

Knowledge, Attitude, and Practices of Post-Abortion Care among Health Workers at Kampala International University Teaching Hospital

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ABSTRACT

Abortion is still a public health dilemma in developing countries Uganda inclusive. Abortion is illegal in Uganda, and unsafe abortion is responsible for at least 30% of all maternal deaths. Each year, an estimated 297,000 induced abortions are performed in Uganda, and nearly 85,000 women are treated for complications, as a result of unsafe abortion. The purpose of this study was to determine the knowledge, attitude, and practices of health workers on Post Abortion Care at Kampala International University Teaching Hospital. A descriptive cross-sectional study design was used which employed quantitative methods and the findings of the study indicated that most of the health workers had knowledge of abortion and PAC. Data is presented in both tables and figures. The health workers had adequate knowledge (95%) of PAC, however, the practice of PAC services was not adequate to assist the health workers in implementing the components efficiently. The majority (82%) of the health workers lacked enough skills, especially in family planning services and reproductive health services. Understanding the service provider-related challenges and overcoming them can enhance sufficient service provision. Effective support and supervision should be done regularly to guide, help, and encourage staff to improve their performance to provide high-quality PAC services. This can lead to early detection of the common challenges faced by the units that deter appropriate management so that they provide high-quality PAC services to avert the effects that are experienced by women after an abortion hence reducing the burden of maternal morbidity and mortality in Uganda.

Keywords: Post-Abortion Care (PAC), Health Workers, Unsafe Abortion, Maternal Mortality, Family Planning Services

INTRODUCTION

Unsafe abortions continue to be a significant public health issue in many parts of the world, including Uganda. According to the World Health Organization, approximately 25 million unsafe abortions occur annually, with the majority taking place in developing countries with restrictive abortion laws. Uganda is no exception, with an estimated 297,000 unsafe abortions occurring each year, resulting in high rates of maternal mortality and morbidity [1]. In response to the high rates of unsafe abortions, the Ugandan government has implemented post-abortion care (PAC) services to provide comprehensive treatment and support for women who have undergone unsafe abortions [2]. The three essential parts of PAC are: -1) emergency care, counseling, and services for post-abortion contraception, 2) community involvement in the early detection and management of abortion complications, and 3) encouragement and reinforcement of continuous contraceptive usage [3]. However, the successful implementation of PAC relies heavily on the knowledge, attitudes, and practices of health workers who are responsible for providing these services. PAC is important because it not only addresses the immediate medical needs of women who have experienced complications from unsafe abortions but also provides an opportunity for counseling, family planning education, and referrals for further support. By addressing the physical, emotional, and social aspects of post-abortion care, PAC plays a vital role in reducing the long-term health consequences of unsafe abortions and preventing future unintended pregnancies [1]. According to [4], the extent of PAC implementation in Africa is estimated to be around 34%. In sub-Saharan Africa, the extent of PAC implementation is estimated to be around 29%. In East Africa, the extent of PAC implementation is estimated to be around 30%. In Uganda, the extent of PAC implementation is estimated to be around 25%. Unfortunately, there is no specific data available for the extent of PAC implementation at KIU-

TH. Due to the limited PAC services at public hospitals, women have continued to receive care in a variety of locations, including private medical clinics, traditional herbalists' homes, establishments run by untrained staff, or even by self-inducing abortion hence this study intends to identify factors associated with the provision of PAC among healthcare workers at Kampala International University Teaching Hospital (KIU-TH) [5]. Whether an abortion is carried out safely or unsafely will affect the health. Despite the constitution's expansion of the provisions allowing access to safe procedures, maternal mortality in Uganda, of which unsafe abortion is a key cause, continues to climb [6]. Why medical professionals can't stop such tragedies when the law offers safe alternatives is a bigger concern. To reduce infections and fatalities associated with improper pregnancy termination, the MoH developed guidelines for the provision of PAC. However, almost a decade later, PAC is rarely practiced in the public setting [7]. Little is known about the knowledge and attitude of healthcare providers towards the provision of PAC in Uganda and also in KIU-TH. For instance, to our understanding, there is no documented report on health facility-related factors that could influence the implementation of PAC. This study therefore aimed at assessing the provision of PAC among healthcare givers of KIU teaching hospitals.

