Perception about Birth Spacing among Medical Students and their Societies.

Samoon N.A¹*, Asif M², Awan S.A³, Shaikh Z.A⁴.

Abstract

Objectives: The study aimed to identify the perception about Birth Spacing in Medical Students & society.

Methods: A cross-sectional study was conducted among Medical students of Fourth Year MBBS. A structured questionnaire was developed to cover the research objectives. The dependent variable was the knowledge of Birth Spacing & utilization of contraceptive methods and the socioeconomic variables were the independent variables. Data analysis done using SPSS 17 version.

Results: The results identified the high knowledge level of the participant students regarding the variety of birth spacing methods. Most participants and their families showed acceptance and in favor to the use of contraceptives for birth spacing. They preferred birth interval of 2-3 years. They intended to have from 2 to 4 children. There was a significant increase in contraceptive use among working women, 30 years and older, with a higher level of education, and those having a large number of children. Multiple regression models revealed that the significant determinants of the use of contraceptives were women’s working and education. The study recommended sustained efforts to increase awareness and motivation for proper contraceptive use.

Conclusion: Majority of students and society favors Birth Spacing as it saves the lives of mother and child as well. Health Education and Behavioral change communication strategies regarding the idea of best possible Birth Spacing are the need of the day. Pakistan has its own set of unique problems regarding population explosion, its negative implications and the numerous conglomerates of the problems linked to poverty, increased fertility and down strengthening economy. The associated advantage of the effects of Optimum Birth Spacing (at least three years between births) on both the mother’s health as well as the neonate’s health is unquestionable. We need to focus on this idea in terms of decreasing maternal and neonatal morbidity and mortality.

Recommendations:

- B.S. Need of Curriculum
- Organize program to make family planning information & services widely available
- Have immediate result & cost less than others.
- Strong political commitment to culturally sensitive, FHW visit homes to bring about tremendous increase in F.P. Spouse should be motivated & informed about optimal Birth interval & spacing timings in order to have optimal birth interval by adopting efficient contraceptive method with low failure rate.

Keywords: Birth Spacing, Contraceptives, Birth interval, Mothers, Child, safe motherhood.

Introduction:

Birth Spacing: Interval between onset of sexual relations by a woman and the birth of her first child and intervals between successive births. This includes use of family planning to control birth intervals.¹ They have a high birth rate and a high total fertility rate relative to those of developed countries; however, the last few years have shown a marked drop in both rates.² The use of contraceptives has been recognized as a key element in reducing fertility for all age groups in many developing countries.³⁻⁵ Review of literature shows that the advantages of proper child spacing are enormous, as a high fertility rate has been linked with underdevelopment in developing countries.⁶ Birth spacing has been identified by the World Health Organization as one of the six essential health interventions needed to achieve safe motherhood.⁷ Studies indicate that the total fertility rate of a nation is inversely related to the prevalence rate of contraceptive use.⁸ The overall rapid change in the socio-demographic pattern of the Saudi Arabian community, especially the changes concerned with women’s education and work, will be an important factor in changing fertility beliefs and behaviors with more tendencies to birth spacing and, consequently, the use of the contraceptives.⁹ It is interesting to identify the perception of Saudi women regarding contraceptive use and the socio-demographic values that affect this perception. Such information would help health care managers to evaluate and promote the quality of the provid-

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ed services. This study aimed to indicate answers to the following questions: What knowledge do women have about contraceptives? What are their attitudes towards fertility and their acceptance of contraceptive use? What are the reasons of use and non-use of contraceptives? Is there any correspondence between women’s sociodemographic characteristics, contraceptive knowledge, and use?

Methods:
A Descriptive cross-sectional study was conducted among Medical students of Fourth Year MBBS and their societies. A structured questionnaire was developed to cover the research objectives. The dependent variable was the knowledge of Birth Spacing & utilization of contraceptive methods and the sociodemographic variables were the independent variables. Data analysis was done using SPSS 17 version.

Results:
Our study indicates the result that 75 i.e. all participants were able to know the term Birth Spacing, 96% were aware about convivial, clinical and permanent birth spacing methods in which there were 39(52%) male and 36(48%) female participants which were aware about Birth Spacing methods as well,i.e condom 29(38.7%), safe period (Rhythm methods) 6 (8%), Coitus Interrupts 11(14.7%), I.U.C.D 8(10.7%), H.O.C.P 1(1.3%), Vasectomy 15(20.3%), T.L. 5(6.7%), while knowledge of used Birth Spacing methods i.e. condom 16 (21.3%), safe period (Rhythm methods) 2(2.7%), Coitus Interrupts 3(4%), I.U.C.D 8(10.7%), H.O.C.P 23(30.7%), H.Injs: 6 (8%), Vasectomy 14(18.7%), T.L 3(4%), respondents view on minimal Birth Spacing period reported 60 out of 75, that there were 43(57%) CBAs that showing age group as well with literacy of 34(57.3%), reported no: of children by 32(42.7%), on Birth Spacing use responded 22 (29.3%) out of 30 as using Modern contraceptive method in which 29% are working women, and with family size of 2 children 23(30.7%) and 3 children 11(14.7%) preferring baby boy by 25(33.3%) and baby girl 1 by 16(21.3%), in our study women occupation showed house wives 14(18.7%), teachers with literacy rate of 34(45%) in which majority was graduate females, our respondents showed 43(57.3%) CBAs with major age group of 25 to 30 years i.e. 14(18.7%), using birth spacing method 22 (29.3%) with S.D .728 having coefficient of variation 94.1% with confidence interval 95.7%.

