

Knowledge and Attitude of Staff Nurses about Post Abortion Care Services.

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ABSTRACT

Objective: To study the knowledge and attitude of staff nurses about Post abortion care in Obstetrics and Gynecology department at Assiut University Hospital. **Background:** Abortion have great contribution to the women's morbidity, abortion nurses are responsible for providing complex physical and psychological care to abortion patients. They require comprehensive and specialized knowledge regarding anatomy and physiology, abortifacient and analgesic pharmacology, surgical procedures, and psychological care processes. However, even though women seeking abortions are certainly entitled to high quality, multifaceted nursing care, A lot of women face multiple barriers that prevent them from accessing abortion services or encountering an abortion nurse at all or finding nurses having good awareness about the proper Post Aborting Care (PAC) services. **Material and Methods:** A structured questionnaire used to evaluate the knowledge and attitude of nurses toward PAC services. The data collected in six months by distributing questionnaire among staff nurses working in Obstetrics and Gynecology department at Assiut University Hospital. Descriptive statistics were used to present and correlate attitude statements and some demographic variables. **Results:** One hundred and ten completed the questionnaire out of 200. All were female nurses. Their knowledge regarding abortion were categorized into three levels; basic, junior and senior according to training. Their knowledge about abortion were similar. The overall findings indicated that the nurses attitudes regarding abortion, agreed that the male responsible for the pregnancy should be involved in the decision, favored governmental regulation of abortions, and supported that abortion is indicated in situations when the female's health was at risk or if the female had been raped. Some of the findings are similar to other studies, particularly those that have involved a sample comprised of nursing students. This study is different from existing studies as it is the first that studied baccalaureate nursing students, it includes a predominately female sample, and it encompasses a larger age span in its sample **Conclusion:** Nurses have major role towards improving women's access to safe abortion care and eradicating unsafe abortion. Nursing care, a fundamental component of post- abortion care services, has been shown to affect the safety and accessibility of women's health following abortion.

Key words: Post abortion care services, awareness, practices, healthcare professionals, nurses, nursing staff.

INTRODUCTION

Abortion is one of the most important direct medical causes of maternal mortality, accounting for 12-40 % of overall global maternal deaths **Abdi J (2011)**. Abortion is

defined as "the termination of a pregnancy, whether spontaneous, occurring before 22 weeks of gestation **Carlton etal (2000)**, or induced" **Craig et al (2002)**.

Abortion, whether spontaneous or induced, may be associated with

complications that constitute global public health challenge especially in developing countries. In many such countries, abortion is often both unauthorized and unsafe **Natan (2010)**. The World Health Organization (WHO) defines unsafe abortion as any procedure with the purpose of terminating a pregnancy that is performed by persons lacking the proper skills and/or that is performed in an unhygienic, non-medical setting **Craig, et al (2002)**.

Unsafe abortion is a preventable and avoidable phenomenon that generates myriad actual and potential negative health outcomes for women, children, families, and communities **Marek (2004)** worldwide. **Marshall et al (1994)**

World Health Organization estimates that 46 million induced abortions occur annually all over the world **Adinma E.D.(2012)** This, however, has regional variations, with rates as low as 2 per 1000 occurring in developed countries and as high as 28 per 1000 taking place in developing countries where restrictive abortion laws abound in great proportions **Adinma JIB et al (2010)**.

To address the complications related to incomplete, spontaneous or unsafely-induced abortions, post-abortion care (PAC) has been introduced in countries where abortion laws are restrictive. Standard PAC includes emergency care (such as resuscitation using blood transfusions, intravenous lines, antibiotics, etc.); contraceptive counseling; treatment of sexually transmitted infections; human immunodeficiency virus (HIV) counseling; and community empowerment⁹.

PAC is a global approach towards solving the problem of maternal mortality and morbidity arising from abortion complications from both spontaneous and induced abortion. It consists of a series of

medical and related interventions designed to manage the complications of abortion. Its overall aim is to reduce maternal morbidity and mortality from abortion and its complications, and to improve women's sexual and reproductive health and lives. A comprehensive post abortion care services has been identified to be useful in ameliorating the adverse health consequences associated with unsafe abortion in regions with restrictive abortion laws. **Adinma JIB et al (2010)**

PAC consists of five elements provided mainly by nursing staff, these elements are; **1- Community and service provider partnerships for prevention:** (of unwanted pregnancies and unsafe abortion), mobilization of resources (to help women receive appropriate and timely care for complications from abortion), and ensuring that health services reflect and meet community expectations and needs, **2- Counseling:** to identify and respond to women's emotional and physical health needs and other concerns, **3- Treatment:** of incomplete and unsafe abortion and complications that are potentially life-threatening, **4- Contraceptive and family planning services:** to help women prevent an unwanted pregnancy or practice birth spacing; and **5- Reproductive and other health services:** that are preferably provided on-site or via referrals to other accessible facilities in providers' networks. **Akhter HH (2001)**

Attitude, beliefs and experience of nurses have shown to influence the provision of post-abortion care. Moreover, training and experience has a positive effect on attitudes and facilitating the bridging of cultural beliefs with the reality of service provision. **Coleman (1999)**.