Conceptual Framework

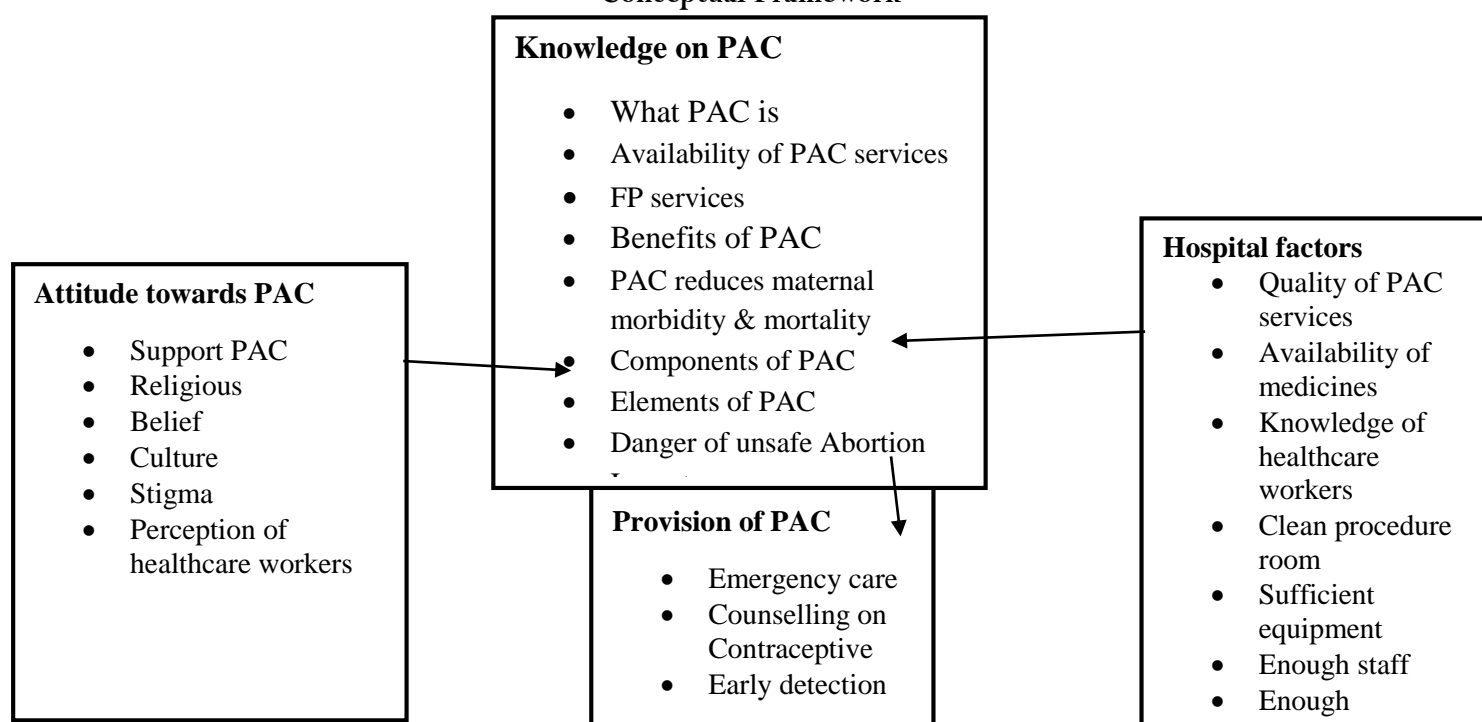


Figure 1: Conceptual framework

The conceptual framework for PAC provision demonstrates that numerous factors affect the provision of PAC needed by health workers to those who need it. These factors include Knowledge, attitude, and hospital factors. Knowledge determines whether the healthcare provider has the needed skills or awareness of PAC hence health workers who are knowledgeable will provide the necessary services while those with suboptimal knowledge will provide inadequate services, the attitude of the healthcare providers towards the provision of PAC also has a great influence in that one can have the necessary knowledge but ones he feels like it is against his belief then he won't provide the PAC and lastly there are hospital factors like the needed equipment, the place for the provision of PAC as this has an influence in that you can have the necessary knowledge, good perception but lack the equipment.

METHODOLOGY

Study Design

The study design was a cross-sectional study using the quantitative technique of data collection.

