ASSOCIATION OF ACCEPTOR AGE, PERCEPTIONS OF CONTRACEPTIVE SIDE EFFECTS, AND COUNSELING QUALITY WITH THREE-MONTH INJECTABLE CONTRACEPTIVE SELECTION AT RSIA MASYITA MAKASSAR

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Abstract

Objective: This study aimed to examine the associations between acceptor age, perceptions of contraceptive side effects, counseling quality, and the selection of three-month injectable contraception at RSIA Masyita Makassar.
Methods: A quantitative cross-sectional study was conducted among 60 family planning acceptors recruited using accidental sampling. Data were collected through interviews and questionnaires assessing age, perceptions of contraceptive side effects, perceived counseling quality, and contraceptive method selection. Descriptive statistics were used to summarize the study variables, and bivariate associations were examined using the chi-square test at a significance level of 0.05.
Results: Of the 60 respondents, 41 (68.3%) were aged 20–35 years, 37 (61.7%) reported positive perceptions of contraceptive side effects, and 40 (66.7%) rated counseling quality as good. Overall, 34 respondents (56.7%) selected three-month injectable contraception. The reported chi-square analyses showed no statistically significant associations between method selection and age ($p = 0.771$), perceptions of side effects ($p = 0.986$), or counseling quality ($p = 0.854$).
Conclusion: No statistically significant associations were identified between the three examined variables and the selection of three-month injectable contraception in this sample. These findings should be interpreted in light of the cross-sectional design, sample size, sampling method, and the statistical assumptions underlying the analyses. Comprehensive, balanced, and understandable contraceptive counseling remains an important component of informed contraceptive decision-making.
Keywords: Acceptor age; contraceptive counseling; contraceptive side effects; injectable contraception; method selection

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1. INTRODUCTION

Family planning is an essential component of reproductive health services because it enables individuals and couples to make informed decisions regarding pregnancy planning, birth spacing, and contraceptive use. Various contraceptive methods are available, including three-month and one-month injectable hormonal contraception. The selection of a contraceptive method may depend on reproductive intentions, individual preferences, previous contraceptive experiences, perceived side effects, and the information provided by healthcare professionals [1], [2].

Age may be relevant to contraceptive decision-making because individuals at different stages of reproductive life may have different fertility intentions, contraceptive experiences, and preferences. Previous research has examined age as a potential factor associated with contraceptive selection,

although its influence may vary across populations and service settings [3]. Age should therefore be considered alongside other individual and contextual factors rather than treated as an independent determinant of contraceptive choice.

Perceptions of contraceptive side effects may also influence the acceptability of a method. Concerns about menstrual changes, weight gain, and other possible complaints may affect an individual's willingness to initiate or continue a particular contraceptive method [4], [5]. However, perceptions may differ from actual clinical experiences and may be shaped by previous use, information received, and expectations. Understanding these perceptions can help healthcare providers address concerns and support informed decisions.

Counseling quality is another relevant aspect of family planning services. Effective counseling should provide balanced information about available methods, benefits, limitations, possible adverse effects, duration of use, and alternative options. It should also allow clients to ask questions, express their preferences, and participate in decisions about contraception. Previous studies have investigated the relationship between structured counseling, counseling quality, and contraceptive method selection [6], [7]. Nevertheless, the association may depend on the quality of service delivery, the range of available methods, and the characteristics of the population receiving counseling.

Service records from RSIA Masyita Makassar for January–May 2022 documented 592 family planning acceptors: 296 users of three-month injectable contraception, 293 users of one-month injectable contraception, and three implant users. These records indicate that three-month and one-month injectable methods accounted for nearly all recorded contraceptive use during the period. However, the aggregate figures alone do not explain why individual acceptors selected particular methods.

Against this background, the present study examined the associations of acceptor age, perceptions of contraceptive side effects, and perceived counseling quality with the selection of three-month injectable contraception at RSIA Masyita Makassar. The findings are intended to contribute to an understanding of contraceptive selection within this specific service setting.

2. METHODOLOGY

2.1 Study design and setting

This study employed a quantitative survey with a cross-sectional design at RSIA Masyita Makassar. Data were collected from family planning acceptors who attended the service and met the study's eligibility criteria. The exact data collection period and eligibility criteria should be specified in the final manuscript based on the original research records.

