

## Individual characteristics affecting the utilization of Depo-Provera among women of reproductive age attending Katabi General Military Hospital. Across-sectional study.

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Page | 1 **Abstract**

### Background:

The study aims to investigate individual-related characteristics affecting the utilization of Depo-Provera among women of reproductive age attending Katabi General Military Hospital.

### Methodology:

A descriptive cross-sectional study design employing quantitative methods was used. The study population consisted of women of reproductive age (15–49 years) attending the family planning clinic of Katabi General Military Hospital during the period of data collection. The sample size was determined using Krejcie and Morgan's table. A convenience sampling technique was used to select study participants.

### Results:

22(50%) of the respondents said cultural beliefs ever stopped them from using contraceptives like Depo-Provera, while at least 10(22.7%) said they never stopped them. Most 27 (61.4%) of the respondents reported that money made it hard for them to use Depo-Provera, while the least 4 (9.1%) said it does not affect their use at all. The majority, 18 (40.9%) of the respondents stated that they sometimes used herbal or traditional methods instead of Depo-Provera, while 11 (25%) said they do not use them at all. Most 24 (54.5%) of the respondents said fear of side effects had often stopped them from using Depo-Provera, while 8 (18.2%) reported that it had never stopped them. The findings further show that the majority, 26 (59.1%) of the respondents indicated that their husbands make the health care seeking decisions on family planning methods like Depo-Provera, while the least 7 (15.9%) reported making the decision themselves.

### Conclusion:

The study concluded that both individual characteristics significantly affect the utilization of Depo-Provera among women of reproductive age attending Katabi General Military Hospital. Cultural beliefs, financial barriers, preference for herbal methods, fear of side effects, and male partner influence were key individual factors limiting use.

### Recommendations:

Implement support programs that assist low-income women in accessing family planning services without financial strain.

**Keywords:** individual characteristics, utilization of Depo-Provera, women of reproductive age, Katabi General Military Hospital

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### Background of the Study

Depo-Provera, also known as depot medroxyprogesterone acetate (DMPA), is an injectable hormonal contraceptive administered every three months to prevent pregnancy. (McCullough et al., 2020). It is one of the most effective and convenient family planning methods for women who wish to delay or space childbirth. (Dahir et al., 2023). However, its utilization is influenced by several factors such as knowledge, accessibility, fear of side effects, partner support, and cultural beliefs. (Tangkiatkumjai et al., 2020). In contrast, in Bangladesh, utilization is estimated at 9.6%, linked to cultural and religious barriers, misconceptions about side effects, limited access to trained health providers,

and inadequate follow-up care, which have resulted in a fertility rate of 2.8 children per woman and persistent maternal health challenges. (Nisha et al., 2021).

In Sub-Saharan Africa, Depo-Provera utilization is estimated at between 12% and 16% among women of reproductive age; however, poor counseling, myths about infertility, and irregular side effects have resulted in a discontinuation rate of about 26% across the region, leading to increased unintended pregnancies and unsafe abortions. (Rouncivell, 2020). In Uganda, Depo-Provera utilization is estimated at 13.6% among women of reproductive age, with factors influencing its use including fear of side effects, misconceptions about infertility, lack of male involvement,

inconsistent availability of commodities, and inadequate health education leading to unplanned pregnancies, unsafe abortions, and poor maternal health outcomes. (Kainja Malota, 2019). The study aims to investigate individual-related characteristics affecting the utilization of Depo-Provera among women of reproductive age attending Katabi General Military Hospital.

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## **METHODOLOGY**

### **Study Design and Rationale**

A descriptive cross-sectional study design employing quantitative methods was used. The study was descriptive because it assessed the characteristics affecting utilization of Depo-Provera among women of reproductive age and analyzed the data using descriptive statistics. It was cross-sectional because data were collected at a single point in time without follow-up (X. Wang & Cheng, 2020). Quantitative methods involved the use of structured questionnaires to collect numerical data on socio-demographics, individual factors, and health facility factors. This design was chosen because it was cost-effective, easier to implement, and could be conducted within a shorter time frame.