Study Area

The study was conducted at Kampala International University Teaching Hospital. It is situated in the western region of Ugandan in the town of Ishaka, Bushenyi district. It is bordered by the Rubirizi District in the northwest, Buhweju District to the northeast, Sheema District to the east, Mitooma District to the south, and Rukungiri District to the west. This study site was chosen for study because it sees a lot of patients who need PAC services and has a wide range of health service providers involved in delivering PAC services. The hospital currently employs people in a variety of positions, including doctors, clinical officers, registered nurses, enrolled nurses, enrolled midwives, anesthetists, laboratory technicians, and laboratory assistants.

The hospital has 1,000 beds capacity and offers services healthcare services like gynecology, antenatal care, family planning, delivery, dental, postnatal checkups, medical, psychiatric, surgical, laboratory, and nutrition services. It is about 75 kilometers to the northwest of Mbarara Regional Referral Hospital. The Kampala International University Teaching Hospital is a private facility, founded in 2001, and run by a board of governors.

Study Population

The study was focused on healthcare professionals (Midwives, Doctors, Clinical Officers, laboratory personnel, and Nurses) at Kampala International University Teaching Hospital.

Sample Size Determination

The sample size was calculated using the Kish Leslie Method of 1965 for calculating sample size for cross-sectional studies [8].

$$n = \frac{(z^2 \cdot pq)}{d^2}$$

Where;

n= the calculated sample size.

z= the level of significance which is 1.96

p= an estimate of the proportion of women who got PAC services at Kampala International Teaching University Hospital.

d= allowable margin of error which is 0.5

q = (1-p)

Therefore, our sample size is;

$$n = 1.96^2 * (0.93 * 0.07) / 0.05^2$$

$$n = 245$$

From the above formula, the sample size was 254 respondents but these health workers were not available in Kampala International University Teaching Hospital gynecology ward and outpatient department therefore, the research used a sample size of 51 health workers.

Therefore, n= 51

Study Procedure

A self-administered questionnaire was given to study participants who gave their agreement to participate in the study and were conveniently present in their particular wards at the time of data collection. This method of recruiting participants is known as convenience sampling. Through this process, individuals were able to participate in the study whenever it was convenient for them.

Eligibility Criteria

Inclusion Criteria

The study included healthcare workers (Midwives, Doctors, Clinical Officers, and Nurses), both males and females working at Kampala International University Teaching Hospital who were on duty and willing to participate in the study.

Exclusion Criteria

The study excluded healthcare workers (Midwives, Doctors, Clinical Officers, and Nurses), both males and females working at Kampala International University Teaching Hospital who were on leave, sick, or those who will be ill.

Definition of Variables

Dependent variable: Post Abortion Care Provision.

Independent variables: The Knowledge, attitude, and practices of PAC.

Data Collection Instruments

Self-administered questionnaires were utilized in this study as the instruments for gathering data. The questionnaire collected quantitative data. English-language questionnaires were created, pretested, and evaluated. The responders' names or addresses weren't necessary because they were clear and straightforward and contained serial numbers that prevented any loss. This ensured secrecy and gave the participants in the study confidence throughout. The questionnaires were cross-checked during data collection to ensure that all questions were addressed, and the researcher provided explanations where respondents had trouble responding to a question.

Data Collection Procedures

Questionnaires that were fully confidential and were used to gather the data. Since the study was to address private, intimate, and delicate concerns, no name was required. The respondents responded freely as a result of this. After the approval of the research proposal, the researcher gave an introduction letter that introduced her to the Kampala International University Teaching Hospital administration as required for approval to conduct the research study in the hospital. Potential respondents (health workers) were informed of the study's objectives by the researcher, and those who were interested in participating were purposefully sampled. After selecting a

sample of respondents, the researcher gave them questionnaires to complete with assistance from two research assistants.

Data Management and Quality Control

Before leaving the data collection site, all completed questionnaires were checked for validity, completeness, accuracy, storage in files, and correct entry into the computer. Before being prepared for analysis, the questionnaires were properly stored in a locker to prevent loss and unauthorized access.

Data Analysis and Presentation

The data collection in the field was constantly supervised. Quantitative raw data from questionnaires were coded and entered into Microsoft Excel. Data were cleaned and exported to SPSS for analysis. The information gathered was presented in the form of text, tables, pie charts, and graphs.

