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ORIGINAL ARTICLE

Effect of structured contraceptive counselling on continuation and satisfaction of women attending gynecology outpatient departments: a case control study

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ABSTRACT

Background: Client-cantered contraceptive counselling has a positive impact on women's confidence in the choices of methods and their satisfaction with services. This study was planned to compare the effect of structured contraceptive counselling versus routine counselling on contraceptive continuation and satisfaction among women who attended the gynecology outpatient department of tertiary care hospitals in south Punjab, Pakistan.

Methods: A case control study was carried out in Gynecology outpatient departments (OPDs) of the Bahawal Victoria Hospital, Bahawalpur, Pakistan between January 2025 to December 2025 (Ref: 2669/DME/QMC, 19-10-2024). 200 women after taking informed consent were recruited and randomly divided into two groups of receiving routine contraceptive counselling and structured counselling.

Results: The structured counselling group also had significantly higher levels of satisfaction (84.0 vs 59.0, p=0.001), less switching of methods (13.0 vs 29.0, p=0.005), fewer side effects (21.0 vs 35.0, p=0.027), and better follow-up compliance (95.0 vs 84.0, p=0.011) than the routine counselling group.

Conclusion: The structured contraceptive counselling was associated with higher rates of contraceptive continuation, higher levels of patient satisfaction, and higher rate of follow-up compliance, as well as lower rates of contraceptive method switching for contraceptive discontinuation and side effect contraceptive discontinuation.

Keywords: Contraceptive Counselling, Contraceptive Continuation, Family Planning

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Introduction

According to the World Health Organization (WHO) an estimated 1.1 billion women in the world are not using family planning methods and a large part of

this population is deprived of access to modern contraceptive techniques,
particularly the low- and middle-income countries (LMICs) (1). A continuing problem in all parts of the globe is the contraceptive discontinuation which in most cases has no bearing on fertility intentions rather associated with lack of adequate counselling, fear of side effects, misperceptions and dissatisfaction with the method chosen. Research has indicated that women who undergo comprehensive and client-cantered counselling are much more likely to remain in the contraceptive method of their choice and report higher levels of satisfaction as compared to those who undergo routine counselling (2,3). According to national reports, although the level of awareness about contraception is high, the level of sustained usage is unsatisfactory (4). Though the prevalence of contraceptive has improved in recent years as seen in the Pakistan Demographic and Health Survey, the discontinuation problem arising from the side effects and the misconceptions is still the major one (5). A multi-county study involving Pakistan showed that giving full information about contraceptives greatly reduced the discontinuation rate (6). Similarly, family planning programs in Pakistan found to have higher success rates in improving contraceptive continuation when the quality of counselling and provider interactions was improved (7). The findings emphasize the applicability of counselling interventions to the local context. The quality of counselling has thus become a pivotal factor in determining the success rate of contraceptives. Structured counselling is structured and discussed systematically on available methods, efficacy, side effects, warning signs and follow up, in contrast to routine counselling, wherein most of the discussion is dependent on the experience of the provider, patient load, and time of consultation. Recent evidence based on randomized controlled trials has shown that structured contraceptive counselling enhances uptake and continuation rates of contraceptive use as compared to standard contraceptive counselling (8, 9). However, the studies were more about "uptake" and not about "continuation" and "satisfaction". Despite increasing evidence that quality counselling improves contraceptive knowledge, satisfaction, and decision-making, important gaps remain. Most available studies have focused primarily on contraceptive uptake or acceptance rather than long-term continuation of the selected contraceptive method. Furthermore, limited evidence exists regarding whether a standardized structured counselling approach provides measurable benefits over routine counselling practices in tertiary care gynecology outpatient settings, particularly in South Punjab, Pakistan, where misconceptions, cultural influences, and inadequate counselling time may affect contraceptive continuation. The primary outcome of this study was six-month continuation of the selected contraceptive method, while secondary outcomes included patient satisfaction, method switching, reported side effects, and follow-up compliance.

