

Original Research Article

Uptake of modern family planning methods among women receiving spontaneous post abortion care at Kuajok hospital, South Sudan: a cross-sectional study

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Received: 04 June 2022

Revised: 25 June 2022

Accepted: 27 June 2022

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ABSTRACT

Background: Improving women's health through modern family planning to spontaneous post abortion care is a key to prevent unwanted pregnancy immediately after miscarriage, world health Organization indicates that spacing for six months period following miscarriage prevent earlier pregnancy. South Sudan ranks the lowest country with the prevalence rate of 5.5% nationwide. This study helped to uncover the factors contribute to the low uptake of modern family planning options among spontaneous post abortion patients in Kuajok hospital, provide evidence to ministry of health, policy makers and health care providers to improve modern family planning services.

Methods: Study adopted a descriptive cross-sectional designed and data was collected from spontaneous post abortion patients to determine the prevalence of spontaneous post abortion in the study area.

Results: Urban and rural have difference choice of modern family planning a total of 38.4% (481) of post abortion women had sort care at the hospital in the past one year revealed that they preferred modern family planning over the other methods. With a total of 17.9% (224) women utilized pills to manage their family sizes, while injectable accounted for 8.6% (108) used of modern family planning among spontaneous post abortion women in that year. The study also noted that male condom was equally popular as a preferred among population at 11.9% (149). Female condoms and cervical diaphragm were unpopular and none patients used them.

Conclusions: Ministry of health, policy makers to increase awareness on modern family planning to spontaneous post abortions patients.

Keywords: Modern, Family planning, Among women

INTRODUCTION

Modern family planning methods promote maternal and child health by reducing the prevalence of unwanted pregnancies, unsafe abortions, maternal deaths and infant mortality.¹ Modern Family Planning used by females aged between 15–49 years both in developed and developing economies globally rose from 14 percent in the mid-1960 to between 62 percent and 68 percent in 2008 as highlighted.¹

In 2019 about 20 million unsafe abortions happened annually across the global with 95% of them happening in developing countries.² As many as 80,000 maternal deaths occur each year as a result of either spontaneous or direct abortion related complications accounting for approximately 13% of all maternal deaths in the world; equivalent to one in eight pregnancy-related deaths.³

About 123 million post abortion patients, mainly in developing countries, do not use modern family planning

among spontaneous post abort women, despite wanting to limit the childbearing and about 40% of all pregnancies were unplanned and occur due to non-use of contraceptive.⁴

Despite its benefits, modern family planning methods among women of childbearing remains low in many sub-Saharan Africa countries, especially South Sudan which ranks the lowest at 5.5%.⁴ Only 43% of women of reproductive age in less developed countries of Africa use modern contraception methods.⁵

A huge gap in utilization of family planning methods was noted between the highest and the lowest wealth quartiles at 52% and 35% respectively.⁶ Even after the declaration of peace and coexistence of communities in the region, utilization of maternal care and modern family planning continue to remain low.⁷ This study helped to uncover the factors which contribute to the low uptake of modern family planning options among women receiving spontaneous post abortion care in Kuajok hospital.

Objectives

The study objectives include, determine the uptake of modern family planning methods among spontaneous post abortion patients at Kuajok hospital, determine the knowledge of modern family planning methods on spontaneous post abortion women in Kuajok Hospital, determine the attitude of spontaneous post abortion women towards family planning at Kuajok hospital and to examine the factors responsible for low uptake of family planning among spontaneous post abortion women at Kuajok hospital.

METHODS

Study designed

A descriptive cross-sectional study was employed. Data was prospectively collected from March through June 2021. The study was conducted at Kuajok hospital, Bahre el Ghazal Region, in North Western South Sudan. It was one of the referral health facilities, offering maternal health services, the facility consists of four major departments which includes, Internal medicines, Pediatrics, surgical, obstetrics & Gynaecology, TB/HIV units, laboratory and pharmaceutical services. Patients were selected after crosschecking the admission data in maternity, ANC and Ob & gynaecology department in general. Inclusion criteria: all women who sought spontaneous post abortion care at Kuajok hospital were accorded equal chances of participating into the study. Exclusion criteria: although participation into the study was free to all women seeking maternal health services at Kuajok Hospital, the study excluded women with mental health challenges and those who never experience spontaneous abortion.

