

CONTRACEPTION;

AWARENESS, KNOWLEDGE AND MISCONCEPTIONS REGARDING THE COMBINED ORAL CONTRACEPTIVE PILL AMONGST PAROUS WOMEN

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ABSTRACT... Background: The uptake of oral contraceptive pill as a method of contraception is very low in Pakistan with a high discontinuation rate. This study aimed to assess the knowledge of contraception seeking, married women in Pakistan about the oral contraceptive pill. **Setting:** Gynaecology clinic and family planning department Military hospital Rawalpindi. **Period:** 1st Oct 2011 to 31st Dec 2011. **Methods:** 102 eligible women completed a cross-sectional survey that consisted of a detailed questionnaire which was completed by the interviewer to assess the womens' level and source of knowledge concerning the risks and benefits of the oral contraceptive pill. **Results:** 102 eligible women participated in the survey. Mean age was 33 and mean parity was 4.01. Majority belonged to low income group 42(41%) and 33% had a fair socioeconomic status. Majority 35(34%) had low education level and 11(10.8%) were graduate or more. Majority 49(48%) scored intermediate on knowledge score with 33(32.5%) scoring poorly. Overall only 15% were aware of cancer preventing powers and 70% of non contraceptive virtues of the pill. Misconception rates were particularly high in this study sample with 46(45%) having high misconception scores. 96.6% of the respondents were convinced that pill leads to obesity. 58(57%) of the overall subjects felt that pill use could be considered but lack of self efficacy could lead to problems with compliance. **Conclusions:** Knowledge about pill efficacy and advantages was low and misbelieve regarding safety and side effects was high. More education regarding safety and health benefits is needed to improve acceptance and compliance.

Key words: Oral contraceptive pill, family planning, attitude, misconceptions.

INTRODUCTION

According to a report by PDHS (Pakistan demographic and health survey) fertility rate of a still married women is still very high 6.6 per woman in Pakistan. 33 percent of users of modern methods were informed of side effects or problems of methods used but only 27 percent users were informed of what to do if they experienced side effects. 62 percent were not informed of alternative methods¹. Combined Oral contraceptives (COCP) are a reliable form of contraception with a theoretical failure rate of 0.1 percent but due to problems with compliance, an actual failure rate of 2 to 3percent². When used correctly and consistently combined oral contraceptive pills are among the most effective reversible methods of contraception with failure rates of 0.1-3/100 women years(pearl index 0.16). They also have noncontraceptive benefits, being useful in the treatment of a variety of disorders including hyperandrogenism, dysmenorrhea, acne, menorrhagia, premenstrual tension, cancer risk reduction ,specially ovarian cancer and uterine cancer. However, the decrease in both estrogen and progesteron content since the introduction

of the pill in 1960 has led to a reduction in both side effects and cardiovascular complications³. While the Food and Drug Administration had previously set upper age limits for COCP use as 35 years for smokers and 40 years for nonsmokers, the age limit was removed in 1989 for healthy, nonsmoking women Thus, COCP can be given until menopause in such women⁴. Much of what is known about the potential risks of COCP comes from four large cohort studies: the Royal College of General Practitioners (RCGP) Study, the Oxford Family Planning Association Study, the Walnut Creek Contraceptive Drug Study, and the Group Health Cooperative of Puget Sound Study^{5,6}.

Misconceptions and inadequate knowledge on various key aspects of contraception is common In our family planning centre in Military Hospital Rawalpindi there is need for further studies evaluating reasons for high discontinuation rate. Many parous women accept to initiate COCP as a method of contraception finally discontinue the pill after a while. There is need for studies evaluating reasons for high discontinuation rates

exploring interactions between clients and providers. Many false beliefs and misperceptions, fear, and ignorance about the actual or perceived side-effects prevail in the community⁷. This study aimed to establish links between the education, socioeconomic status of Pakistani women, and degree of knowledge and misconceptions of subjects that they hold. It also aimed to examine the link between the source of knowledge and the resulting ambivalence to the pill.

MATERIALS AND METHODS

A cross sectional survey was done by recruiting parous women desirous of family planning attending family planning centre and Gynaecology OPD in MH Rawalpindi. Those who did not desire family planning, those with less than 2 living children, and those who refused to participate in the study were excluded from the study. A predesigned questionnaire was completed by interviewer with patient demography and Yes/No option for knowledge and misconception about the pill.(Performa AnnexI) Educational status was assessed on a scale of 5 from nil to college education (1.nil ti 4th grade, 2.primary to 9th,3.matric,4.FA 5.BA or more) or more, and socioeconomic status was assessed on a scale from “marginalized” to “high”

(1.10,000 or less 2.11,000-20,000,3.21,000-30,000,4.31-40,000,5.>40,000).

