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ORIGINAL ARTICLE

Decline in contraceptive use- Is the health care provider to blame, too?

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ABSTRACT… Objective: To assess what impact does primary physician counseling have on contraceptive uptake. **Study Design:** Cross-sectional Comparative study. **Setting:** Study was done in three semi – government hospitals in three different cities. **Period:** April 2022 to May 2022. **Material & Methods:** Patients in outpatient clinics of the hospitals were given a questionnaire by simple random sampling. It was to assess women for their current use of contraception based on the source of their information about contraception. These groups were compared with each other for their contraception uptake. Associations between education, parity, working status and contraception use was also sought. The sample size was 175 women. **Results:** Out of 175 participants, 74 (42.3%) were practicing contraception at the time and 53 (30.3%) did not know about contraception. Reasons for not using contraception included side effects 71 (40.6%), Doctor never told them 56 (32%) and husband not willing 50 (28.6%). More women were of parity 4 or less (58 vs 34) and more working women used contraception (16 vs 6). The difference was not statistically significant. Illiterate women used contraceptives less. With education, there was significantly more use (38 vs 10) $p < 0.001$. Most Women knew about contraception from neighbor/ relatives 57 (32.5%) and 41 (23.4%) did not practice any method. A doctor/health professional was the source in 37 (21.2%), only 12 (6.9%) did not adopt contraception with $p = 0.003$. There was a strong statistical significance. **Conclusion:** There was a strong association between the physician counseling and contraceptive use. There is a strong need of regular, persistent contraceptive advice during each antenatal visit to individualize a contraception plan to suit a couple.

Key words: Contraception, Health Care Provider, Patient Directed Counseling.

INTRODUCTION

Contraception is an age old concept. Earliest mention is its use amongst ancient Egyptians in 1850 BC.[1] but the methods changed. They range from the oldest[2] like, coitus interruptus to the riskiest[3] like sponge or lemon inserted in the vagina, to the most modern and effective. This just shows the importance and desire of society to control reproduction. Despite so many ways now being available[4], their use has, however, plateaued.[5] This trend is present not only in poorly resourced countries but in developed countries too.[6] The reasons are varied. Recently a thinking is developing that health care provider's contraceptive counselling[7] may improve the uptake. In a country like Pakistan where doctor patient ratio is low[8], this maybe one major reason for the decline in contraception usage. This study is done to assess what is the effect of lack of physician counseling. Khyber – Pakhtoon Khawa (KPK) province is relatively traditional with deep rooted customs[9] so as an assessment of contraceptive uptake, it can provide some answers. The hospital under study were located in KPK.

MATERIAL & METHODS

This cross sectional comparative study was carried out in three different hospitals' obgyn outdoor clinics from April to May 2022. These hospitals were government hospitals located in Risalpur, Mardan and Peshawar cities of Khyber –Pakhtoon- Khawa province of Pakistan. Hospital Ethical review Board permission was taken and consent obtained from the patients prior to their participation. The IERB number is 11. The patients were sampled via random convenience sampling. All married women of reproductive

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age group, of any education level, of any parity, whether in a job or homemakers were included in the study. Nulliparous, widowed, unmarried, those with any contraindication to any form of contraceptives available in the country and those who wanted permanent methods were excluded. Their responses were collected via survey questionnaires. The women were given privacy from accompanying relatives. Their identities were not asked. Sample size was calculated by using WHO sample calculator, using 95 % confident level, 5% marginal of error and report. The prevalence of contraception in KPK is 12.7%.[10] A total of 176 women were questioned.

The variables were age, education, parity and working status of the patient. Descriptive, bivariate and multi-variate analyses were done to look for a link between patient characteristics and their choices, the source of their contraception knowledge and their uptake. Outcomes were dichotomized depending on the associations. Data was analyzed by using Statistical Package for the social sciences (SPSS) version 23.00. Mean ± SD was calculated for continuous variable. Frequency and percentage was calculated for categorical variables. Pearson's Chi square test were used. The p value ≤ 0.05 was considered significant.

RESULTS

A total of 175 married females were included, the mean age of the participants was 33.03 ± 4.80 years range from 22 to 46 Years,68 (38.9%) females were illiterate, 21 (12%) primary/ middle passed, 38 (21.7%) Secondary passed, 48 (27.4%) were higher educated, 92 (52.6%) females were para 1 to 4 , 83 (47.4%) females were para > 4 , 22 (12.6%) females were working and 153 (87.4%) were home maker, 74 (42.3%) females practiced contraception at the time and 84 (48%) ever practiced contraception. 37(44%) females used traditional method while 16 (19%) used short term method and 31 (37%) used long term method. 53 (30.3%) females did not know about contraception, 15 (8.6%) had knowledge of contraception from TV, 13 (7.4%) known from social media, 37 (21.1%) knew from Doctor/LHV and 57 (32.6%) knew from neighbor/relatives. Reason of not using contraception included 71 (40.6%) who were afraid of side effect followed by 56 (32%)who said Doctor never told them about contraception and 50 (28.6) said husband not willing , as shown in Table-I.

