



Factors Associated With Uptake Of Post-Abortion Family Planning Among Women Of Reproductive Age Seeking Postabortion Care In Nyeri County Referral Hospital

Joseph Mulah¹, Florence Mbutia²

^{1,2}Midwifery Department, School of Nursing, Dedan Kimathi University of Technology, Private Bag- 657-10100, Nyeri, Kenya

| ARTICLE INFO | ABSTRACT |
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| <p>Article history:</p> <p>Received Aug 7, 2023 Revised Sep 25, 2023 Accepted Oct 18, 2023</p> <p>Keywords:</p> <p>Post-abortion Care; Post-abortion Family Planning; Pregnancy loss; Uptake; Women of Reproductive age.</p> | <p>Globally, > 75 million Women of Reproductive Age (WRA) needs Post Abortion Family Planning (PAFP) yearly after treatment of pregnancy loss. However, results from several studies show that majority of these women fail to access PAFP as needed. Efforts made to support uptake of PAFP in Sub-Saharan African (SSA) has borne little success and the uptake of PAFP remains crucially low. This study assessed factors associated with uptake of PAFP among WRA seeking PAC in Nyeri County Referral Hospital (NCRH). A descriptive cross-sectional study was used. The study population was WRA seeking PAFP as a component of PAC after having a pregnancy loss. The study sample included WRA who sought PAC at gynecological ward in NCRH during the time of study from February 11th 2023 to March 20th 2023. A researcher-administered questionnaire was used. Quantitative data was managed using SPSS version 25. The rate of uptake of PAFP was 56.4%. Factors associated with the uptake of PAFP were: sociodemographic factors that included age, marital status, education level, occupation and parity. Health system related factors included: healthcare provider attitudes.</p> |

Corresponding Author:

Joseph Mulah,
Department of Midwifery,
Dedan Kimathi University of Technology,
Private Bag- 657-10100, Nyeri, Kenya
Email: mulah.joseph19@students.dkut.ac.ke

1. Introduction

Post-abortion Family planning (PAFP) is a component of post-abortion care (PAC) given to women of reproductive age (WRA) after treating complications of gestation loss secondary to spontaneous or induced termination [1], [2]. Benefits of PAFP uptake includes: preventing unintended pregnancies and subsequent abortions[3], ensures optimal birth spacing [4] and empowering WRA and promote their reproductive autonomy [5].

Globally, over 75 million WRA need PAFP yearly after treating complications from pregnancy loss[6]. In Sub-Saharan Africa (SSA) usage of PAFP is low (PAFP uptake ranging from 47.7% to 52%) despite continued efforts to improve its uptake [7]. Studies show that only less 60% of clients eligible for PAFP obtain it, while 40% receive no PAFP at all [8]. In Africa, restrictions surrounding treatment of pregnancy loss has made it difficult to fully implement PAFP [9].

The Kenyan government through the Ministry of Health has reinforced PAFP provision in all facilities offering PAC services [10]. The reinforcements include eliminating all obstacles to accessing PAFP [11], developing a program on PAFP clinical skills to train caregivers and ensuring PAFP is accessible at lower-level hospitals (Ministry of Health, 2022). Contraception is widely available, knowledge about contraception is high, yet PAFP usage remains low in Kenya[12]. Due to the low usage of PAFP,

subsequent terminations are common among WRA previously treated from a complication of pregnancy loss.

Nyeri County Referral Hospital offers PAC services at the gynecological ward. The Ministry Of Health (MOH) 301 register of the gynecological ward showed that the uptake of PAFP was less than 50%. In the month of May, 2022, number of treated abortions were 29 and with 0 PAFP uptake. In June 2022, 8 abortions were treated with 0 PAFP uptake. In July, 26 were treated with only 7 women taking PAFP. In August, 27 abortions were treated yet only 13 women received PAFP. In September, 58 abortions were treated with only 29 women received PAFP. This trend kept recurring showing huge discrepancy in women using PAFP as compared to ones treated for abortion-related complications. This study aimed to assess the factors influencing the uptake of PAFP among WRA in Nyeri County Referral Hospital at the gynecological ward. There was an urgent need to establish the cause for the continued low uptake of PAFP at the study site despite the high number of treated abortions at the same study site.