### **Study Setting and Rationale**

The study was conducted at Katabi General Military Hospital, located in Entebbe Municipality, Wakiso District, Central Uganda. The hospital is situated approximately 37 kilometers south of Kampala, along the Kampala–Entebbe Highway. Katabi General Military Hospital serves residents from Wakiso District and its neighboring districts, including Mpigi, Kampala, and Buikwe. The hospital provides a wide range of services, including maternal and child health, outpatient and inpatient care, family planning, immunization, and HIV/AIDS services, Postnatal services (PNC), antenatal services (ANC), and is recognized as a key facility for reproductive health services in the region. The geographical coordinates of Katabi General Military Hospital are approximately 0°03'45.0"N latitude and 32°30'10.0"E longitude. The hospital is strategically located to serve both military personnel and civilian populations. Katabi General Military Hospital provides a range of services, including maternal and child health, outpatient and inpatient services, immunization, HIV care, and family planning. The family planning clinic offers various contraceptive methods, including Depo-Provera, implants, oral contraceptive pills, and condoms. The hospital serves a catchment population of approximately 25,000 residents, including both military personnel and civilians from the surrounding communities. The rural-urban mix and diversity of the population provide an ideal context to assess individual and health facility-related characteristics influencing Depo-Provera use.

### **Study Population**

The study population consisted of women of reproductive age (15–49 years) attending the family planning clinic of Katabi General Military Hospital during the period of data collection. This population was appropriate because it allowed assessment of real-time barriers and facilitators to Depo-Provera utilization among women who were actively seeking contraceptive services.

### **Sample Size Determination and Rationale**

The sample size was determined using Krejcie and Morgan's table (1970). According to the family planning clinic register at Katabi General Military Hospital, 10 women attend family planning services each day, according to HMIS 003 FP Unit (2025), and thus, this assured a total of 50 women during the five days a researcher intends to use for data collection. Based on Krejcie and Morgan's table, a population size (N) of 50 corresponds to a sample size (S) of 44 participants. Therefore, this study included 44 women of reproductive age attending the family planning clinic.

### **Sampling Technique and Rationale**

A convenience sampling technique was used to select study participants. This method was employed because it allowed the researcher to recruit respondents who were readily available and willing to participate at the time of data collection, making it easier and faster to reach the required sample size of 44 respondents. Participants were approached directly as they attended the clinic, and those who consented were included in the study until the desired sample size of 44 respondents was achieved. Data collection took place over five days, targeting 9 respondents per day to meet the required sample size.

### **Selection Criteria**

#### **Inclusion Criteria**

The study included all women of reproductive age attending the family planning clinic at Katabi General Military Hospital who consented to participate in the study, were available and free at the time of data collection, were present during the data collection period, and were able to speak and understand English.

#### **Exclusion Criteria**

The study excluded all women who declined to participate after informed consent, were unable to respond to the questionnaire, or had speech difficulties that hindered effective communication during the interview.

#### **Study Variables**

##### **Dependent Variable:**

Utilization of Depo-Provera.

**Independent Variables:**

Individual-related characteristics (age, education level, marital status, number of children, cultural beliefs, economic status, reliance on herbal remedies, etc.).

**Research Instrument and Rationale**

Data was collected using a structured questionnaire written in English and containing questions aligned with the study objectives. The questionnaire included three sections: Section A: Socio-demographic characteristics of respondents; Section B: Individual-related characteristics affecting Depo-Provera utilization. All questions were closed-ended to ensure clarity and ease of analysis.

**Data Collection Procedure**

Upon approval of the proposal by the research supervisor and the Institutional Research Committee (IRC), the researcher obtained an introductory letter from the Dean, School of Nursing, Mildmay Uganda School of Nursing and Midwifery. This letter was presented to the hospital administration to request permission to conduct the study. After obtaining clearance, the researcher met with the person in charge of the family planning clinic to explain the purpose of the study and sought authorization to interact with clients. The in-charge introduced the researcher to the clients, after which data collection began. Each participant was informed about the study objectives, procedures, and verbal and written consent was obtained before data collection. The researcher personally administered the questionnaire through face-to-face interaction. Data collection lasted for 5 days, with 9 participants interviewed each day. Confidentiality and anonymity were assured throughout the process.