Every question regarding knowledge had a mark .Knowledge was summed up on a scale of three with 1or less as poor,2-3 as intermediate and 4 or more as reasonable.

A similar score was assigned to misconception. Lastly, subjects were asked about their source of knowledge and the final attitude (positive or negative) as well as the reason behind this attitude. Data was analyzed using SPSS 19.0 for windows. Chi square test of significance of association between various components of misconceptions and knowledge. P-value ≤ 0.05 was considered significant.

RESULTS

102 eligible women participated in the survey. The mean age was 33 and mean parity was 4.01.Most of these

women were seriously interested in family planning. Majority belonged to low income group42(41%) and 33% had a fair socioeconomic status(Table I).

Table-I. Sociodemographic features (n=102)

	Range	N(%)	mean
age	20-29 30-35 36-41	102 (100)	33 ± years
Educational status of lady	Nil to 4 th grade primary-9th grade Matric FA BA or more	35 (34) 18 (17.6) 25 (24.5) 13 (12.7) 11 (10.8)	
Educational status of husband	Nil to 4 th grade primary-9th grade Matric FA BA or more	5 (4.9) 17 (16.7) 36 (35.3) 24 (23.5) 20 (19.6)	
Parity	2-3 4-6 6-10	37 (31.3) 59 (58.7) 6 (5.9)	4.01 ± 1.31
Income	10,000 or less 11-20,000 21-30,000 31-40,000 41,000 or more	4 (3.9) 42 (41.2) 34 (33.32) 9 (8.8) 13 (12.7)	

Majority 35(34%) had low education level and 11(10.8%) were graduate or more. Majority 49(48%) scored intermediate on knowledge score with 33(32.5%) scoring poorly. Overall, only 15% were aware of cancer preventing powers and only 30% of non contraceptive virtues of the pill (Table II) Misconception rates were particularly high in this study sample with 46(45%) having a high level of misconception (Table III). Misconception was particularly high for some components. For instance, 96.6%% of the respondents, including those with high level of education, were convinced that the pill leads to obesity.(table III) Poorest knowledge was linked to information from friend/spouse and highest with leaflet /internet(table V) Educational status had a a linear relationship with lack of knowledge and inverse with misconceptions (Figure I and II). 42(82%) of those with a high level of misconception were unwilling to try the pill. 58(57%) of the overall subjects

were willing to consider taking the pill, but worried they would forget to take the dosage regularly or authority figures would object to the use of the pill.(table VI).The subjects felt that lack of self efficacy could lead to problems with compliance.

DISCUSSION

Uncontrolled and exponential rise in population is one of

the biggest obstacles in the socioeconomic progress and prosperity of a nation. Improving uptake of modern contraceptives is a challenge in our country. COCP has been the gold standard for contraception in the United States since their introduction in 1960. They are used for both their contraceptive and non-contraceptive benefits⁶. Good clinician-patient communication, which includes creating an open dialogue with the patient to discuss her

Table-II. Knowledge of efficacy of pill (n=102)

Components of knowledge	With poor knowledge n=33 (32.5%)	With intermediate knowledge n=49 (48%)	With responsible knowledge n=20 (19.6%)	Overall knowledge of group N=102	P value
Side effect of blood pressure	24	42	16	82	0.348
Effect on blood clot in legs	10	15	06	31	0.999
Prevention of cancers	02	03	10	15	0.001
Reversibility / fertility preservation	12	31	18	61	0.001
Non contraceptive benefits	-	12	18	30	0.001

Table-III. Misconceptions regarding the pill

Component of misconception	With low misconceptions (n=28)	With intermediate misconceptions (n%28)	With high misconceptions (n%46)	Overall misconceptions (n=102)	P value
Weight gain	24	27	46	97	0.02
Jeopardizes future fertility	03	04	38	45	0.001
Strong link in causing cancer	01	17	31	49	0.001
Produces permanent harmful effects on body	04	12	38	54	0.001
Poor efficacy	02	05	34	41	0.001

