

Contraceptive knowledge and practices in two districts of Sindh, Pakistan: A hospital based study

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Abstract

Objective: To assess contraceptive knowledge, practices, availability and accessibility of family planning services and reasons for non-utilization of family planning services in interior of Sindh province, Pakistan.

Methods: A hospital based cross-sectional survey was conducted in 2003. In person interviews were carried out with attendees of Gynaecology and Obstetrics out patient clinics of two districts hospitals in Tando Allahyar and Jamshoro. Data was collected regarding socio-demographic features, reproductive profile, availability and accessibility of family planning services and reasons for non-use of contraception.

Results: Current contraceptive practice at the time of survey was 29%. However, use of family planning was more in district Tando-Allahyar as compared to district Jamshoro ($p < 0.001$) inspite of similar socio-demographic and reproductive profile. Mean age of marriage of wife and husband was 17.73 ± 3.8 and 23.82 ± 5.8 years respectively. In both districts mean parity and number of living children was around 4. Contraceptive use increased with increasing age of mother, parity and number of living children. Tubal ligation (9.5%) and condoms (9.0%) were the most popular methods of family planning. Mass media was the primary source of information in approximately 72.5% of the study population. Fear of side effects was the main reason given by non-users.

Conclusion: The current contraceptive practices are not at the expected levels. Community health workers have provided good services at raising awareness (JPMA 58:254;2008).

Introduction

The world population has been stabilized in the developed world but Pakistan, which is the 6th most populous country of world¹, still grapples with the control of the fast growing population. According to the Population Reference Bureau 2005², the estimated population of Pakistan is 162.4 million and is expected to be 295 million in the year 2050. Thus it is difficult for the state to provide basic human facilities to its people i.e. food, clothing, housing, health and education. Family planning promotion is the priority for the government of Pakistan in order to keep pace between socio-economic growth and population expansion.^{3,4}

The rationale of this study was to find out the current contraceptive practices in women belonging to two districts of Sindh and to highlight the importance of availability and accessibility of family planning services on contraceptive usage. Non-users of contraception were evaluated to determine the reasons for lack of family planning. By this study, we hoped to help health planners in informed decision-making regarding strengthening family planning services in Pakistan.

Patients and Methods

This hospital based cross sectional survey carried out in the year 2003 at the gynaecology and obstetrics out patient

clinics (OPD) of two health facilities i.e. Liaquat University Hospital Jamshoro and Civil Hospital Tando-Allahyar, located at Jamshoro and Tando-Allahyar districts respectively. At each district, a non-probability, convenience sample of 200 was selected from women of reproductive age group, attending the OPD either as patients or their attendants.

Interviews were conducted, after obtaining an informed consent. A structured questionnaire designed in the local languages was used to obtain information on socio-demographic features, reproductive profile, contraceptive practices, availability and accessibility of family planning services. Reasons for non-utilization of contraceptive services were also asked from the respondents. The data was entered and analyzed on SPSS version 11. Chi-square test has been applied where necessary for significance testing.

Results

About 400 women of reproductive age group (15-49 years) were interviewed. Current contraceptive practice was 29.0%. Contraceptive use increased with increasing age of mother, parity and number of living children in both the districts.

The socio-demographic features of women and their spouses are shown in Table I. Half (50.0%) of the women were in age group of 21-30 years while most (48.0%) of the

husbands were in age group of 31-40 years. The Muslims made up (95.0%) of the subjects while Hindus and Christians constituted 5% of population. Illiteracy was the common feature of the study population; however husbands had higher educational background than their wives. A greater part (76.0%) of study population belonged to low income group earning less than 5000 Pakistani rupees per month (equivalent

Table 1. Demographic Features of Couples attending the out patient clinics of Civil Hospital Tando Allahyar and Liaquat University Hospital, Jamshoro.