Methods

It was a case control study conducted in Gynecology outpatient departments (OPDs) of the Bahawal Victoria Hospital, Bahawalpur, Pakistan after obtaining ethical approval (Ref: 2669/DME/QMC, 19-10-2024).It was carried out between January 2025toDecember2025.

The married and sexually active women aged 18–45 years visiting gynecology OPD

(to start contraceptive or seek contraceptive counselling) were included after a written informed consent. The women with current pregnancy, contraindications to hormonal or intrauterine contraceptives or already using a contraceptive method in excess of three months and who don't wish to attend and/or are unable to attend follow-up. The WHO sample size formula was used to compare two proportions (10) and the expected continuation rate were computed to be 65 in routine counselling and 85 in structured counselling with 95 confidence level, 80 power and 5 level of significance. The lowest possible sample size that was estimated was 91 participants per group. The number of subjects was estimated to be 100 per group to make up for the potential dropouts, so that there are 200 subjects in total.

Consecutive sampling technique was used for recruiting eligible participants (PD) for the OPD. Randomization and Allocation Eligible participants were randomly assigned in a 1:1 ratio to either structured counselling or routine counselling using a computer generated randomization sequence. The allocation sequence was prepared before participant enrolment. Allocation concealment was not performed due to the practical nature of the counselling intervention; however, outcome assessment was performed by an independent assessor who was unaware of group assignment

Demographic and clinical data was obtained at the baseline after informed consent, age, parity, education level, socioeconomic status and contraceptive usage in the past. The subjects participated in the following practices,6monthscontinuation/discontinuation, side effects, switching of methods/not and satisfaction data. The participants were approached with structured contraceptive counselling using a standardized counselling tool that was created using the validated WHO GATHER framework. Structured counselling included, assessment of reproductive plans, description of all possible approaches, side effects discussion, myth clarification, follow-up guidance and a visual counselling aid. For routine counselling, participants were counselled verbally during routine OPD visits as per the traditional OPD practice without using any checklist and visual aid.

Primary Outcome was the continuation of the preferred method of contraception at 6 months and secondary outcomes were patient satisfaction score, method switching, reported side effects, reasons for discontinuation, satisfaction Assessment. Patients' satisfaction level with the hospital was measured by a structured questionnaire having a total of five questions scored on a Likert scale (1-5) and classified into: High satisfaction: ≥20, Moderate satisfaction: 15–19, and Low satisfaction: <15. Participants who lost to follow-up were excluded so no missing data handling was needed. The SPSS version 26 was used to analyze the data. Mean and standard deviation were used to quantify the quantitative variables and compared them using the independent samplet -test. Qualitative data were presented as frequencies and percentages and compared using Chi-square test. A p value of < 0.05 was statistically significant.

Results

A total of 200 participants were randomly divided into two equal groups. There were no significant differences in baseline characteristics of study groups. Table 1

Table 1: Baseline demographic characteristics across the two study groups, n=100 each.

Variable	Structured Counselling	Routine Counselling	p-value
Age (years), mean ± SD	29.7 ± 5.2	30.4 ± 5.6	0.36
Parity, mean ± SD	2.4 ± 1.1	2.5 ± 1.3	0.58
Primary education or less	61 (61.0%)	58 (58.0%)	0.67
Low socioeconomic status	69 (69.0%)	66 (66.0%)	0.65
Previous contraceptive use	34 (34.0%)	31 (31.0%)	0.65

In table 2, contraceptive continuation was significantly higher in the structured counselling group compared to the routine counselling group (82.0% vs 61.0%, p=0.001) and discontinuation was significantly lower (18.0% vs 39.0%, p=0.001).