Descriptive Statistics:

| Females use contraceptive method | Valid N (list wise) | 2.2 2 | 8 1 9 107 | 4.86 .489 2.295 5.26 6 |
|----------------------------------|--------------------|------|-------|---------|---------|-------|---------|

Chi-Square Tests

<table>
<thead>
<tr>
<th>Value</th>
<th>df</th>
<th>Asymp. Sig (2 -sided)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Chi-Square</td>
<td>17.679</td>
<td>4</td>
</tr>
<tr>
<td>Likelihood Ratio</td>
<td>20.040</td>
<td>4</td>
</tr>
<tr>
<td>Linear-by-Linear Association</td>
<td>1.168</td>
<td>1</td>
</tr>
</tbody>
</table>

No of Valid Cases

22
Discussion:
Contraceptive use has increased in nearly every country in recent decades. It was interesting to explore the perception and use of contraceptives among Saudi women. The results identified the poor knowledge regarding the simple variety of contraceptive methods. However, in temporary contraceptives Condom and (H.O.C.P) oral contraceptive pills were known to all participants. This could be attributed to the main source of knowledge that is the family members, who share their limited individual experience. This is consistent with other Saudi studies that have reported the popularity of oral pills. We found a limited role of the health workers in providing the information about contraception, which reflects the conservative culture of the community and the power of the family. Our study showed that almost all 75 (100%) participants are well oriented about Birth Spacing & use of contraceptives, recent population surveys have reported that in 37 out of 60 developing countries surveyed, 95% of married women knew at least one contraceptive method (modern or traditional). The knowledge gap restricts women’s choice for the use of contraceptive. The international contraceptive knowledge and awareness study conducted among 7,000 women aged 16 to 40 years from 14 countries, has revealed the failure of women to take advantage of new contraceptive methods, their contraceptive knowledge rarely stretching beyond the pill. Most importantly, the survey revealed that all women benefit from full information from their doctors about every contraceptive option.

Our study signified i.e. 45(61%) responded in which 17 (22%) & 20(26.7%) simultaneously were in favor of 2 to 3 years interval of birth spacing, while a period from 2-3 years was the preferred birth interval. This period coincides with the Islamic teachings regarding the birth rate. Few recent studies have discussed the birth intervals among the Saudi population and have concluded similar results. The first study was a house-to-house survey conducted in a rural area north west of Riyadh in the year 1995, and reported the existing mean birth interval of 31.2±10.1 months that increased with the increasing age of the women. Second study, conducted in AlKhobar, the urban Eastern Region, reported that the existing mean preceding and succeeding birth intervals of studied children were 26.2 and 28.2 months, respectively. A birth interval of 2-3 years was indicated as the preferred interval by another study. One study that used Demographic and Health Survey (DHS) program data from 18 countries found that children born 3 years or more after a previous birth were healthier at birth and more likely to survive at all stages of infancy and childhood through age five. Our study specified family size of 2 children 23(30.7%) and 3 children 11(14.7%) preferring baby boy by 25(33.3%) and baby girl 1 by 16 (21.3%). On the other studies it seem that responded to the question about the number of children they intended to have, the majority indicated to have at least 5 and up to 10 children, which means that the woman would not stop having children throughout her reproductive life. Although they accept the concept of birth spacing and the use of contraceptives in order to have the desired interval, this does not mean having fewer children. This high fertility attitude is attributed to the indigenous culture in favor of large families it also coincides with the Islamic religion which rejects the concept of limiting the family size. However, globally, a growing percentage of married women want to stop having many children; the family size that women consider ideal is falling.

Our results show, using birth spacing method 22(29.3%) with S.D .728 having coefficient of variation 94.1% with confidence interval 95.7% which is matching with the national figure of Pakistan whose CPR is 28%, while in other study of 40% of the participants using or have used modern contraceptives for at least one continuous year, which is a higher percentage of concepive use than the recent reports about Saudi Arabia indicating 31.8% for all types use, and 28.5% for use of modern contraceptives. This study’s higher rate might be attributed to the population sample that was selected on the community.