**Data Management and Analysis**

**Data Management**

Data collected each day was checked for completeness, accuracy, and consistency. Questionnaires were edited before leaving the study area to ensure there were no missing responses. The completed questionnaires were stored securely in a locked cupboard and coded for easy

identification. Data was then entered into a computer for analysis.

**Data Analysis**

Quantitative data were coded, sorted, and entered into Microsoft Excel (version 2019) for analysis, and then findings were presented in the form of tables, pie charts, bar graphs, and descriptive narratives for easy interpretation and discussion, leading to meaningful conclusions.

**Quality Control**

**Validity:**

The validity of the study was ensured by developing a questionnaire that directly addresses the study objectives under the close supervision and guidance of the research supervisor. This ensured that the tool accurately measures the intended variables, increasing the reliability of the study findings.

**Reliability:**

A pre-test of the questionnaire was conducted at a Kajjansi Health Centre IV on 10 women of reproductive age to identify and correct any errors or unclear questions. The pre-test results guided adjustments to improve clarity, consistency, and accuracy before the actual data collection.

**Ethical Considerations**

Ethical approval was obtained from the Institutional Research Committee (IRC) of Mildmay Uganda School of Nursing and Midwifery. An introductory letter from the Dean, School of Nursing, was presented to the in-charge of Katabi General Military Hospital to obtain permission for data collection. Informed consent was obtained from each participant after providing full information about the purpose of the study, expected benefits, and confidentiality assurance. Participation was voluntary, and no incentives were provided. Anonymity was maintained throughout data collection and analysis, and only data relevant to the study objectives were collected.

**Results**

**Demographic information of respondents.**

**Table 1 shows the demographic data of the respondents**

Variable	Response	Frequency(n=44)	Percentage (%)
age	< 20 years	6	13.6
	20–29 years	22	50
	30–39 years	11	25
	40-49 years	3	6.8
Education level	Primary level	5	11.4
	Secondary level	21	47.7
	Tertiary/University	18	40.9
Marital status	Married	23	52.3
	Single	11	25
	Divorced/Separated	10	22.7

Religion	Christian	28	63.6
	Muslim	11	25
	Other	5	11.4
Number of children	None	8	18.2
	1-2	12	27.3
	3 or more	24	54.5

Table 1 shows that 22 (50%) of the respondents were aged 20–29 years, while the least 3 (6.8%) were aged 40–49 years. The majority, 21 (47.7%) of the respondents had attained a secondary level of education, whereas the least, 5 (11.4%) had a primary level of education. Most 23 (52.3%) of the respondents were married, 11 (25%) were single, and 10 (22.7%) were divorced or separated. The majority, 28 (63.6%) of the respondents were Christians, while the least 5 (11.4%) belonged to other religions. Most 24 (54.5%) of

the respondents had three or more children, whereas the least 8 (18.2%) of the respondents had no children.

### Individual-Related Characteristics Affecting Utilization of Depo-Provera among Women of Reproductive Age Attending Katabi General Military Hospital