Table 2: Comparison of contraceptive continuation at 6 months (Primary Outcome)

Outcome	Structured Counselling (n=100)	Routine Counselling (n=100)	Relative risk with 95% CI	p-value
Continued selected method	82 (82.0%)	61 (61.0%)	1.34 (1.10–1.64)	0.001
Discontinued method	18 (18.0%)	39 (39.0%)	0.46 (0.29–0.73)	0.001

The structured counselling group also had significantly higher levels of satisfaction (84.0 vs 59.0, p=<0.001), less switching of methods (13.0 vs 29.0, p=0.005), fewer side effects (21.0 vs 35.0, p=0.027), and better follow-up compliance (95.0 vs 84.0, p=0.011) than the routine counselling group, Table 3. These findings indicate that there was a relationship between structured counselling and continuation of contraceptives and patient satisfaction.

Table 3: Comparison of secondary outcomes between the two study groups, n=100 each.

Outcome	Structured Counselling	Routine Counselling	Relative risk with 95% CI	p-value
High satisfaction (score ≥20)	84 (84.0%)	59 (59.0%)	1.42 (1.18–1.72)	<0.001
Method switching	13 (13.0%)	29 (29.0%)	0.45 (0.25–0.82)	0.005
Reported side effects	21 (21.0%)	35 (35.0%)	0.60 (0.38–0.96)	0.027
Follow-up compliance	95 (95.0%)	84 (84.0%)	1.13 (1.02–1.25)	0.011

Discussion

The current randomized controlled trial revealed that structured counselling on contraceptive use was significantly more effective in terms of contraceptive continuation at six months of age compared to routine counselling. Structured counselling of women resulted in increased continuation rates, greater satisfaction, fewer method switches, fewer problems with side effects, and greater compliance with follow-up. The findings are in line with the growing amount of literature showing that the quality of counselling is a key factor in the effectiveness of contraceptives and in their sustained use over time (2,3).

The percentage of continuation in the structured counselling group (82%), was much higher than the percentage of continuation in the routine counselling group (61%). This distinction highlights the value of standardized counselling to improve long-term contraceptive use. Past studies have indicated that women undergoing structured and comprehensive counselling have higher chances of remaining in the contraceptive method of their choice due to better knowledge on how the contraceptive works, side effects and anticipated changes (8,11).

Women who received structured counselling had a high level of patient satisfaction. Hale et al. Demonstrated a direct effect of the quality of counselling on satisfaction and continuation intentions (11). Similarly, dissatisfaction with decisions that are made in the process of introducing contraceptives has been shown to be less among women who receive individual counselling, so the higher levels of satisfaction reported in our study (12) are not unexpected.

Other notable results were the much lower turnover rate in the structured counselling group. A change in method could indicate lack of satisfaction, unrealistic expectations or a poor first choice of method. Simmons RG et al. Reported that early switching has traditionally been associated with inadequate counselling regarding side effects or appropriateness of the method (13). Fewer side effects were reported for the structured counselling group. Francesca et al. Discovered that through anticipatory counselling, the side-effect-related discontinuation was significantly reduced by preparing women psychologically and clinically (14). A local study in Gilgit showed that women who were given complete information were far more likely to use hormonal methods of contraception when compared to women who received incomplete information (15). few studies showed that client-centered counselling increased the use of modern contraceptives among urban population of Pakistan particularly amongst the less served population (16,17). Their study focused more on uptake, but it is likely that the increase in uptake was related to the improved communication and quality of counselling.

The compliance of follow-up was also much higher in organized counselling group. Improved compliance could indicate improved provider-patient interaction and a more coherent follow-up planning. In the practice of contraceptive counselling, preparedness for follow-up is a key component of counselling models advocated by WHO (1). It has also been shown that person-centred approaches to counselling can improve continuity of care in low resource settings (18). The results of the current study are also in line with the general evidence of the health system. In Pakistan, better quality of FP services has been found to be directly linked to increased continuation rates and service satisfaction (19). This suggests that if the quality of counselling could be improved then there could be a positive impact on outcomes without the need for a massive increase in services (20). The six-month follow-up period may not be long enough to assess continuation patterns. It is recommended that further studies be conducted to assess the outcome in 1 year or years to come.

Conclusion

In gynecology outpatient departments, the unification of counselling practices can improve counselling effectiveness of family planning and promote long-term use of recent contraceptive technologies

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