Wife Features	Tando- Allahyar (n=200)	Jamshoro (n=200)	All (n=400)
Age (years)			
15 - 20	38 (19%)	68 (34%)	106 (26.50%)
21 - 30	106 (53%)	94 (47%)	200 (50.00%)
31 - 40	38 (19%)	22 (11%)	60 (15.00%)
41 - 50	18 (09%)	16 (08%)	34 (08.50%)
Education			
Illiterate	132 (66%)	126 (63%)	258 (64.50%)
Primary school	16 (08%)	36 (16%)	52 (12.00%)
Middle school	4 (02%)	0	4 (01.00%)
High school	32 (16%)	12 (06%)	44 (11.00%)
College	16 (08%)	30 (15%)	46 (11.50%)
Occupation			
Housewives	194 (97%)	194 (97%)	388 (97.00%)
Working women	6 (03%)	6 (03%)	12 (03.00%)
Husband's Features			
Age (years)			
15 - 20	0	2 (01%)	2 (00.50%)
21 - 30	64 (32%)	84 (42%)	148 (37.00%)
31 - 40	108 (54%)	84 (42%)	192 (48.00%)
41 - 50	28 (14%)	24 (12%)	52 (13.00%)
50 and above	0	6 (03%)	6 (01.50%)
Education			
Illiterate	92 (46%)	74 (37%)	166 (41.50%)
Primary school	20 (10%)	20 (10%)	40 (12.00%)
Middle school	6 (03%)	2 (01%)	8 (02.00%)
High school	44 (22%)	36 (18%)	80 (20.00%)
College	36 (18%)	58 (29%)	94 (23.50%)
University	2 (01%)	2 (01%)	4 (01.00%)
Monthly Income			
< Rs. 2000	64 (32%)	46 (23%)	110 (27.50%)
Rs.2000 to Rs.5000	82 (41%)	112 (56%)	194 (48.50%)
> Rs.5000	54 (27%)	42 (21%)	96 (24.00%)
Religion of Couple			
Muslim	186 (93%)	194 (97%)	380 (95.00%)
Christian	0	6 (03%)	6 (01.50%)
Hindu	14 (07%)	0	14 (03.50%)

Table 2. Source of Knowledge, Availability and Accessibility of Family Planning Services.

Variables	Tando-Allahyar (n=200)	Jamshoro (n=200)	All (n=400)	P- value
Source of Knowledge				
Mass media	142 (71%)	148 (74%)	280 (72.50%)	Non Significant
Health professionals	78 (39%)	70 (35%)	148 (37.00%)	Non Significant
Lady health workers	106 (53%)	70 (35%)	176 (44.00%)	χ^2 6.575 <0.005 Significant
Family planning clinics	28 (14%)	26 (13%)	54 (13.50%)	Non Significant
Neighbors, relatives, friends	86 (43%)	124 (62%)	210 (52.50%)	χ^2 7.238 <0.005 Significant
Availability*				
Government hospitals	136 (68%)	102 (56%)	238 (62.00%)	Non Significant
Private hospitals	70 (35%)	56 (28%)	126 (31.50%)	Non Significant
Lady health workers	78 (39%)	54 (27%)	132 (33.00%)	Non Significant
Family planning clinics	56 (28%)	32 (16%)	88 (22.00%)	Non Significant
Medical stores	96 (48%)	68 (34%)	164 (41.00%)	Non Significant
Accessibility**				
0 - 4 km	130 (65%)	102 (51%)	232 (58.00%)	Non Significant
4 - 14 km	24 (12%)	32 (16%)	56 (14.00%)	Non Significant
14 km or more	26 (13%)	36 (18%)	62 (15.50%)	Non Significant
Not known	20 (10%)	30 (15%)	50 (12.50%)	Non Significant

* Availability of family planning services.

** Distance from residence to nearest facility.

to US dollars 81.96).

Women belonging to both the districts got married in their teens (mean age at marriage 17.73 ± 3.88 years) and on the average, six years younger than their husbands (mean age at marriage 23.83 ± 5.80 years). Mean parity and number of living children were approximately four. Generally, at the time of the survey, 29.0% of respondents were practicing contraception, however use of family planning was greater in patients / attendants presenting to Civil Hospital, Tando-Allahyar (40.0%) as compared to Liaquat University Hospital, Jamshoro (18.0%) ($p < 0.001$). Ninety six percent of the users were practicing family planning with the co-operation of their husbands and in-laws. Figure, demonstrates a wide gap between the knowledge and practice of different family planning methods. All the participants were aware of the methods of contraception, however, use of these methods was around 9.0%. The most common method used was tubal ligation, (9.5%) followed by condoms. Contraceptive injections were used only by women presenting at Tando-Allahyar hospital, which constitutes (9.0%) of the methods. Vasectomy (35.5%) was the least known method and was never practiced by them. They also denied use of induced abortion.