Nursing staff are obligated to work toward improving women's access to safe

abortion care and eradicating unsafe abortion. Nursing care that is a fundamental component of abortion services, shown to affect the safety and accessibility of the procedure for women. **Coleman (1999)** However, PAC services provided by nursing staff to ensure women's health and well-being, have not yet been studied effectively. **Curtis C (2007)**.

Therefore this study aimed to investigate the awareness and attitudes of staff nurses regarding post abortion nursing care services within the broad framework of professional identity focusing on subsequent abortion ideologies and practices that have been, and continue to be, permitted and expected of nurses.

Research question

The research question for the purpose of this study is: 'What is the knowledge and attitude of nursing staff towards PAC services?'

Objective

The objective of the study is to assess the knowledge and attitude of nursing staff towards PAC services provided for women in Obs. and Gynecology department at Assiut University Hospital.

MATERIAL AND METHOD

Research method and design

This is a cross sectional study, structured questionnaire was distributed among nursing staff working in Obstetrics and Gynecology department at Assiut University Hospital throughout 6 month period, from April 2013 to September.

Data were collected regarding socio-demographic information, attitudes and

knowledge and other variables of nurses concerning PAC services provided for aborting women. The data was collected, compiled and analyzed using statistical package.

Study sample:

All Staff nurses (110 nurses) working in Obstetrics and Gynecology department at Assiut University Hospital.

The eligibility criteria are as follow:

- i. Staff nurses,
- ii. nurses concerned with working in Obstetrics and Gynecology department and
- iii. nurses working in Obstetrics and Gynecology department more than three years.

Exclusion criteria

- i. Nurses aids,
- ii. individuals who are 'pre-nursing' students in the faculty of Nursing at Assiut University were not enrolled and
- i. nurses working in Obstetrics and Gynecology department less than three years.

The instrument:

A structured questionnaire that is designed and guided by questionnaires from other studies, developed by the items for the Abortion Attitude Survey with the assistance of other members of Obstetrics and Gynecology department at Assiut University Hospital, including a literature review and two instruments used in previous studies with PAC services nursing staff. **Duggal (2004)**

This questionnaire was used to obtain data to answer the research questions. It consists of two parts: **10 questions** pertaining

to socio-demographic information used to describe the sample and compare the characteristics of the participants in regards to level of PAC services provided, some of the questions pertain to the participant's age, gender, marital status, and having children. **A 17 items Likert-type scale** regarding attitudes concerning abortion, several questions are about level of nurses knowledge and attitude in PAC services program, additional courses, and any experience with abortion.

The questionnaire was revised as regards words and meanings. The questionnaire was validated by 3 Gynecology and obstetrics consultants who reviewed the instrument for ensure the validity. Since this is an instrument developed for the proposed study, there are no reliability data available.

The attitudes concerning abortion scale had a Cronbach alpha coefficient of 0.94 from the data of the sample, showing internal consistency among the items in the instrument. **Elul B (2004)**

Data-collection methods:

The data collected by using the structured questionnaire from all staff nurses working in Obstetrics and Gynecology department at Assiut University Hospital throughout 6 months, from November 2013 to April 2014.

Statistical Analysis

Nurses were interviewed using a pre-tested, structured, self-administered questionnaire to obtain information regarding their socio-demographic characteristics, along with their knowledge and practice of the five elements of PAC services. The data were analyzed using Epi- Info version 2001. Statistical relationships between variables were explored using the chi-square test and a

p-value of < 0.05 at a 95% confidence interval was considered significant for all statistical comparisons and a *p*-value of ≤ 0.01 was considered statistically significant.

Ethical Aspects

Permission to recruit participating nurses from the Obstetrics and Gynecology department at Assiut University Hospital was obtained from head of the Obstetrics and Gynecology department.

The Social and Behavioral Sciences Human Subjects Review Committee in Assiut University approved the proposal as it meeting the criteria for being exempt from full review for the protection of human subjects prior to conducting the study.

Results:

All of the PAC services nursing staff received a letter with the study questionnaire. Out of the 200 questionnaires distributed, a total of 110 completed questionnaires were returned. This represents an overall return of 55 percent. The results of the study are presented in terms of sample characteristics of the participants and the research questions used to investigate nursing staff' attitude concerning abortion.

Table (1) represents the frequencies and percentages distribution of the sociodemographic characteristics of the participants. In regard to gender, all were females (n = 110, 100%). Their ages ranged from 18 to 55 years, with the majority of the participating nurses aged between 25-29 years of age (n = 26, 23.8%) and between 40-44 years (n = 23, 21.5%).