2. Methods

A descriptive cross-sectional study design was used. The study took place at Nyeri County Referral Hospital gynecological ward. The study population was all WRA seeking PAFP. The sample included WRA seeking PAC at gynecological ward during the time of study. All WRA admitted at gynecological MOH 301 register formed basis of sampling frame. Purposive sampling technique was used. The sample size was 78 participants. Those WRA who had a pregnancy loss previously and were seeking PAFP after the PAC treatment services at the gynecological ward 12 were included for the study. Those eligible clients who were very sick as a result of complications arising from pregnancy loss were excluded. The dependent variable was uptake of PAFP. There were two expected outcomes from the WRA seeking PAFP. One outcome was that they would choose and use a method and the other outcome was that they would not choose a method or use it. The independent variables were: sociodemographic factors, health system related factors. Sociodemographic factors included: age, marital status, level of education, distance to facility, employment status, religious affiliation, history of previous pregnancy loss and the number of living children. Health system related factors included healthcare provider's attitude. A researcher-administered questionnaire was used. The study questionnaire was adopted from WHO, 2019 from a study on Factors associated with the uptake of Post abortion care in Tanzania. The reported validity was 98%.[13] The reliability was 96%. [13]. Data was collected using interviewer administered questionnaire. Quantitative data was managed using a Statistical Package for Social Science (SPSS) version 25. A Chi-square test and Fisher's Exact Test were used during test of association between independent and dependent variable. Ethical approval obtained from Dedan Kimathi University of Technology Ethics and Review Committee. Permission to conduct the study was obtained from Nyeri County Referral Hospital Research Ethics and Review Committee.

3. Results, Analysis and Discussion

The results indicated only 56.4% (n=44) of respondents were discharged home with a PAFP (see table 1). The most selected PAFP method was Injectable (DMPA) 29.5% (n=23). The low uptake could be attributed to the fact that possible inadequate awareness of importance of PAFP among WRA. Stigma and misconceptions surrounding the WRA who had a pregnancy loss discourage women from taking these services. The low uptake could also be partly contributed by the healthcare provider bias. The result was consistent with a study in Ethiopia which had 58% [14]and another in Cameroon which had 56%[7]. However, this rate was lower than the Kenyan national level which at the time of the study was 64%. On the contrary, this result differed with ones of studies in Japan 95% [15] and Spain 98.3% [12]. These studies were from first world countries which explained the higher rates as an indication of highest attainment of quality PAFP services. The disparity was because more than 90% of participants in Japan and Spain had good knowledge of PAFP. Another possible reason was these countries had well established health systems to facilitate PAFP uptake [16]

The association of sociodemographic factors and uptake of PAFP are illustrated in table 2. Majority of respondents were less than 24 years with cumulative percentage of 55.2% (n=43). Half of

respondents were single with 50% (n=39). In addition, majority had attended a secondary school to completion 48.7% (n=38). More than half had a formal employment 55.1% (n=43). Two-thirds were of protestant religion 60.3% (n=47). The association indicated that age, marital status, occupation, religion and number of living children were significantly associated with uptake of PAFP. From the results age was significantly associated with uptake of PAFP. Majority of the WRA of 15-19 had no uptake which suggested that younger WRA faced unique challenges in accessing PAFP due to limited knowledge, lack of autonomy, and stigma surrounding sexuality. These results were consistent with studies in Ethiopia[17], Nigeria(Magalona et al., 2022), Tanzania(Asubiojo et al., 2021) and Somalia[19]. Another study in China by Wang et al differed with the results of this study as it displayed age as not significantly associated with the uptake of PAFP[2].