Ethical Consideration

The Researcher obtained permission to conduct the study from Kampala International University School of Nursing REC, and the Research Committee issued an introductory letter to the Gynecology department, Outpatient department, and Accident and Emergency ward. Heads of departments were asked to authorize the researcher's access to the ward, after which the researcher explained the study to the participants and obtained their informed consent (health workers). Throughout the study, confidentiality was maintained [9].

Dissemination of Results

Dissemination was done through publishing articles in reputable peer-reviewed journals and through presentations in conferences and symposiums. Also, some copies of this dissertation were presented to; Kampala International University Western Campus through the School of Nursing Sciences, Kampala International University School of Nursing library, and Kampala International University Teaching Hospital library.

RESULTS

Socio-demographic Characteristics of Healthcare Workers

A total of 51 healthcare workers answered the questionnaire of which the minimum age was 21 years and the maximum age was 48 years and the majority of them 30(58.8%) were less than 30 years, Nearly all of the healthcare workers had partners (43(84.3%)), majority of them 39(76.5 %) were Christians, meanwhile of those who responded, minority 5 (9.8%) had masters and 17(33.3%) were doctors as summarized in Table 1 below.

Table 1: Sociodemographic characteristics of respondents

Characteristics	Frequency (n)	Percentage (%)
	=300	3(300) (300) 100)
Age of respondent in years		
<30	30	58.8
Above 30	21	41.2
Cadre		
Nurse	11	21.6
Midwife	13	25.5
Clinical Officer	10	19.6
Doctor	17	33.3
Marital status		
With a partner	43	84.3
Without a partner	8	15.7
Level of Education		
Certificate	12	23.53
Diploma	22	43.14
Degree	12	23.53
Masters	5	9.80
Religion		
Christian	39	76.5
Muslim	12	23.5

Research Objective 1: Knowledge of PAC

The respondents were asked whether unsafe abortion is one of the top 5 most causal death in women and the majority 34(66.7%) knew and yes, others didn't know as they mentioned otherwise, nearly all of the healthcare workers 46(90.2%) knew that clinicians can perform abortion services to save a life, majority 40 (78.4%) knew

the definition of PAC, only a few 15(29.4%) didn't accept that health practitioners had a duty not to object abortion-related services during an emergency, majority 40(78.4%) of them accepted that PAC should be carried out only in an equipped health facility with authorized skilled health workers as summarized in table 2 below.

Table 2: Knowledge of PAC

Responses	Frequency (51)	Percentage%
Unsafe abortion is among the top 5 most causal agents of death in women		
Yes	34	66.7
No	17	33.3
Clinicians can perform abortion services to save life		
Yes	46	90.2
No	5	9.8
What is PAC		
Knew	40	78.4
Didn't Know	11	21.6
PAC should be carried out only in equipped health facilities with an authorised skilled health worker		
Yes	40	78.4
No	11	21.6
Health practitioners had a duty to object abortion-related services during emergency		
No	36	70.6
Yes	15	29.4

Actual Knowledge of PAC.

The summary of the information contained in Table 2 gives the level of the participant's actual knowledge regarding PAC. It has been made vivid, as mentioned in Figure 2, that 74.3 % of the healthcare workers had correct knowledge of PAC.