Sampling technique

The sample size was calculated using the Fishers Model Equation.

$$N = [Z^2pq/d^2]$$

Where n=desired sample size,

Z=the standard Normal deviation at the required confidence interval (95 probability error equal to 1.962); P =Probability index of presence (0.5 for unknown distribution); Q =Proportion of non-occurrence (1-p); D = level of statistical significance or margin of error (0.05 for 95% significance level) 384.1

The sample were accustomed using the Yamane 1967 which is recommended for a population below 10,000.

Where nf = desirable sample size of the study; n= calculated sample size; N = Estimated population in the study area.

$$Nf = 384.1 / (1 + 384.1 / 980)$$

$$Nf = 384.1 / 1.392$$

Nf = 275.9. Therefore 276 respondents were randomly selected.

A pair of structured questionnaires questions were administered to only spontaneous post aborted women at the age of 15 -49 years who had ever been admitted to Kuajok hospital for maternal care services and the other key informants were used for medical professionals. Data obtained from questionnaires were coded into a Statistical Package for Social Sciences (SPSS) program version 23 and transfer the data information into Microsoft words. Both descriptive and inferential were used to reveal complex relationship between variables. Statistical tests were explained the significance in those relationships and results were presented in tables, charts and graphs.

Ethical approval

Ethical clearance for this study was sought from the Ethical Review Board of Kenyatta University. Kenyatta University Ethical Review Board was considered for ethical approval as we were keen to have the study protocol reviewed within the anticipated timelines. The National Commission for Science, Technology and Innovation (NACOSTI) granted the research license. Approvals were also obtained from the hospital in-charge of Kuajok hospital and MOH Republic of South Sudan.

RESULTS

Urban and rural areas have difference choice of modern family planning methods a total of 38.4% (481) of spontaneous post abortion women who had sort of care at

the hospital in the past one year revealed that they preferred modern family planning methods over the other methods. With a total of 17.9% (224) women utilized pills to manage their family sizes and conception period while injectable accounted for 8.6% (108) used of modern family planning methods among spontaneous post abortion women in that year. The study also noted that male condom was equally popular as a preferred method among population at 11.9% (149). Female condoms, cervical diaphragm, spermicides and loop methods were very unpopular and none of the patients used them.

Table 1: Distribution of the respondents by the socio-demographic factors.

Social demographic characteristics	N	%
Age (years)		
15-25	124	51.0
26-30	76	31.3
31-35	29	11.9
36-40	12	4.9
41-49	2	0.8
Education level		
No education	83	1.3
Primary level	78	35.4
Secondary level	53	49.6
Tertiary/university level	34	14.9
Marital status		
Single	42	17.3
Married	185	76.1
Separated	6	2.5
Windowed	10	4.1
Occupation		
Employed	35	14.4
Farming	27	11.1
Housewife	129	53.1
Business	13	5.3
Under family support	22	9.1
Students	17	07.0
Patients highest level of education		
No education	187	77.0
Primary school level	27	11.1
Secondary school level	13	5.3
University/college level	16	6.6

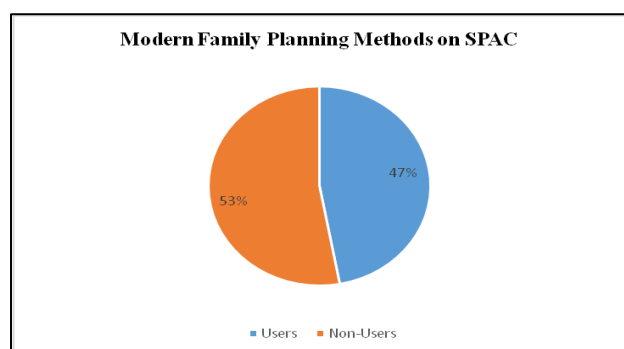


Figure 1: Proportion of women who used modern family planning immediately after miscarriage.