Advanced education level was associated with improved knowledge about reproductive health and family planning options. This result was in conjunction with Magalona et al., 2022 , study done in Côte d'Ivoire[1]. In other studies, conducted in Uganda, level of education differed with these results showing that attainment of higher levels didn't translate to higher uptake of PAFP [2]. Such a discrepancy was attributed to involvement of multiple other factors that included religion and culture[2].

Occupation of respondents was significantly associated with uptake of PAFP. The association observed was in agreement with a study done in Ethiopia[20], Tanzania[18] Uganda[21], and Egypt[17]. From the aforementioned studies, unemployment led to financial constraints which limited WRA's ability to afford contraceptives or access healthcare services. Lack of health insurance coverage was a barrier, particularly for low-income WRA, making it harder to obtain the necessary PAFP.

Marital status was significantly associated with PAFP. Studies in Mozambique, [17], Uganda [21] and Tanzania (Asubiojo et al., 2021) demonstrated same significance. Married or cohabiting individuals had different motivations and preferences for contraception compared to single or unmarried WRA [7]. Relationship dynamics, including discussions with partners, influenced the decision-making process regarding contraception after a pregnancy loss. On the contrary, a great difference was noted in studies done in USA [22]and Italy[14]. This was attributed to the fact that majority of these countries had more single WRA[14]

Number of living children was significantly associated with uptake of PAFP. The number of children WRA already had affected her decision to adopt PAFP. Attainment of desired family size motivated her to use contraception consistently to prevent subsequent pregnancies. On the other hand, those who desired more children less likely adopted PAFP immediately after a pregnancy loss. The significance was in conjunction with Gele's study in Somalia [19], and Baffour-Duah's study in South Africa[16]. A variation was seen in Atiglo's and Biney's study in Ghana that showed no significant association[23]. This variation was linked to the fact that majority of Atiglo's and Biney's participants were young college women below 20 years and they could not have had any young children.[23]

Association of healthcare provider's (HCPs) attitude with the uptake of PAFP is illustrated in **Table 3**. The HCPs attitudes was significantly associated with the uptake of PAFP. Outdated HCPs personal beliefs/biases against PAFP made them fail to provide accurate information, counseling, and appropriate options to WRA seeking PAFP thus creating barriers and discouraging PAFP uptake. Chakhame et al in a study conducted in Malawi [24] demonstrated a similar association.

4. Conclusions

The findings of this research contributed to the understanding that the low uptake of PAFP at the study site may have been as a result of HCPs poor attitude, and demographics surrounding the users thus the urgent need to address these factors to improve the uptake. The results implied that the sociodemographic factors significant included: age, occupation, level of education, marital status and number of living children. The health system related factors were: perceived quality of care, hospital privacy set-up and healthcare provider's attitude.

5. Tables

The results Table 1 showing uptake of Post-abortion Family planning

Table 1.
Uptake of Post-abortion Family Planning

| Characteristics | Category | Frequency | Percentage (%) |
|-----------------|--|-----------|----------------|
| Uptake of PAFP | No uptake | 34 | 43.6 |
| | Yes uptake | 44 | 56.4 |
| Method selected | No method | 27 | 34.6 |
| | Condoms(male/female) | 6 | 7.7 |
| | Pills (COCs) | 12 | 15.4 |
| | Injectables (DMPA) | 23 | 29.5 |
| | IUCD (insert>2 weeks) | 3 | 3.8 |
| | Implant (referred to another Facility for insertion) | 7 | 9.0 |

Table 2 shows association between the sociodemographic factors of the WRA and the uptake of PAFP.