**Figure 1 Have cultural beliefs ever stopped you from using contraceptives like Depo-Provera, n=44**

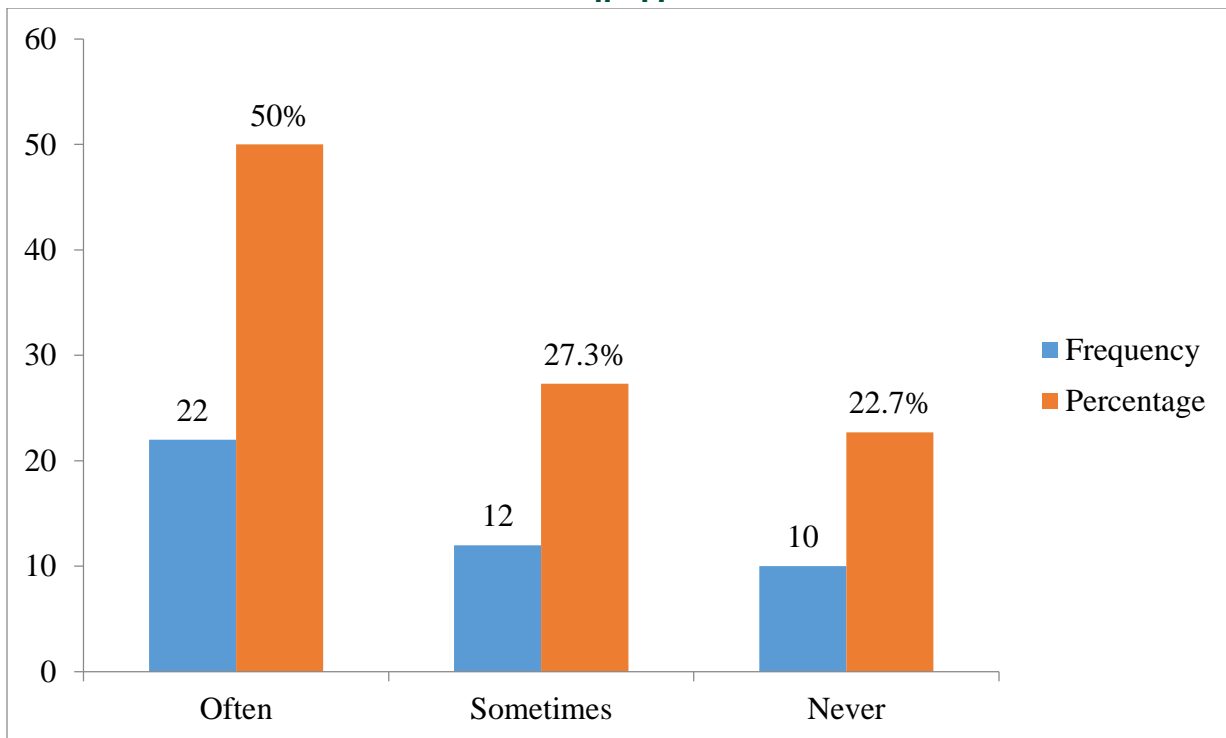


Figure 1 shows that the majority, 22(50%) of the respondents said cultural beliefs ever stopped them from using contraceptives like Depo-Provera, while the least 10(22.7%) said they never stopped them.

**Table 2 shows other Individual-Related Characteristics Affecting Utilization of Depo-Provera among Women of Reproductive Age**

variable	Response	Frequency(n=44)	Percentage (%)
money make it hard for you to use Depo-Provera	Yes, a lot	27	61.4
	A little	13	29.5
	Not at all	4	9.1

ever used herbal or traditional methods instead of Depo-Provera for family planning	Yes	15	34.1
	Sometimes	18	40.9
	No	11	25
fear of side effects ever stopped you from using Depo-Provera	Often	24	54.5
	Sometimes	12	27.3
	Never	8	18.2
Who makes the health care seeking decision on family planning methods	My self	7	15.9
	My husband	26	59.1
	Clan elders	11	25

Table 2 shows that 27 (61.4%) of the respondents reported that money made it hard for them to use Depo-Provera, while the least 4 (9.1%) said it does not affect their use at all. The majority, 18 (40.9%) of the respondents stated that they sometimes used herbal or traditional methods instead of Depo-Provera, while 11 (25%) said they do not use them at all. Most 24 (54.5%) of the respondents said fear of side effects had often stopped them from using Depo-Provera while 8 (18.2%) reported that it had never stopped them. The findings further show that the majority 26 (59.1%) of the respondents indicated that their husbands make the health care seeking decisions on family planning methods like Depo-Provera, while the least 7 (15.9%) reported making the decision themselves.

## DISCUSSION

### Individual-Related Characteristics Affecting Utilization of Depo-Provera among Women of Reproductive Age Attending Katabi General Military Hospital