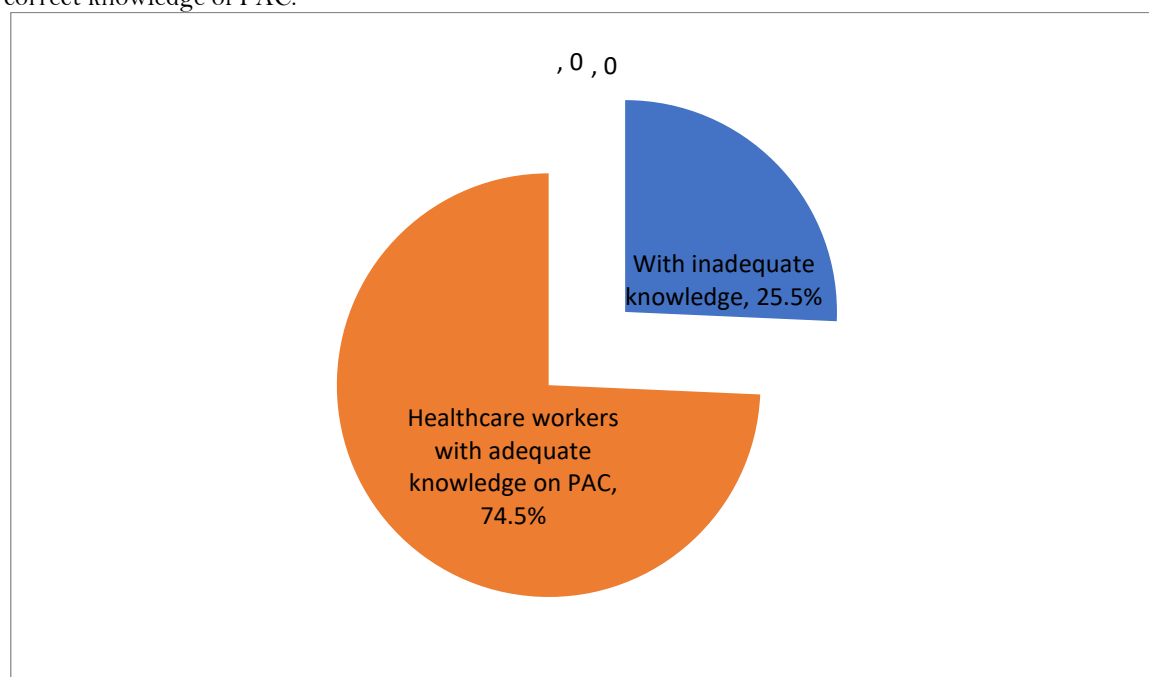


Figure 2: Pie chart Showing Knowledge of Healthcare workers on PAC

Analysis of the PAC Knowledge Of the Healthcare Workers in The Study

Age

Among the mothers with adequate knowledge about EBF, 58.2 % are older than 30 years old and 41.8 % are 30 or younger. There is no statistical correlation between the age of the healthcare workers in the study and their knowledge regarding PAC ($p = 0.823$).

Education Level

The majority of the healthcare workers among the ones with adequate knowledge about PAC (53.3 %) have at least a degree at the education level, and a minority 21.1% have a diploma or certificate at the education level. Nevertheless, the education level of the participants does not influence their knowledge regarding PAC ($p =$

0.562).

Cadre

Fewer than half that is 40% of the healthcare workers who adequately knew about PAC were midwives and doctors. There is no correlation between healthcare worker's cadre and the knowledge ($p = 0.117$).

Marital Status

The majority of healthcare workers with correct knowledge regarding PAC (63.3 %) live with a partner, and the minority 11.1% of them do not. The knowledge of PAC does not depend upon the marital status ($p = 0.778$).

Religion

The larger proportion (60 %) of the participants who had appropriate knowledge about PAC were Christians and a small percentage (14.4%) were Muslims. The knowledge of the participants does not statistically depend on religion ($p = 0.132$).

Table 3: Analysis of PAC Knowledge of the Healthcare workers in the study

Variables	Number	PAC KNOWLEDGE				P
		With knowledge		Without knowledge		
Age (in years)						
< 30	30	22	43.1	8	15.7	0.823
≥ 30	21	16	31.4	5	9.8	
Education						
Diploma/ Certificate	34	27	52.9	7	13.7	0.562
Atleast a degree	17	11	21.6	6	11.8	
Cadre						
Doctors/ Midwives	30	18	35.3	12	23.5	0.117
Others	21	20	39.2	1	2	
Marital status						
With a partner	43	32	62.7	11	21.6	0.778
Without a partner	8	6	11.8	2	3.9	
Religion						
Christian	39	30	58.8	9	17.7	0.132
Muslim	12	8	15.7	4	7.8	

Research Objective 2: Attitude Towards PAC

Nearly all the students in the study 44(86.3%) reported that abortion-related policies and protocols are developed to clarify, majority 40(78.4%) said that the Provision of PAC is not contrary to their personal/religious beliefs. when respondents were asked whether they could support Pregnancy being terminated in a woman with a pregnancy that endangers her life if she consents, the majority 33(64.7%) said yes and when asked whether they support PAC services to a woman with incomplete abortion, the majority 39(76.5%) of them said yes,

