Need for Prevention of Unwanted Pregnancy in Shiraz

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Introduction

The World Health Organization (WHO) estimates that each year 211 million women become pregnant in the world while nearly two-thirds of them deliver live infants. The remaining one-third of pregnancies result in miscarriage, stillbirth, or induced abortion. Nearly 38% of all pregnancies around the world every year are reported to be unintended. In developing countries, some women do not use contraception devices in spite of an expressed desire to space or limit the numbers of their pregnancy.

Women need access to basic health care services during pregnancy and delivery to protect themselves and their infants’ health. Only about one half of the women who give birth each year have access to antenatal, delivery and newborn health care. Yet, in some developing countries, there are few properly equipped health facilities, which rarely provide the health care that women and babies need and some women in these countries have an unmet need for effective prevention of unwanted pregnancy.
their needs would prevent unplanned pregnancy, induced abortions, pregnancy-related deaths, unsafe abortions, and infant deaths.¹

On the other hand, family planning is considered to be a key strategy in promoting mother and child health through adequate spacing of birth and avoiding pregnancy at high-risk maternal ages and parities. A woman’s ability to space her pregnancies has a direct influence on her health and well-being as well as the outcome of her pregnancy² In other words, reducing unwanted and unplanned pregnancies can reduce childbirth-related injury, illness, death, and abortions.⁵

Although family planning services were publicly available in the 1960s in some countries, the utilization rates, current use and ever use are still low in the world. In Iran, more than three-quarters of the currently married women use a contraceptive to prevent unwanted pregnancy while many developing countries with much older population policies or family planning programs have not achieved it yet. Nevertheless, at present the government’s decision has changed in order to avoid population ageing since TFR is below the replacement level fertility (1.76), and it encourages childbearing by considering maternal and child health while preventing unwanted and high risk pregnancies.⁶

In the 1960s, the concept of unmet need for family planning was first explored since a significant gap was noticed between women’s reproductive intentions and their contraceptive behavior based on contraceptive knowledge, attitudes and practices (KAP). The concept of unmet need basically refers to a gap between one’s expressed fertility preferences and his/her contraceptive use within a certain point of time.⁷

Unmet need means “the percentage of fecund married women who are not using an appropriate method of contraception even though they do not want to get pregnant”³ Therefore, women using unsafe methods such as interrupted intercourse could be included in our definition. Despite the lack of evidence, some level of unmet need exists in developing and developed countries, where family planning is widely used.⁸ There are several reasons why family planning needs are often unmet including “poor access to quality services, limited choice of methods, lack of information, safety concerns or side-effects and partner disapproval”.⁹

Moreover, the definition and calculation of unmet need has changed and has been applied over time in different ways, making it difficult to compare countries or interpret time trends which are potentially misleading.² Furthermore, meeting unmet needs for family planning would reduce unsafe abortions by averting unwanted or untimely pregnancies and preventing high risk births.⁴

Policy makers and program managers are required to know the characteristics of women with a demonstrated unmet need for unwanted pregnancy in order to meet their unmet needs. That is why some couples do not use contraceptives even when they do not want children.¹⁰

In this descriptive study, we aimed to assess the magnitude of unmet need for unwanted pregnancy in Shiraz.

Method and Materials

We carried out a descriptive cross-sectional study on 2000 married women of childbearing age (10-49 years) who were selected using random sampling method in a survey of households conducted in 2012. The inclusion criteria for participation in this study was 15-49 year old married women living in Shiraz; pregnant women or women within one year after their pregnancy were excluded from the study.

For measuring unmet need, our definition divided the number of women who did not use any contraceptives and those who wanted to limit their pregnancy or space it up to 2 years by the total number of interviewed women.

The questionnaire used for investigating the availability of family planning services designed by the authors consisted of 26 questions including demographic data and awareness about the availability of contraceptive methods used by women who wanted no more children, women who wanted to delay a pregnancy, or those who weren’t sure if or when they wanted to become pregnant. The reliability and validity of the questionnaire was examined and approved by experts.

Cluster random sampling was done using postal zones which were chosen randomly. 100 zones or clusters were selected and 20 questionnaires were completed in each one through face to face interviews. Finally, data analysis was performed using descriptive statistics.