2.2 Population and sampling

The study included 60 family planning acceptors recruited using accidental sampling. Participants were selected from eligible acceptors encountered during the data collection period. Because this was a non-probability sampling method, the findings should be interpreted cautiously and should not automatically be generalized to all family planning acceptors in Makassar.

2.3 Variables and operational definitions

The independent variables were acceptor age, perceptions of contraceptive side effects, and perceived counseling quality. The dependent variable was the selection of three-month injectable hormonal contraception.

Age was categorized into three groups: younger than 20 years, 20–35 years, and older than 35 years. Perceptions of contraceptive side effects were classified as positive or negative based on questionnaire scores. Counseling quality was classified as good or less good according to respondents' assessments of the counseling received. Contraceptive selection was classified as selecting or not selecting the three-month injectable method.

The final manuscript should specify the questionnaire items, scoring procedures, cut-off values, and supporting references used to establish these categories. The direction and interpretation of the positive and negative perception scores should also be clearly explained.

2.4 Data collection and statistical analysis

Data were collected through interviews and questionnaire completion. The questionnaire covered respondent age, perceptions of contraceptive side effects, perceived counseling quality, and selected contraceptive method.

Descriptive analysis was conducted using frequencies and percentages. Associations between the independent variables and contraceptive selection were examined using the chi-square test, with a nominal significance level of 0.05.

The appropriateness of the chi-square test should be verified against the expected cell frequencies, particularly for the age categories. If its assumptions are not satisfied, an appropriate exact test should be considered. Statistical results should be finalized after verification against the original dataset and statistical output.

2.5 Ethical considerations

The final manuscript should report the applicable research ethics approval or exemption, the name of the approving institution, and the approval number where applicable. It should also explain how informed consent, confidentiality, and voluntary participation were addressed. These details must be obtained from the actual study documentation rather than inferred.

3. RESULTS

3.1 Distribution of study variables

A total of 60 family planning acceptors participated in the study. The distributions of age, perceptions of contraceptive side effects, perceived counseling quality, and three-month injectable contraceptive selection are presented in Table 1.

Table 1. Distribution of respondents according to study variables

Variable	n	%
Age		
<20 years	6	10.0
20–35 years	41	68.3
>35 years	13	21.7
Perceptions of contraceptive side effects		
Positive	37	61.7
Negative	23	38.3
Perceived counseling quality		
Good	40	66.7
Less good	20	33.3
Three-month injectable contraceptive selection		
Selected	34	56.7
Not selected	26	43.3
Total	**60**	**100.0**

The largest age group was 20–35 years, comprising 41 respondents (68.3%). Positive perceptions of contraceptive side effects were reported by 37 respondents (61.7%), while 40 respondents (66.7%) rated counseling quality as good. In total, 34 respondents (56.7%) selected three-month injectable contraception.

3.2 Association between age and contraceptive selection

The distribution of three-month injectable contraceptive selection across age categories is presented in Table 2.

Table 2. Association between age and three-month injectable contraceptive selection

Age group	Selected, n	Not selected, n	Total, n	Selected (%)
<20 years	4	2	6	66.7
20–35 years	22	19	41	53.7
>35 years	8	5	13	61.5
Total	**34**	**26**	**60**	**56.7**

The proportion selecting three-month injectable contraception was 66.7% among respondents younger than 20 years, 53.7% among those aged 20–35 years, and 61.5% among those older than 35 years. The reported chi-square analysis yielded $\chi^2 = 0.521$, df = 2, and p = 0.771. However, the test assumptions should be checked because some expected cell frequencies may be small.

3.3 Association between perceptions of side effects and contraceptive selection

Among respondents with positive perceptions of contraceptive side effects, 21 selected three-month injectable contraception and 16 did not. Among respondents with negative perceptions, 13 selected the method and 10 did not.

The reported chi-square test yielded $\chi^2 = 0.000$, df = 1, and p = 0.986. The observed proportions selecting the method were similar between the two perception groups.

3.4 Association between counseling quality and contraceptive selection

Among respondents who rated counseling quality as good, 23 selected three-month injectable contraception and 17 did not. Among those who rated counseling quality as less good, 11 selected the method and nine did not.

The reported chi-square test yielded $\chi^2 = 0.034$, df = 1, and p = 0.854. Although the proportion selecting the method differed slightly between the two counseling-quality groups, the reported analysis did not identify a statistically significant association.