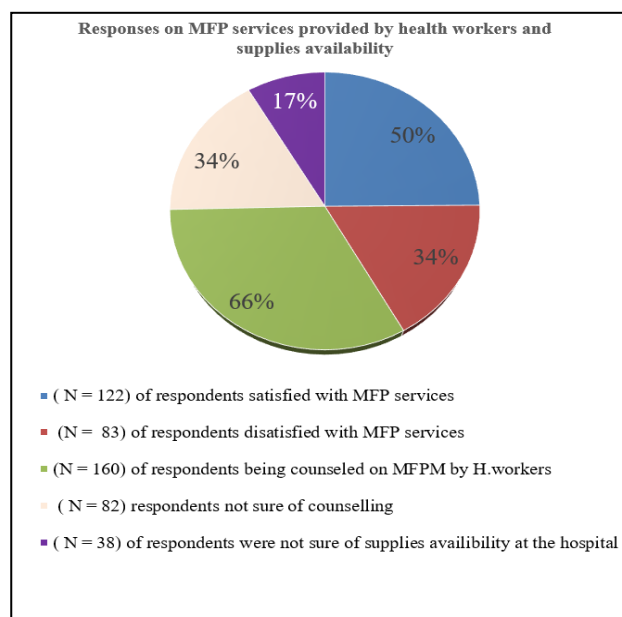


Figure 2: Health facility factors in provision of modern family planning methods after miscarriage/SPAC.

Table 2: Utilization & non-utilization of modern family planning methods on SPAC women.

Variable	Users of FP (N=219) frequency (%)	Non-users of FP (N=24) frequency (%)	P value
Age (years)			
15-25	116 (93.5)	8 (6.5)	0.000
25-30	73 (91.3)	7 (8.8)	
30-35	24 (82.8)	5 (17.2)	
35-40	8 (66.7)	4 (33.3)	
40 and above	2 (100)	0 (0)	
Marital status			
Single	35 (83.3)	7 (16.7)	0.000
Married	172 (93.0)	13 (7.0)	
Separated	5 (83.3)	1 (16.7)	
Windowed	7 (70.0)	3 (30.0)	
Patients' religion			
Christian	58 (87.9)	8 (12.1)	0.005
No religion	161 (91.0)	16 (9.0)	
Occupation			
Employed	28 (80.0)	7 (20.0)	0.003
Farming	24 (88.9)	3 (11.1)	
Housewife	118 (91.5)	11 (8.5)	
Business	10 (76.9)	3 (23.1)	
Under family support	22 (100)	0 (0)	
Student	17 (100)	0 (0)	

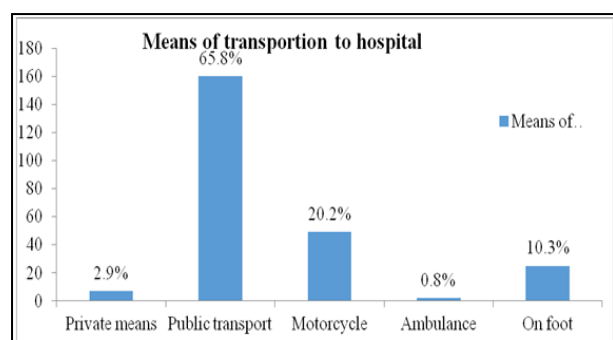


Figure 3: The mean of transport by the women from home to the hospital.