Table-IV. Link between source of knowledge and correct knowledge

Main source of knowledge	Poor knowledge	Intermediate knowledge	Reasonable knowledge	Overall score	P value
Husband / friend / relative	32	34	01	66	
Health care provider	01	14	09	24	0.001
Leaflet / internet	-	01	10	11	

Table-V. Link between source of knowledge and misconceptions					
Main source of knowledge	Low misconceptions	Intermediate misconceptions	High misconceptions	Overall rate	P value
Husband / friend / relative	06	15	46	67	0.001
Health care provider	13	11	-	24	
Leaflet / internet	09	02	-	11	

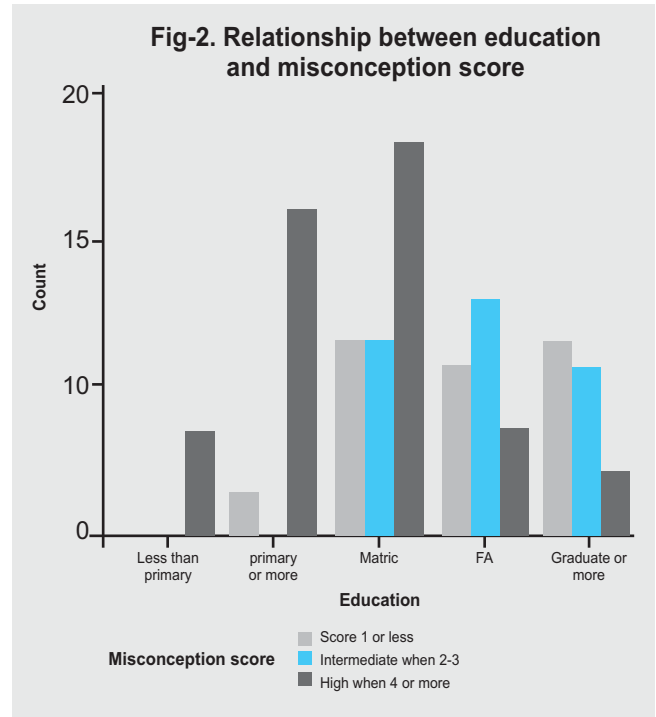
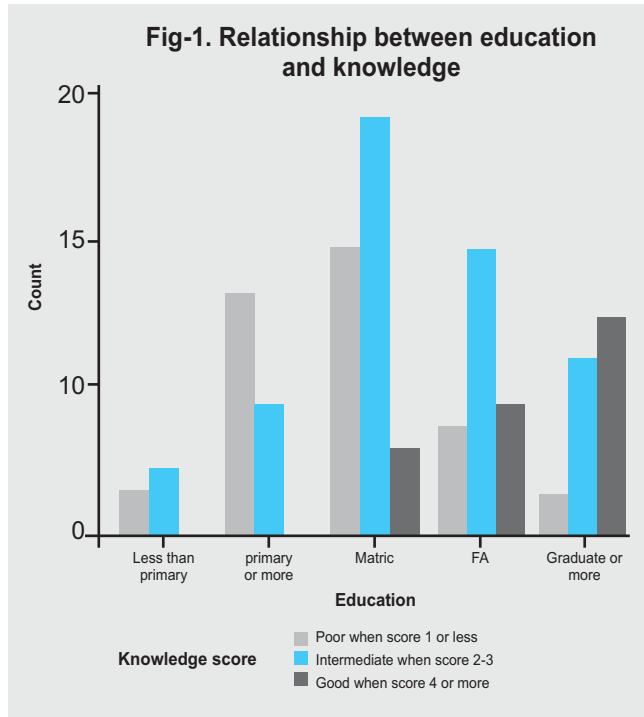
Table VI. Link between final attitude and knowledge/misconceptions				
	Agreed	Disagreed	Could be considered	P value
Poor knowledge (N=33)	-	30	03	0.001
Intermediate knowledge (N=49)	07	20	22	
Reasonable Knowledge (N=20)	15	01	04	
Low misconceptions (N=28)	18	01	09	
Intermediate Misconceptions (N=28)	04	07	17	
High misconceptions (n=46)	01	42	03	
Reason for agreement/disagreement	Good efficacy	Side effects	Compliance a problem	

Table-VII. Link between final attitude and reason for agreement				
Reason for agreement	Agreed	Disagreed	Could be considered	P-value
Side effects	01	48	08	0.001
Compliance	01	01	15	
Good efficacy	01	01	06	

individual risks and benefits, should lead to more successful contraceptive utilization⁷.