There was no significant association of contraception use with Parity (p=0.0903) and Working/Home Maker female's (p = 0.113) but education had significant association (p < 0.001) shown in Table-II. Where they acquired knowledge about contraception and contraception use also had significant association.

57 (32.5%) females had knowledge about Contraction from neighbour/relatives. Out of those women, 41 (23.4%) did not take up contraception. 37 (21.2%) had knowledge about contraction by doctor/LHV. Out of these women, 12 (6.9%) females did not practice contraception. There was statistically significant difference p = 0.003 as shown in Table-III.

DISCUSSION

Pakistan population grew from 75 million (census 1951) at the time of independence to over 220 million (UN Data 2021).[11] There is no denying that Pakistan needs contraceptives use. While it grew steadily from 06% in 1969[12] to 35.4% in 2013[13], it has declined to 34%.[13] The rate of modern contraceptive use is the lowest in the subcontinent.[14] While the prevalent reasons of low use of contraceptive are social, economic and cultural[15], some new narratives are just coming up into professional discussion. Patient centered contraceptive advice by health professionals is now being advocated.[16] In our part of the world, the contraceptive and family planning services are usually run by doctors and nurses or Lady health visitors. This study was done to see what stops women from practicing contraception despite apparent contraception counseling sessions with the health professionals in family planning centers.

Our study included 175 patients. There were from various backgrounds. While there were expected results, some were unexpected. Out of the total, n=74 (42.3%) currently were practicing

contraception and n= 122 (69.7%) knew about the concept of contraception. This is in comparison with Siddiqui M, et al[17] study in Karachi where 93.4% knew about contraception and only 49.7% were currently practicing contraception. Clearly, awareness was more in Karachi than in cities of KPK (where this study is conducted), but women using contraception currently, was very similar.

Study Parameters	N (%)
Age (Mean±SD)	33.03 ± 4.80 years
Education	
Illiterate	68 (38.9)
Primary	21 (12)
Secondary	38 (21.7)
Higher	48 (27.4)
Parity	
Para 1 – 4	92 (52.6)
More than 4	83 (47.4)
Status	
Working	22 (12.6)
Home Maker	153 (87.4)
Practice Contraception at present	
Yes	74 (42.3)
No	101 (57.7)
Ever Practiced of Contraception	
Yes	84 (48)
No	91 (52)
Contraception ever used	
Traditional method	37 (44)
Short term modern Method	16 (19)
Long term modern Method	31 (37)
Known about contraception	
Yes	122 (69.7)
No	53 (30.3%)
Source	
TV/ Radio	15 (8.6%)
Social Media	13 (7.4%)
Doctor/LHV	37 (21.1%)
Neighbour/relatives	57 (32.6%)
Reasons for not using contraception	
Afraid of Side effects	71 (40.6%)
I don't agree	24 (13.7%)
In-Laws don't agree	16 (9.14%)
Husband not willing	50 (28.6%)
Doctor/Health professional didn't mention contraception ante/ post partum	63 (36%)
Family Planning Centre too far	11 (6.3%)
Religious concern	15 (8.6%)
Only female offspring	10 (5.7%)

Table-I. Demographic and reproductive variables

Baseline Characteristics	Contraction n (%)		P-Value
	Yes	No	
Parity			
Para 1 – 4	58 (33.1)	34 (19.4)	0.093
More than 4	41 (23.4)	42 (24.0)	
Status			
Working	16 (9.1)	6 (3.4)	0.113
Home Maker	83 (47.4)	70 (40)	
Education			
Illiterate	26 (14.9)	42 (24.0)	< 0.001
Primary	11 (6.3)	10 (5.7)	
Secondary	24 (13.7)	14 (8.0)	
Higher	38 (21.7)	10 (5.7)	

Table-II. Association of contraception used with parity, Working/Home maker and education

Baseline Characteristics	Contraction Practices n (%)		P-Value
	Yes	No	
Source			
TV/ Radio	4 (2.3)	11 (6.3)	0.003
Social Media	6 (3.4)	7 (4)	
Doctor/LHV	25 (14.3)	12 (6.9)	
Neighbor/relatives	16 (9.1)	41 (23.4)	