**Table 1**

<table>
<thead>
<tr>
<th>Females using Birth Spacing in Society</th>
<th>t</th>
<th>d</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>425</td>
<td>2</td>
<td>0.000</td>
<td>1.267</td>
<td>1.10</td>
<td>1.43</td>
</tr>
<tr>
<td>9.9</td>
<td>41</td>
<td>2</td>
<td>0.000</td>
<td>4.864</td>
<td>3.85</td>
<td>5.88</td>
</tr>
<tr>
<td>10.</td>
<td>970</td>
<td>7</td>
<td>0.000</td>
<td>3.987</td>
<td>3.26</td>
<td>4.71</td>
</tr>
</tbody>
</table>

**Figure 1**

Minimum Birth Spacing Period should in Students view

**Figure 2**

Minimum Birth Spacing Period should in Students view
basis rather than the official governmental data. The use of contraceptives is free among the Saudi Arabian population who obtain a different variety of contraceptive health service. Moreover, the contraceptives are available over the counter in the Kingdom. This might add to underestimation of the realistic contraceptives use. However, the user’s rates of the studied participants were still lower than the world reported rates (63.1 %) and lower than those reported in developed countries (67.4 %). Children are a blessing from God was the main reason for the refusal of contraceptives use. This reflects the impact of the Islamic culture; however, nearly one third of the participants raised the question of the impact of contraceptives use on women’s health and marital life, which directs our attention to the misconceptions regarding contraceptives in the culture. Compared with nearby Islamic Arab countries which are supposed to be the same culture, there was a variation in the use of contraceptives. The majority showed a higher user rate than Saudi Arabia, ranging from 43.2% in Qatar, 58.3% in Syria and 61.8% in Bahrain; only two countries reported lower rates: United Arab Emirates (27.5%) and Yemen (23.1%). This variation could be attributed to the variation in the local culture of these countries towards contraceptive use.

Our results depicts that 22(29.3%) users of Modern Birth Spacing methods were distributed as condom 3(4%), H.O.C.P 7(9.3%), H. Injectable 7(9.3%), I.U.C.Ds 2(2.7%), T.L 3(4%), concerning the ranking of the most commonly used methods, our results are consistent with the reported data about Saudi Arabia. In which oral contraceptives came on the top followed by intrauterine devices (IUDs), female sterilization and the use of the male condom. However, female sterilization was not reported in this study. In developing countries, four modern contraceptive methods, oral contraceptives, IUDs, Injectable, and female sterilization are the most widely used methods among married women.

Concerning the male use of contraceptives, the results showed a discrepancy between the husbands’ acceptance of the birth spacing and the low use of male contraceptives (condoms), which could be attributed to the traditional cultures or may reflect underreporting due to shy users. In developing countries, condoms and male sterilization are among the least used of all contraceptive methods. The reverse is true in developed countries, in which condoms are the major method of family planning. However, the recent United Nation’s report (2007) about contraceptive use worldwide showed more use of condoms among the Saudi population and to be the second most common used method after pills, which matches the trend of developed countries.

There was a strong association between the participants’ age (25 to 30+ years) and the use of contraceptives. This could suggest that the mother may be satisfied by the number of children she has had and feels that she needs more spacing for preserving her health. The use of modern contraceptive methods has been successfully promoted for child spacing and limiting family size among older married women with children in developing countries. The results of this study were also consistent with published reports showing more contraceptives use among women at the higher economic level. Significantly more use of contraceptives was reported by the participants with higher education, better knowledge, and those working. It was confirmed that education generally exerts a negative influence on fertility; secondary analyses of the data of one Egyptian Demographic Health Survey (EDHS) documented the negative impact of maternal lack of education on the low use of contraceptive services. Through education, women have acquired the cognitive and communication skills that shape their attitudes, family style and interactions with the modern world. These appeared in a strong association between the use of services and education. The secondary analysis of a sub-sample of a national demographic survey (Zaire, 1999) concluded that age at marriage and a woman’s education are apparently the most important determinants of low fertility behavior. Women’s work is strongly linked to the contraceptives use. A rapid change in the community in the last decade with great expansion in women’s education, and consequently women’s work could explain the evolution of these two variables as the main determinants of contraceptive use.

Conclusion:
Majority of students and society favours Birth Spacing as its saves the lives of mother and child as well. Health Education and Behavioral change communication strategies regarding the idea of best possible Birth Spacing are the need of the day. Pakistan has its own set of unique problems regarding population explosion, its negative implications and the numerous conglomerates of the problems linked to poverty, increased fertility and down strengthening economy. The associated advantage of the effects of Optimum Birth Spacing (at least three years between births) on both the mother’s health as well as the neonate’s health is unquestionable. We need to focus on this idea in terms of decreasing maternal and neonatal morbidity and mortality.

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