Table 4: Showing attitudes towards PAC

Responses	Frequency (51)	Percentage %
Do you support Pregnancy being terminated in a woman with a pregnancy that endangers her life if she consent?		
Yes	33	64.7
No	18	35.3
Do you support PAC services to a woman with incomplete abortion?		
Yes	39	76.5
No	12	23.5
Is Provision of PAC is contrary to your personal/religious beliefs?		
Yes	11	21.6
No	40	78.4
Abortion related policies and protocols are clearly developed to clarify its legacy		
Yes	44	86.3
No	7	13.7

Overall Attitudes of the Participants Towards PAC

Each of the 4 questions in the attitude section was scored as 2 for a correct response, 0 for a wrong response, and 1 for not sure, and from Table 4, it may be seen that a lot of the students in this study (71%) have a positive attitude towards PAC, figure 3 summarizes the overall attitudes of the participants.

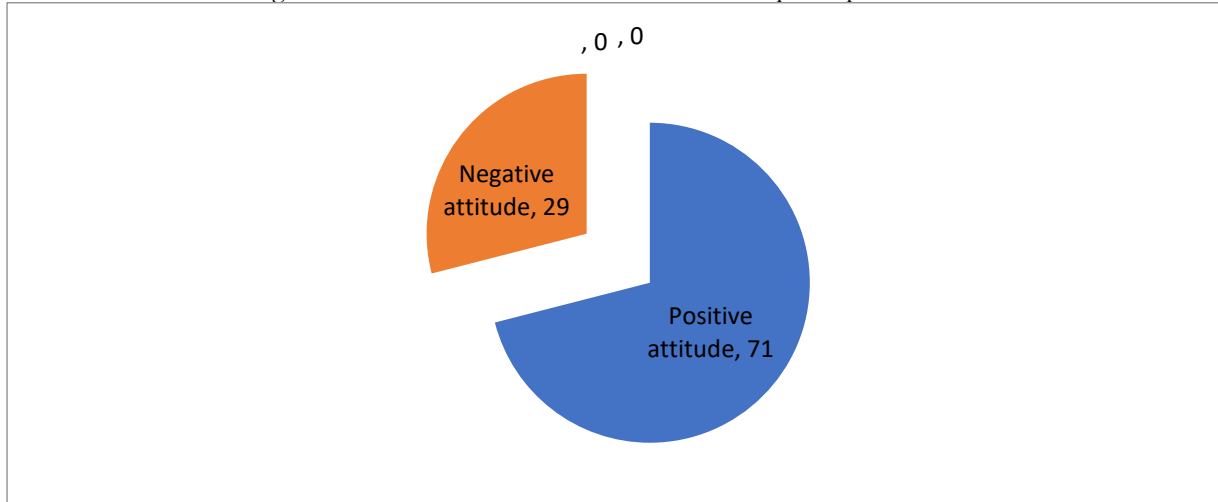


Figure 3: Pie chart showing attitudes of the participants towards PAC

Research Objective 3: Practices of PAC

Table 5: Showing response on Practices of PAC

Variable	Responses	Frequency (51)	Percentage (%)
From where did you get the training on PAC	Hospital	30	58.8
	School	18	35.3
	Others	3	5.9
Which procedure is mostly practiced at KIU-TH	D & C	12	23.5
	MVA	39	76.5
What is the common obstacles in providing PAC services	Limited Resources	41	80.4
	Lack of trained providers	10	19.6
PAC services offered at KIH-TH	Yes	33	64.7
	No	18	35.3

Actual Practice of PAC

The summary of the information contained in Table 5 gives the level of the participant's actual practice of PAC. It has been made vivid, as mentioned in figure 4, that 65.8 % of the healthcare workers had good practice of PAC.