4. DISCUSSION

4.1 Age and contraceptive selection

The findings showed no statistically significant association between age and selection of three-month injectable contraception based on the reported analysis (p = 0.771). Although the proportion selecting the method varied across age categories, the observed differences were not statistically significant under the reported test.

This finding does not establish that age has no relationship with contraceptive choice in other populations. The study included only 60 respondents, and the age categories contained unequal numbers of participants. In particular, only six respondents were younger than 20 years. These characteristics limit the precision of comparisons between age groups.

Contraceptive selection may also reflect factors that were not examined in this study, including reproductive intentions, parity, previous contraceptive experience, partner involvement, accessibility of methods, and individual preferences. Consequently, age should be interpreted as one potential correlate among several factors influencing contraceptive decision-making.

4.2 Perceptions of contraceptive side effects and contraceptive selection

The study found no statistically significant association between perceptions of contraceptive side effects and selection of three-month injectable contraception (p = 0.986). Of the respondents, 37 (61.7%) had positive perceptions and 23 (38.3%) had negative perceptions. The proportions selecting the method were nearly identical in the two groups.

One possible interpretation is that the perception categories used in this study did not distinguish respondents' contraceptive choices sufficiently. However, this explanation remains hypothetical and cannot be confirmed from the available data. The relationship may also depend on previous contraceptive experiences, the specific concerns held by respondents, the information provided during counseling, and the availability of alternative methods.

The questionnaire's scoring system and the meaning of positive and negative perceptions require particular attention. Without a clear operational definition and evidence of instrument validity, it is difficult to determine precisely what these categories represent. Future research could assess specific concerns about menstrual changes, weight gain, and other perceived effects rather than relying exclusively on an overall perception category.

4.3 Counseling quality and contraceptive selection

The reported analysis showed no statistically significant association between perceived counseling quality and selection of three-month injectable contraception (p = 0.854). Most respondents rated counseling quality as good, but the distribution of method selection did not differ significantly between the good and less-good counseling groups.

This result should not be interpreted as evidence that counseling quality is unimportant. The study measured respondents' assessments of counseling and examined their association with method selection at a single point in time. It did not establish whether counseling changed respondents' preferences, improved their understanding, or influenced continuation of the chosen method.

The use of a broad counseling-quality category may also have limited the ability to distinguish important dimensions of counseling, such as information about benefits and risks, discussion of alternatives, opportunities to ask questions, and respect for client preferences. Further research could examine these dimensions separately and assess whether the counseling received was consistent with informed, preference-sensitive contraceptive decision-making.

Previous studies have examined the relationship between structured counseling, counseling quality, and contraceptive selection [6], [7]. Differences between those findings and the present results may reflect variations in study populations, research designs, measurement instruments, service settings, or available contraceptive options. Direct comparison should therefore be made only after the specific methods and findings of the cited studies have been verified.

4.4 Study limitations and implications

Several limitations should be considered when interpreting the findings. First, the cross-sectional design permits an assessment of associations but does not establish causal relationships. Second, the relatively small sample and accidental sampling method limit statistical precision and generalizability. Third, the categorization of perceptions and counseling quality may have obscured differences within the original questionnaire scores. Fourth, the available manuscript does not provide sufficient information about instrument validation, potential confounding variables, or research ethics documentation.

The reported statistical tests also require verification against the original dataset, especially the age analysis, because small expected cell frequencies may affect the suitability of the chi-square approximation. The final conclusions should reflect the results of the appropriate analysis.

Despite these limitations, the findings provide a descriptive account of contraceptive selection among the respondents at RSIA Masyita Makassar. Family planning services should continue to provide balanced information, discuss possible side effects and available alternatives, and support clients in choosing methods consistent with their health conditions, reproductive intentions, and preferences.

5. CONCLUSIONS

In this sample of 60 family planning acceptors at RSIA Masyita Makassar, the reported analyses did not identify statistically significant associations between age ($p = 0.771$), perceptions of contraceptive side effects ($p = 0.986$), or perceived counseling quality ($p = 0.854$) and selection of three-month injectable contraception.

These findings should be interpreted cautiously because of the study's cross-sectional design, non-probability sampling, sample size, and the need to verify the assumptions of the statistical tests. The results do not establish that the examined factors are irrelevant to contraceptive decision-making in other settings.

Family planning services should continue to provide comprehensive, understandable, and balanced counseling that enables acceptors to compare available methods and make informed decisions according to their individual needs and preferences.

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