Table 2
Association between socio-demographic factors and the uptake of PAFP

| Characteristics test | Caegory | frequency | Percentage | PAFP uptake | | X ² /Fisher's test |
|---------------------------|----------------|-----------|------------|-------------|----|---|
| | | | | Yes | No | |
| Age | 15-19 | 18 | 23.1 | 5 | 13 | fisher's Exact Test = 11.356 p= 0.030 |
| | 20-24 | 25 | 32.1 | 15 | 10 | |
| | 25-29 | 17 | 21.8 | 11 | 6 | |
| | 30-34 | 11 | 14.1 | 6 | 5 | |
| | 35-39 | 5 | 6.4 | 15 | 0 | |
| | 40-44 | 2 | 2.6 | 2 | 0 | |
| Marital status | Single | 39 | 50.0 | 19 | 20 | Fisher's Exact Test = 17.654 p= 0.021 |
| | Married | 22 | 28.2 | 13 | 9 | |
| | Cohabiting | 14 | 17.9 | 9 | 5 | |
| | Separated | 3 | 3.8 | 3 | 0 | |
| Educational level | No education | 1 | 1.3 | 1 | 0 | Fisher's Exact test = 10.633 p= 0.40 |
| | Primary school | 22 | 28.2 | 10 | 12 | |
| | Secondary | 38 | 48.7 | 24 | 14 | |
| | Tertiary | 17 | 21.8 | 9 | 8 | |
| Occupation | Employed | 43 | 55.1 | 28 | 15 | Fisher's Exact Test= 27.289 p= 0.003 |
| | Housewife | 14 | 17.9 | 9 | 5 | |
| | Student | 18 | 23.1 | 6 | 12 | |
| | Family support | 3 | 3.8 | 1 | 2 | |
| Religion | Catholic | 12 | 15.4 | 0 | 12 | fisher's Exact Test= 19.279 p=0.000 |
| | Protestant | 47 | 60.3 | 29 | 18 | |
| | Muslim | 7 | 9.0 | 6 | 1 | |
| | No religion | 12 | 15.4 | 9 | 3 | |
| Previous loss | No history | 51 | 65.4 | 25 | 26 | Fisher's Exact Test= 3.200 p= 0.199 |
| | One loss | 23 | 29.5 | 16 | 7 | |
| | >one loss | 4 | 5.1 | 3 | 1 | |
| Number of Living children | No child | 44 | 56.4 | 22 | 22 | Chi-square(X ²) = 18.156, Df=2 p=0.018 |
| | 1 child | 17 | 21.8 | 12 | 5 | |
| | >1 child | 17 | 21.8 | 10 | 7 | |

Table 3 shows an association of the healthcare provider's attitude and the uptake of PAFP.

Table 3
Association between the healthcare providers' attitude and uptake of PAFP

| Characteristics | Category | Frequency | Percentage | PAFP uptake | | X ² / Fisher |
|------------------------------|----------|-----------|------------|-------------|----|--|
| | | | | Yes | No | |
| Handled you well | No | 5 | 6.4 | 3 | 2 | Fisher's =25.759 p=0.000 |
| | Yes | 40 | 51.3 | 33 | 7 | |
| | Not sure | 33 | 42.3 | 8 | 25 | |
| Concerned for your Condition | No | 22 | 28.2 | 7 | 15 | Fisher's =9.139 p=0.009 |
| | Yes | 55 | 70.5 | 37 | 18 | |
| | Not sure | 1 | 1.3 | 0 | 1 | |
| Abused by caregiver | No | 51 | 65.4 | 38 | 13 | Fisher's =19.872 p=0.000 |
| | Yes | 26 | 33.3 | 6 | 20 | |
| | Not sure | 1 | 1.3 | 0 | 1 | |
| Blamed by caregiver | No | 50 | 64.1 | 37 | 13 | X ² = 17.526, Df=2 P=0.000 |
| | Yes | 28 | 35.9 | 7 | 21 | |
| Denied any method | No | 40 | 51.3 | 33 | 7 | Fisher's =24.57 p=0.000 |
| | Yes | 4 | 5.1 | 0 | 4 | |
| | Not sure | 34 | 43.6 | 11 | 23 | |

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