Table 2 shows the source of information, availability

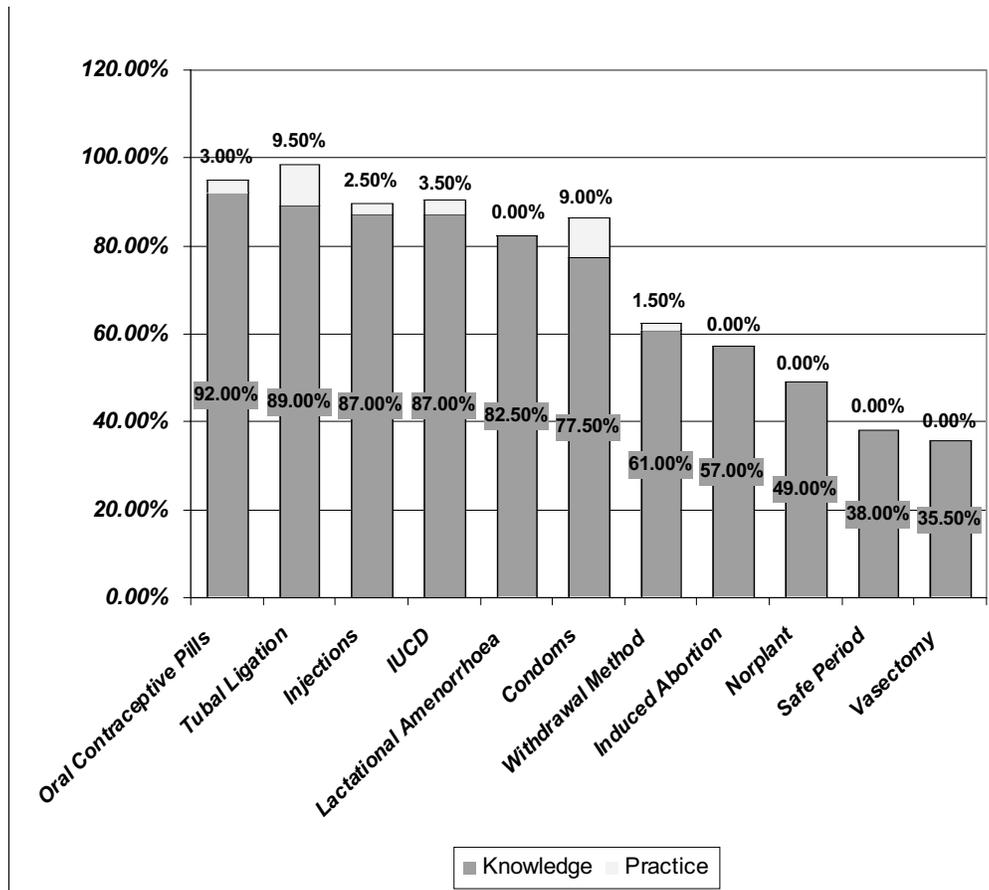


Figure. Knowledge and practice of different contraceptive methods.

and accessibility of family planning services. Mass media provided information to nearly two thirds of study population. Generally, Lady health workers created awareness in 44.0% of population however their role was markedly greater (53.0%), in District Tando-Allahyar than in district Jamshoro (53.0%). Regarding provision of family planning services, government hospitals and Lady Health Workers were the major care provider. The percentage of women that lived within 0-4 km of family planning facility was 58.0%, although this figure was higher (65.0%) in Tando-Allahyar district than in district Jamshoro.

The major reasons for non-use of family planning were fear of side effects (38.0%), followed by intention to have a child (22.0%). Other reasons were religious constraints (7.0%), method failure (5.0%), intention to have a son (4.0%), pressure from husband / in-law's (3.0%), whereas 13.0% of participants gave no reason.