DISCUSSION

Socio-demographic characteristics of modern family planning care to spontaneous post abortion women

Nearly 38.4% of spontaneous post abortion women counselled and accepted basic contraception methods while receiving spontaneous post abortion care. This is much higher compare with the overall low prevalence rate of 5.5% for South Sudan.⁸ Moreover, it could be attributed to strong cultural beliefs, lack of a law empowering women to take an informed decision to use modern family planning and inadequate counselling of the women.⁸

The study also noted that majority of spontaneous post abortion women who were admitted in the maternity for treatment at Kuajok -hospital were aged between fifteen and twenty-five years, with only a few aged above twenty-five years. Majority of the spontaneous post abortion respondents seek modern family planning care services after counselling as they did not have any education background and only a few had attained high school, college or university level. The study findings concur with those of Zecharia & Malel whose study found that the prevalence rate of postpartum women receiving post abortion care did 30% which was higher than the country asl low as 4.7%.⁶

Knowledge on modern family planning methods by SPAC women

It was imperative to note that a significant population of respondents demonstrated basic knowledge of at least one modern family planning methods and options thereof. To accurately capture the respondents' knowledge of the existing modern family planning methods among spontaneous post abortion patients, they were provided with a list in which they could choose one or more methods that they knew of and the methods they have used in the past. Among the respondents who sought care at the hospital, majority said that women should be educated on available modern family planning. Some of the reasons for using natural family planning over the modern family planning methods were attributed to the fact that they were hormone-free, low cost, and often

acknowledged by some religious groups. This seemed to work well with the respondents as majority of them hailed from humble background, lower economic status and majority depended on external support either from their partners or family.

Attitude towards modern family planning methods on SPAC women

The study sought to determine the attitude of the respondents regarding use of various methods of modern family planning after spontaneous abortion. The study noted presence of some myths and behaviors wrapped around modern family planning methods uptake by women who sought care at the hospital.

Another significant fraction of the respondents pointed that modern family planning methods affect women body structure and function, another group of respondents said that some modern family planning methods caused woman to stay longer without receiving their monthly periods while others said that modern family planning methods affected their reproductive cycle and feared for loss of pregnancy in future. The relationship between higher scores for women with relatively higher levels of educated can be attributed to acquisition of knowledge on modern family planning for SPAC women in school and other places while lower scores for women with lower levels of education could be attributed to lack of awareness and lack of knowledge on modern family planning. The study findings concur with those of Tuladhae & Marahatta.³

The results of this study conclude that there was generally good attitude towards the modern family planning methods among the respondents. This means that fewer women want to use modern family planning methods among spontaneous post abortion women. A significant population of the respondents said that young women were had high proportion of modern family planning methods in their community and this coincides with findings as mentioned in published literature who conducted and almost similar study in Guinea.

Health facility factors and access to MFPM care services for SPAC women

On the question of accessibility for modern family planning to the respondents a significant population of the respondents said that modern family planning methods were accessible only in major health facilities and clinics. The study noted challenges of accessibility as most of the women resided a far distance from health facilities offering modern family planning methods. This challenge could have a ripple effect as it could also affect the distribution of supplies.

Limitations

The scope of this study was limited to the uptake of modern family planning methods among the spontaneous

post abortion women in Kuajok hospital. Study participants were drawn only from a pool of women aged 15-49 years who experienced spontaneous post and aborting and seeking health care services at the hospital.

CONCLUSION

Ministry of health, policy makers to revised sexual and reproductive health policy and provide advocacy and increase awareness on modern family planning to spontaneous post abortions patients at all levels. Further research is required in the region on the same subject.

ACKNOWLEDGEMENTS

Authors are thankful to officers and administration at Kuajok state hospital for the help during data collection. Authors are also thankful to midwives and nurses at obstetrics/gynaecology department in the study facility for keeping records that provided the data for this study. I'm indebted to Dr. Gitonga and Dr. Lister for their valuable comments.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Majok SA, Makunyi EG, Onsongo L. Uptake of modern family planning methods among women receiving spontaneous post abortion care at Kuajok hospital, South Sudan: a cross-sectional study. Int J Community Med Public Health 2022;9:3090-4.