The study purpose was to determine individual-related characteristics affecting utilization of depo-provera among women of reproductive age attending Katabi General Military Hospital and the findings revealed were as follows; The majority of the respondents said cultural beliefs ever stopped them from using contraceptives like Depo-Provera which was due to prevailing traditional norms that discourage modern family planning methods associating them with infertility or immorality thus addressing cultural misconceptions through community sensitization is essential to improving Depo-Provera utilization. This is in support of a study conducted in Kenya by Kipng'o'k et al. (2023) On the influence of cultural beliefs on family planning, which revealed that 56.8% of women avoided Depo-Provera due to cultural myths linking contraceptive use with infertility, marital instability, and promiscuity. The results showed that 27 (61.4%) of the respondents reported that money makes it hard for them to use Depo-Provera, and this is in line with the problem statement. This might be due to the financial challenges associated with transport costs or purchasing the injection in private

facilities when public stocks run out. This implies that improving the affordability and consistent supply of Depo-Provera could enhance access and usage among low-income women. This is in line with a study carried out in Tanzania by Ternes, (2019) on economic status and contraceptive utilization, which found that women from low-income households had a Depo-Provera uptake rate of only 23.4% compared to 58.9% among those with higher income levels. The findings also revealed that (40.9%) of the respondents stated that they sometimes use herbal or traditional methods instead of Depo-Provera due to a strong cultural attachment to traditional practices or mistrust of modern contraceptives. This was in line with a problem statement. This implies that community-based education and health promotion are needed to correct misconceptions and promote confidence in modern methods. Maduka and Okubor's (2024) study on the use of herbal and traditional medicines by women of reproductive age in Ethiopia contradicts this, that 32.6% of women did not prefer herbal remedies.

Study results showed that 24 (54.5%) of the respondents said fear of side effects had often stopped them from using Depo-Provera, and this was in line with the problem statement. This might be due to inadequate counseling and misinformation about the safety and effects of the injection. This signifies that proper pre-use and post-use counseling by health workers can help reduce fear and improve continued use. This is in contradiction with a study conducted in Nigeria by Nonye-Enyidah et al. (2020), which found that 48.2% of women who had experienced irregular bleeding after using Depo-Provera used it continuously.

### Study Limitations

The study relied on self-reported information from women, which may have been affected by recall bias or fear of giving truthful responses about their Depo-Provera use. This may have led some respondents to under-report or over-report their actual utilization.

The study was conducted at one health facility (Katabi General Military Hospital), which limits the generalization of findings to women in other settings with different cultural beliefs, economic conditions, and facility structures.

The cross-sectional design captured information at only one point in time, making it difficult to determine whether the identified factors directly cause low utilization of Depo-Provera.

Some sensitive issues, such as partner influence and cultural restrictions, were difficult for participants to openly discuss, which may have resulted in incomplete or socially desirable responses.

## Conclusion

The study concluded that individual characteristics significantly affect the utilization of Depo-Provera among women of reproductive age attending Katabi General Military Hospital.

Cultural beliefs, financial barriers, preference for herbal methods, fear of side effects, and male partner influence were key individual factors limiting use.

## Recommendations

### Community Leaders and Local Councils

Support community sensitization programs aimed at addressing cultural myths and misconceptions surrounding Depo-Provera and family planning

Encourage male involvement in reproductive health decision-making.

### Non-Governmental Organizations (NGOs)

Develop community education materials in local languages to promote awareness about Depo-Provera safety and benefits. Implement support programs that assist low-income women in accessing family planning services without financial strain.

### Nursing Implications

The findings emphasize the need for nurses to offer clear, complete, and culturally sensitive counseling about Depo-Provera, helping reduce fear of side effects and improving informed choice.

Nurses can use the findings to design targeted health education sessions that address cultural myths, herbal alternatives, and misconceptions, leading to healthier reproductive choices among women.

Nurses will be able to establish effective follow-up mechanisms such as reminders and personalized support, especially for women facing financial or distance barriers.

The findings guide nurses to advocate for greater male involvement in reproductive health issues and encourage shared decision-making, improving women's autonomy and contraceptive uptake.

## List of Abbreviations

**DMPA** — depot medroxyprogesterone acetate

**HMIS** — Health Management Information System

**FP** — Family Planning

**ANC** — Antenatal Care

**PNC** — Postnatal Care

**HIV/AIDS** — Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome

**IRC** — Institutional Research Committee

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The study was not funded.

## Conflict of interest

The author did not declare any conflict of interest.

## Author contributions

Cephus Nkwasiwe was the principal investigator.

George Masete supervised the research.

Hasifa Nanseroko supervised the research.

Immaculate Naggulu supervised the research.

Jane Frank Nalubega supervised the research.

## Data availability

The data is available upon request.

## Author Biography

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