Many other studies, like an Iranian study on oral contraceptive use, compare findings in users and non users of the pill². However, we assessed data on women desiring contraception and tried to establish a link between their educational status and knowledge or lack thereof. As in current study non –users and those with a negative attitude found anecdotal information from their social network was more important. In the current study while most women with high levels of education were confident of being knowledgeable about COCP but many

were unaware of their knowledge gap. Similar findings were uncovered by Vogt C etal⁸. These authors felt that Healthcare professionals should tailor their teaching about contraception to the particular socio-cultural and religious groups they are dealing with. These include factors like benefits, risks myths and preferences about counseling material. A survey from India⁹ revealed that even regular users of oral contraceptives displayed had poor knowledge. Therefore, family planning services should not limit their concern to access to services, but should also improve knowledge about the contraceptive services.



Our study also revealed that people with low income and education have very little confidence in medical institutions as well as hormonal contraception. A similar trend was noted in a study from USA amongst African-Americans¹⁰ Additionally, the authors recommend that a reevaluation of provider practices can help to build trust with patient and help them make informed choices. We also concluded that research should not stay focused the socio-demographic group of the patient, but also focus on the provider. This should help build trust with patient and make informed choices. In the current study those deemed to be with reasonable knowledge felt that neither the leaflet by family planning association nor the health care provider informed us that COCP was the most efficacious method. Overall 85% were unaware of cancer preventing powers and only 70% of non contraceptive virtues of the pill. The die hard perception that pill leads to weight gain was prevalent in 97% of the cases! The information leaflet of Pakistan family planning Association could be supplemented with more information about non-contraceptive benefits.

Self-efficacy was an issue for poor COCP uptake in the current study. 57% of women felt that despite being

aware of the virtues of the pill they did not possess the necessary skills and resources, to use a COCP as compliance could not be guaranteed. Turkish women with high mean scores for self-directedness were more likely to consider using pills vs. longer-term hormonal methods such as implants or IUD's¹¹. There is evidence that Iranian women's continued use of COCP is primarily related to self efficacy¹². In the current study some women claiming to be highly desirous of family planning did not have a positive attitude to the pill as some said it is upto God and others felt their Husband/mother/mother-in-law would not allow it.

While in our study demographic variables were linked to knowledge a study by Dempsy etal¹³ highlighted the fact that demographic variables were insignificant after adjustment and participants who gave high scores to pill advantages were likely to continue using it for 6 months. In this study method advantage was the chief determinant for positive response to the pill. Our study was at variance as high misconception score regarding method disadvantage was strongly linked to final attitude.

Despite the immense body of evidence regarding the safety of OCP's, the perceived health risks are often exaggerated. In the current study weight gain was a concern even amongst the most well informed women precluding its use. This was also the main hurdle in an Indian study⁹. In a Finnish study the major concern about side effects were cardiovascular, cancer, weight gain and fertility¹⁴. A Russian study identified the pill as ineffective and permanently harmful leading to low popularity¹⁵. In another study¹⁰ one-tenth of the clinicians thought that the pill was dangerous to health! This high prevalence of mistrust in a drug with a known risk/benefit ratio is alarming considering all the non contraceptive benefits like prevention of dysmenorrhea, anemia, pelvic inflammatory disease, ovarian cysts, endometriosis and cancer.

However, they should be discussed with the patients as much as COCP risks. For presenting data one trial showed that categories were better than numbers. In another trial audiovisual aids worked better^{16,17}. By complying with guidelines and heeding women's concern doctors can individualize their contraceptive recommendation¹⁸. Our study was in agreement with an Australian survey where preferred formats for COCP related information was internet and an information booklet¹⁹. In our study these sources produced the most reliable result. The importance of the provider may increase to successfully integrate newer contraceptive technologies into clinical practice. A study in Karachi, Pakistan has linked satisfaction with provider and continuity of care with more consistent use of COCP²⁰.

CONCLUSIONS

In this study, higher levels of knowledge about contraception were associated with more favorable attitudes. Women's health concerns were unjustified in those with negative attitude. Socio-cultural and educational factors were pivotal to perceived risks of contraceptive. Health workers and doctors should help tailor culture specific educational interventions to focus on how to better inform women in order to improve uptake of COCP

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No man deserves punishment for
 his thoughts.

Anonymous