Discussion

Pakistan incorporated family planning program in public sector in 1960s realizing its importance in population

growth control. Despite far-sightedness of Pakistani government, population control is still a dream to come true. Contraceptive prevalence rate (CPR) of 28% is very discouraging⁵, if we compare it with CPR of neighboring countries as 48% in India, 58% in Bangladesh and 70% in Srilanka.²

Current contraceptive use in this study was 29%, comparable to CPR of 28% in district Khairpur⁶ and 28% in Lahore.⁷ This study points towards low literacy rate and poor socio-economic status of couples, which could be the reasons for the low CPR. Relationship of low CPR with poverty and illiteracy is a well-acknowledged fact. Low income was found as a barrier for modern contraceptive method use in Pakistan contraceptive demands survey.⁸ Similarly, Saleem and Bobak in the secondary analysis of national reproductive health and family planning survey 2000, found that women's education was the key factor in raising family planning practices.⁹ Women's economical and educational status in Karachi was reported to be associated with rapid fertility decline.¹⁰

Reported singulate mean age of marriage in Pakistan was 27.1 years for males and 22.7 years for females with age

difference of 4.4.¹¹ Results of our study were different where mean age at marriage for both male and female was low with age difference of 6.1 years. Unfortunately contraceptives in teenagers was less in contrast to advanced countries.¹² Thus there is need to promote and accelerate family planning measures in youngsters to decrease birth rate. A positive correlation was observed between contraceptive uptake, rise in parity and number of living children, in line with other Pakistani studies.¹³

Awareness and knowledge of different contraceptive methods is the key point in the adaptation of family planning and making a choice for a particular method. Although nearly all the respondents knew at least a single method of contraception, current contraceptive practice was far from the ideal. Commonly used methods were female sterilization and condoms followed by IUCD, consistent with the findings of Pakistan fertility and family planning survey 1996-1997.¹⁴ Comparative analysis between two studies depicts the rise in the use of female sterilization and condoms from 6% to 9.5% and 4.2% to 9% respectively while the use of IUCDs remained around 3.5% in both studies. Pakistani women often rely on female sterilization after completion of desired family size¹⁵ as observed in our study. A point worthy to note is that condom use equates female sterilization in both the districts. Thus reflecting increased adaptation of temporary methods of family planning. Initiation of condom social marketing programme by the government, affordable prices and door step availability have contributed significantly to the promotion of condom use.¹⁶ Rise of condom use signify positive male attitude towards family planning, who were always dominant in decision making pertaining to women's fertility and birth spacing in Pakistan.¹⁷ Mass media campaigns have played crucial role in promotion of family planning in this study, which is already well-established world wide.¹⁸

There is no doubt that provision of family planning advice and supplies at the doorstep of women increases contraceptive use.¹⁹ This was not evident from our study. Douthwaite and Ward in national evaluation of lady health workers programme found that lady health workers succeeded in raising contraceptive uptake in rural Pakistan.²⁰ Another national survey revealed that married women living within 5km of two community-based workers were significantly more likely to use modern reversible methods than those with no access.²¹

An interesting feature of this study is increase contraceptive usage in patients / attendants from district Tando-Allahyar as compared to district Jamshoro ($p < 0.001$) despite similar socio-demographic and reproductive profile of the couples. This may be attributable to active role of lady health workers, increased availability and accessibility of family planning services in district Tando-Allahyar and

improved quality of care. Numerous studies have demonstrated a strong association between quality of care and uptake of contraceptive methods.^{22,23}

Fear of side effects was the most common reason given by the non-users, reflecting poor knowledge regarding, use, efficacy and safety of contraceptives, a weakness highlighted in a recent study from Karachi.²⁴

Conclusion

It is evident that the current contraceptive practices are not at the expected levels. Community health workers have been successful in the promotion of modern methods of contraception.

Recommendation

Female education needs to be improved. More media campaign should be intensified particularly in regional languages. More intensive training of community health workers is essential to improve provider-client interaction.

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