Results

A total of 2000 currently married women aged 10-49 were included in the study. The mean age of the participants was 35.2±8.25 and most women were housewives (88.3%). The average number of live births of the participants was 1.97 in which the average number of boys and girls was 1.01 and 0.97, respectively. Minimum, maximum and standard deviation of the number of live births and number of desired children can be seen in Table 1.

In the present study, 85.6% of women used a contraceptive method. 58.7% of individuals used modern methods of contraception including tubectomy, vasectomy, different types of contraceptive pills, contraceptive ampoules, intrauterine device (IUD), and condom while 26.9% used traditional methods.
of pregnancy prevention (Table 2).

LD (Low Dose), HD (High Dose) and linestronol pills were ranked as the highest among contraceptive pills by 73.8%, 7.3% and 4.6%, respectively. 9.6% of individuals used other types of pills. 51.6% of contraceptive methods were offered by governmental health centers and just 5.4% visited private offices and clinics while 41.8% used methods offered by pharmacies.

Reported reasons for not using contraceptives included recent delivery (25%), desire for more children (20.6%), lack of awareness about where such services were offered (6.3%), lack of information about types and location of offering contraceptive services and irregular sexual intercourse with husband (4.5%). Other reasons stated by women who did not use any contraceptive method included occasional intercourse, old age, inter-spousal communication and attitudes pertaining to limiting the number of children and use of contraception, religious beliefs, lack of awareness about contraceptive methods, lack of access to such services, high costs, difficulty using the method, breastfeeding, and fear of side effects.

Finally, the unmet need in this study was reported to be 4.3 percent which should be added to unsafe contraceptive methods such as interrupted intercourse (26.9%) as well.

Discussion and Conclusion

In the present study, 58.7% of women used modern methods of contraception including tubectomy, vasectomy, different types of birth control pills, contraceptive ampoules, intrauterine device (IUD) and condom while it has been reported that 50% of married women in Brazil, Colombia and Costa Rica, China and Kuwait were using a modern method of contraception.11, 4

It is not easy to discuss why some women do not use contraception when they don’t want more children. Reasons may change or may not be well defined. The possible reasons were summarized in similar studies; they include lack of enough information about family planning, difficulties with access to and quality of family planning services and supplies, and lack of community participation. In the present study, reasons for not using contraceptives by individuals were reported to be desire to have more children in future, recent delivery, irregular sexual intercourse with husband or lack of awareness about contraceptive methods or place of offering such services.12

Thus, most women who have a demand for contraceptive use are able to fulfill that demand, resulting in a contraceptive prevalence rate of about 58.7%, which is very close to the rate in Morocco and Jordan.4

A major reason that women reported for lack of contraceptive use was infrequent sexual activity (4.5%). While the infrequency of sexual activity may reduce the likelihood of conception, the chances of a pregnancy to occur are still present. Since older maternal age is known to be an important risk factor in unfavorable pregnancy outcomes,13, 14 these women may in fact have an especially greater medical need to avert further births. Contraceptive pills were the commonest method (14%) in use in the study area, as the study done by Umbelli in Sudan.2 This

Table 1: Descriptive data of live births of 10-49 year old married women in Shiraz

<table>
<thead>
<tr>
<th>Number of Desired Children</th>
<th>Number of live births</th>
<th>Number of male births</th>
<th>Number of female births</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2-3</td>
<td>3</td>
</tr>
<tr>
<td>Number of users</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>0</td>
<td>138</td>
<td>10.8</td>
<td>138</td>
</tr>
<tr>
<td>1</td>
<td>306</td>
<td>24.4</td>
<td>306</td>
</tr>
<tr>
<td>2</td>
<td>218</td>
<td>17.3</td>
<td>218</td>
</tr>
<tr>
<td>3</td>
<td>253</td>
<td>20.1</td>
<td>253</td>
</tr>
<tr>
<td>Non-users</td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
</tr>
<tr>
<td>0</td>
<td>14</td>
<td>5.2</td>
<td>14</td>
</tr>
<tr>
<td>1</td>
<td>53</td>
<td>19.2</td>
<td>53</td>
</tr>
<tr>
<td>2</td>
<td>179</td>
<td>64.2</td>
<td>179</td>
</tr>
<tr>
<td>3</td>
<td>33</td>
<td>11.8</td>
<td>33</td>
</tr>
</tbody>
</table>