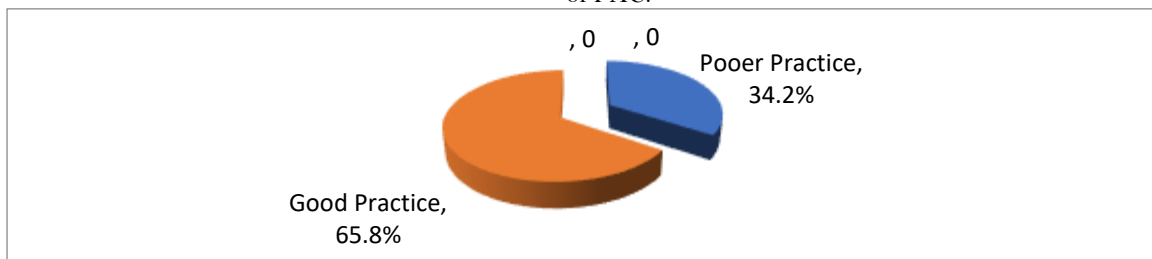


Figure 4: Pie chart Showing Practice of PAC by the healthcare workers

DISCUSSION

Knowledge about Post-Abortion Care

Knowledge is very important in the success of any intervention. Therefore, people concerned by the interventions must first of all be given some knowledge regarding the benefits that the interventions may offer.

In the scope of this study, adequate knowledge regarding PAC among students would tremendously help promote PAC practice, which in turn would reduce maternal deaths and other complications such as sepsis and it would guarantee mothers' health. A recent study conducted at KIU-TH revealed a significant finding that 74.5% of healthcare workers at the institution possess adequate knowledge of post-abortion care (PAC). This discovery underscores the importance of training and education programs implemented within the healthcare setting, as a majority of the staff demonstrated a solid understanding of crucial PAC protocols and procedures [10]. Such a high percentage of healthcare workers with sufficient knowledge of PAC is promising, as it indicates a strong foundation for providing quality care to patients in need of post-abortion services [12]. This finding not only reflects positively on the institution's commitment to continuous learning and professional development but also suggests that patients seeking PAC at KIU-TH are likely to receive competent and informed care from their healthcare providers. The study's results also highlight the effectiveness of ongoing training initiatives and the dedication of healthcare workers at KIU-TH to stay abreast of best practices in PAC [13, 14]. With nearly three-quarters of the staff demonstrating adequate knowledge in this critical area of healthcare, the institution can be confident in its ability to deliver high-quality post-abortion services to patients. Moving forward, these findings may serve as a benchmark for other healthcare facilities looking to enhance their staff's competency in PAC, emphasizing the importance of investing in training programs and resources that empower healthcare workers to provide optimal care to patients in need [15, 16].

However, this level of PAC knowledge, in comparison with the same knowledge revealed by some studies conducted in different communities in the world may be considered satisfactory. As an illustration, a study conducted in Mbarara Hospital, in the Republic of Uganda in 2003, showed that the PAC knowledge level was 73.8% and another study conducted in 2016 by Mogre et al in Ghana reported that 74% of the participants had general knowledge on PAC, which are all closer to the current study findings.

Attitudes of Students Towards Post-Abortion Care

A recent study conducted at KIU-TH yielded a noteworthy finding, indicating that 71% of healthcare workers at the institution exhibit a positive attitude towards Postabortion Care (PAC). This discovery underscores the dedication and compassion of the healthcare staff, as a majority of them displayed an optimistic and supportive outlook toward patients seeking post-abortion services. A positive attitude among healthcare workers is crucial in ensuring that patients receive not only the necessary medical care but also the emotional support and understanding they require during a vulnerable time. This finding speaks volumes about the culture of empathy and patient-centered care fostered within the institution, reflecting a commitment to holistic well-being and patient satisfaction [17, 18]. The study's results also shed light on the effectiveness of efforts to cultivate a supportive and empathetic environment within the healthcare setting. With 71% of healthcare workers demonstrating a positive attitude towards PAC, KIU-TH can take pride in the compassionate and empathetic care that patients are likely to receive when seeking post-abortion services. This finding serves as a testament to the institution's dedication to nurturing a culture of understanding and support, ultimately contributing to a more positive and reassuring experience for patients in need of PAC. Moving forward, these results may inspire other healthcare facilities to prioritize initiatives aimed at fostering a positive and empathetic attitude among their staff, recognizing the significant impact it can have on patient care and well-being [19, 20].