Table-III. Association of contraception practices with

Of the methods, n= 37(21%) ever used the traditional method of coitus interruptus. Siddiqui M et al[17] found 28% of their cohort used traditional method. Compared to this, 1 in 10 women in Pakistan used traditional methods in a report by Kerry L. D. MacQuarrie and Azra Aziz in 2018.[18] However, the modern method users were n=47(26.9%) which is very similar to the report by Kerry LD. MacQuarrie and Azra Aziz where 1 in 4 married women used modern contraception. The Population Council study in 2016 with support from the Bill and Melinda Gates Foundation[19], it seems discontinuation rates are especially high for the intrauterine device (IUD), while use of hormonal methods is either stagnant or declining. In contrast, the cohort of the study drop out rate was not high as is evident by the ever users being n=84 compared to current users at n=74. More women who had 4 or less children were using a contraception method but the difference was not statistically significant. Working women were more likely to use a contraception but the difference was not statistically significant. Education influence on contraception use was significant at p value of> 0.001. These statistics

compares to study by Siddiqui M et all[17.]

The result to ponder is that n= 122 (67.9%) knew about contraception but 48 i.e. 39% of them still chose not to use any method. This compares with Siddiqui M.et all[17]where 216 (46%) of them still chose not to use any method despite 93% having knowledge of contraception. The reason most n=71 (40.6%) mentioned is side effects. This is the reason also in given Pakistan Population council reports[20] and international population reports.[21,22] The reason following close in our study is the spouse n= 50(28.4%) {in laws n= 20 (11.6%)}do not agree to the use. This result is also corroborated by these Pakistani and international reports.[20,21,22] Conventionally, religious concerns and need for male offspring are thought to be the reason for non-use of contraception but our study finds such concerns to be not major ones. Surprisingly, only n=15 (8.6%) and n=10 (5.7%) respectively voiced this as their reason. The answer to why women don't use contraceptives despite a need, may lie in another reason. A number of women n= 56(32%) said that they did not use any method because the doctor/health professional never told them about using any. This thought is also supported by the result that those women who were informed by their health professional about contraceptive were most likely to practice it. Of the total that were informed (37) by a health professional, 25 (67.5%) chose to adopt a method and out of total that got information from neighbors and friends (57), only 16(28%) did and 41 (71.9%) didn't take up contraception. The result was statistically significant with p value 0.003. The common denominator for less use of contraception seems to be inadequate information. Siddiqui et all noted that 57.9% of the women never consulted a health professional for family planning despite being in urban setting and having access to health care. Its perhaps , also important to note only 6.3% thought family planning center was too far away. So maybe, women need doctors or health professionals at their door step. MARVI rural contraceptive program is part of such a drive. In urban settings, family planning services in Pakistan are separate organizations which are not integrated in the mainstream hospital obstetrics. Of late, another approach of patient -centered contraceptive advice is being considered.[24]

First, the women feel part of the decision making. This is more likely to cause continuation of a particular chosen method They will feel empowered and responsible about their bodies. Secondly, the side effects are more readily discussed and in a good patient centered counseling session, a second option should also be chosen in case the first isn't working for the patient.[24] The question arises, how to best incorporate health professional/doctor contraceptive advice sessions with women health to get better results. The antenatal clinics are an already working mechanism where patient/ doctor meet. Odelola O et all[25] in Nigeria however, came to the conclusion that a separate antenatal purely contraceptive meeting with doctor made no difference. The idea is to have a continued contact with the obstetrician or health professional to address all questions and misgivings about contraceptives along with antenatal care as the pregnancy progresses. This can only be achieved if contraceptive advise is incorporated in antenatal care along with the 6 point care advised by WHO. So that in puerperium, a method is already started and second method is in place, in case the first method isn't tolerated. The woman has to be empowered and the health professional has to hear her.

CONCLUSION

Contraception uptake rate is declining or at best is stagnating worldwide and in Pakistan in particular. Pakistan contraception use rate is low as compared to rest of the world and it's a prevailing thought that another approach is needed. Lack of correct information and unmotivated health care providers appear to be one strong reason for the stagnation. Continuous contact of the patient with the health provider during each antenatal visits with regular patient centered contraceptive advice can be the answer.

LIMITATION

The study was in selected hospitals and in a particular section of the society. Side effects of contraceptives were not explored. Permanent

forms of contraception were not considered.

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3	Umbreen Akram	Data collection, introduction and methodology writing.	
4	Sumaira Khan	Daat collection, References and ethical committee permission.	
5	Joodi Kizilwarda Akhtar	References, proof reading and discussion writing.	
6	Shahzadi Neelam	References, Methodology and discussion proof reading.	