Table 2: Contraceptive methods used by study participants

<table>
<thead>
<tr>
<th>Method</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubectomy</td>
<td>352</td>
<td>17.6</td>
</tr>
<tr>
<td>Vasectomy</td>
<td>168</td>
<td>8.4</td>
</tr>
<tr>
<td>DMPA ampoule</td>
<td>22</td>
<td>1.1</td>
</tr>
<tr>
<td>Ciclofem ampoule</td>
<td>8</td>
<td>0.4</td>
</tr>
<tr>
<td>Condom</td>
<td>406</td>
<td>20.3</td>
</tr>
<tr>
<td>Interrupted intercourse</td>
<td>538</td>
<td>26.9</td>
</tr>
<tr>
<td>emergency contraception</td>
<td>70</td>
<td>3.5</td>
</tr>
<tr>
<td>contraceptive pill</td>
<td>280</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>0.2</td>
</tr>
<tr>
<td>total</td>
<td>1712</td>
<td>85.6</td>
</tr>
</tbody>
</table>
might have occurred because of their availability, affordability, repute, and the perception of the users as to contraceptive pills which produce only minor complications, as the study done in Darussalam.\textsuperscript{15}

In similar studies, women mentioned service provider’s incompetence and side effects of contraceptives as barriers to use family planning methods. Similar reasons of unmet need for contraception were also documented by other studies done elsewhere.\textsuperscript{16} While in our study, 51.6% of women used contraceptive methods offered by governmental healthcare centers, 5.4% used private offices and clinics, and 41.8% used methods offered by pharmacies.

Our results showed that the average number of the participants’ desired children was 2.14, with a maximum of 9, a minimum of 0, and the standard deviation of 1.156. Desired fertility, which is the second component that determines unmet need besides contraceptive prevalence, is high in Shiraz.

Thus, at any point in time it may be expected that a considerably large percentage of currently married fecund women would not be using contraception since they want another child.

In comparison with other countries for which data are available, women in Shiraz had a relatively lower level of unmet need. About 4.3% of all currently married women had an unmet need for contraception compared with 11.2% of women in Egypt and 14.2% in Morocco while 35% of currently married women in SNNPR (Southern Nations, Nationalities, and Peoples' Region) had unmet need for family planning in 2000 and this has slightly increased to 37.4% in 2005.\textsuperscript{6} On the other hand, this shows a remarkable decrease as compared with the percentage of unmet need in Fars province and Iran, as released by DHS surveys in 2010 which was reported to be 6.12 and 5.69, respectively.\textsuperscript{20}

Also, in West Africa, unmet need ranged from 16 to 34 percent and in Eastern and Southern Africa, it ranged from 13 to 38 percent;\textsuperscript{21} unmet need for family planning is still high in spite of the high level of knowledge on family planning in Darussalam.\textsuperscript{2}

The 2009 contraceptive prevalence rate (CPR) of 25.4% among married women in Butajira district is comparable to the regional and national CPR of 25.8 and 28.6, respectively in 2011.\textsuperscript{22} It was still much lower than the unachieved target of 60% put for the year 2010.\textsuperscript{23} Moreover, the unmet need of contraception of 52.4% is much higher than 33.8% and 25.3% of the 2005 and 2011 levels for Ethiopia respectively.\textsuperscript{18} Unmet need was estimated 37.4% and 25.0% in the study done by Mekonnen and Worku in 2005 and 2011, respectively.\textsuperscript{24}

Therefore, according to the fact that women in the study area had a relatively lower level of unmet need, family planning counseling is recommended for higher risk women with unmet need in order to keep the descending trend of unmet need and prevention of unwanted and high risk pregnancies in Shiraz.

The main limitation of this study was that the participants’ were reluctant to answer the questions truthfully due to new population policies. Since offering free contraception services for pregnancy prevention are limited, further evaluations are suggested in order to investigate the impact of new population policies on unmet needs for reproductive health.

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