The Practice of Post-Abortion Care among the Students

A recent study conducted at KIU-TH revealed a significant finding that 65.8% of healthcare workers at the institution demonstrated good practice of PAC. Another study conducted among Rural Jamaican healthcare providers concluded that the practice of PAC was only 59.2 %. In Iran and Malaysia, the rates were respectively 47.7% and 52.8%. The reason for such low practice of PAC regardless of the fact that the participants have a satisfactory level of knowledge towards PAC might be rooted in the cultural issues; which issues could better be dug out by qualitative research. This discovery underscores the commitment of the healthcare staff to implementing best practices and protocols when providing care to patients in need of post-abortion services. With a majority of healthcare workers exhibiting good practice in PAC, KIU-TH can be confident in the quality of care delivered to patients, ensuring that they receive safe, effective, and evidence-based treatment. This finding not only reflects positively on the institution's dedication to upholding standards of care but also highlights the professionalism and expertise of the healthcare workers in managing post-abortion cases [21, 22]. The study's results also emphasize the importance of continuous training and professional development initiatives in promoting good practice among healthcare workers. With 65.7% of the staff demonstrating proficiency in PAC, KIU-TH can leverage this finding to further enhance its training programs and ensure that all healthcare workers are equipped with the necessary skills and knowledge to deliver high-quality PAC. Moving forward, these results may catalyze ongoing quality improvement efforts within the institution, reinforcing the importance of adherence to best practices and the implementation of standardized protocols in the delivery of PAC [23, 24].

CONCLUSION

The study conducted at KIU-TH to assess the knowledge, attitude, and practices of healthcare providers regarding Post-abortion Care (PAC) has yielded insightful findings. The results indicate that a significant proportion of healthcare providers at the institution possess adequate knowledge (74.5%), exhibit a positive attitude (71%), and demonstrate good practice (65.8%) in the provision of PAC services. These findings

collectively reflect a strong foundation of competency, compassion, and proficiency among healthcare providers at KIU-TH, underscoring their commitment to delivering comprehensive and patient-centered care to individuals in need of post-abortion services. Moving forward, these results can serve as a basis for further enhancing the quality of PAC services at KIU-TH through targeted interventions and continuous professional development initiatives. By leveraging the strengths identified in this study, such as the high level of knowledge, positive attitude, and good practice demonstrated by a majority of healthcare providers, the institution can build upon its existing strengths and address any areas that may require improvement. Ultimately, by fostering a culture of excellence, empathy, and best practices in PAC, KIU-TH can continue to uphold its commitment to providing safe, effective, and compassionate care to patients, ensuring optimal outcomes and satisfaction for those seeking post-abortion services at the institution.

Recommendations

Effective support and supervision should be done regularly to guide, help, and encourage health workers to improve their performance to provide high-quality PAC services. This would facilitate team building and confidence which motivates health workers to provide quality PAC services. It also creates chances for early detection of the common challenges that the unit might be facing. The hospital administration should organize workshops on PAC to enrich the health workers with more PAC knowledge and skills which will increase the quality of services provided. Community sensitization through health talks, mass media, and community outreaches is another area of concern that will help to increase the utilization of the services in the hospital. Advocacy efforts should be directed towards a multidisciplinary approach to gain support from all levels of stakeholders and policymakers such as government, community health stakeholders, religious leaders, media, and NGOs as they need a common understanding of the sensitivity of PAC services.

Implications to Nursing Practice

It is of paramount importance that Nurses and Midwives involved in PAC service delivery have adequate knowledge and skills. This calls for adequate training of health workers on PAC through refresher courses, workshops, and seminars. CME/CNE should be organized and conducted to improve their knowledge, also regular follow-up and supervision should be done to ensure that the Nurses and Midwives provide sufficient PAC to the affected women.

The theory and practice of safe abortion care should be incorporated into training institutions curricula in the country. This would ensure that future Nurses and Midwives acquire knowledge on the acceptable methods of managing women with unwanted pregnancies and complications of unsafe abortion. This approach may provide a significant and sustainable reduction in abortion-related maternal morbidity and mortality in Uganda.

Nurses and Midwives should be aware of the short- and long-term complications of inappropriate PAC and take early interventions to improve the quality of life of the affected women. The Nurses and Midwives, if well versed with the knowledge and skills on PAC, can improve the patient's self-efficacy through providing quality family planning and counseling services, treatment of abortion complications, health education about abortion and post-abortion complications, self-management programs, psychological support and coping skills plus reproductive health services so that women benefit after an abortion.

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