Most of the participants were married (n = 79, 71.4%), 14.7% (n = 17) were single, and 11.9% (n = 14) were engaged. Most of

them did not report having children (n = 95, 87.1%) and 11.9% (n = 13) did have children.

Most of the participants have not taken a training course about PAC services (n = 63, 57.3%) compared to 42.7% (n = 47) who had. The majority (n = 79, 71.8%) of the nurses had provided care for a woman who recently had an abortion, while only 20% (n

= 22) of the studied sample knew someone who had an abortion.

The sample was subdivided according to level of experience in PAC services. The sample was comprised of 34(30.9%) basic level of knowledge, 27(24.5%) junior level, and 49(44.6%) senior level.

Table (1) Frequency and percentage distribution of the socio-demographic characteristics of the participants: (n=110)

Characteristics	No. (N=110)	%
Age (years)		
18-24	6	(5.7)
25-29	26	(23.8)
30-34	11	(9.6)
35-39	13	(11.4)
40-44	23	(21.5)
45-49	15	(13.3)
≥50	16	(14.7)
Sex		
Female	110	(100)
Marital Status		
married	79	(71.4)
Single	17	(14.7)
Engaged	14	(11.9)
Have taken a training course about PAC services		
took a training course	47	(42.7)
Did not take courses	63	(57.3)

Table (2) Comparison of the characteristics of the sample regards to the level of experience in PAC services in nursing (n=110)

Have taken a training course about PAC services	No.	%
took a training course	47	(42.7)
Did not take courses	63	(57.3)
Level of experience in PAC services		
basic level of knowledge	34	(30.9%)
junior level	27	(24.5%)
senior level	49	(44.6%)

Table (2) A comparison of the characteristics of the sample regards to the level of experience in PAC services in nursing. Chi-square statistics were used to ascertain if there were any statistical

significant differences between the three levels of knowledge.

Chi-square statistical analyses were done for taking a training course about PAC services, providing care to a woman who had

an abortion, and knowing someone who had an abortion. There was a statistically significant relationship between the level of education in regard to taking training course about PAC services in nursing ($X^2 = 21.98$, $df = 2$, $p = .001$).

Compared to the basic level of knowledge and junior level, a larger number of senior level nurses reported taking a training course about PAC services in nursing.

There was a statistically significant relationship between the levels of experience and having provided care to a woman who had an abortion ($X^2 = 12.72$, $df=2$, $p=.01$).

More junior and senior level nurses reported having provided care to a woman who had an abortion as compared to the basic level of knowledge nurses had. There was no statistically significant relationship between the three levels of knowledge and experience in regards to knowing someone who had an abortion ($X^2 = .77$, $df = 2$, $p = .85$).

Table (3)(n=110) Nursing Responses to the Abortion Attitude Survey Items:

Item	N	Strongly Agree	Agree	Disagree	Strongly Disagree	Mean	Standard deviation
1. Abortion should be a method of birth control	110	0	6	9	95	1.19	0.52
2. An abortion should be done after the first three months of pregnancy	110	2	4	21	83	1.32	0.63
3. An abortion should be done for any reason	110	2	7	22	79	1.38	0.69
4. Governmental agencies should strictly regulate abortions	109	30	40	26	13	2.80	0.98
5. Abortions should be inexpensive and widely available	107	4	16	31	56	1.70	0.86
6. An abortion is indicated if a female's own health is endangered by the pregnancy.	108	31	46	21	10	2.90	2.90
7. An abortion is indicated if a female became pregnant from being raped.	108	23	42	24	19	2.64	1.00
8. An abortion is indicated when the fetus has a suspected physical or mental disability.	109	5	13	48	43	1.82	0.82
9. An abortion is indicated if a female perceives she cannot afford to have the baby.	108	18	29	70	19	1.44	0.67
10. An abortion is indicated if a woman is married and does not want any more children.	107	13	21	82	19	1.28	0.56
11. An abortion is indicated if a female does not feel emotionally that she would be able to care for the baby.	109	1	12	27	69	1.52	0.73
12. An abortion is indicated if the female is an unmarried teenager.	109	1	8	32	68	1.47	0.67
13. An abortion is indicated if the pregnancy is a threat to the couple's relationship.	109	0	3	28	78	1.31	0.52
14. The male responsible for the pregnancy should be included in the decision to terminate the pregnancy.	105	37	47	14	7	3.09	0.87
15. An abortion is indicated for an unplanned pregnancy that interferes with educational and career goals.	109	0	9	26	74	1.40	0.64
16. I would be comfortable assisting with an abortion procedure.	108	3	23	19	63	1.69	0.90
17. I believe that a female has the right to terminate a pregnancy.	107	21	24	25	37	2.27	1.14

Table (3) Nursing represents the degree to which the nurses in the studied sample agreed or disagreed with the abortion attitudes survey questions, as well as the mean and standard deviation of the results of the questions of the Abortion Attitude Survey. The mean scores from the 17 items ranged from 1.9 to 3.09.

The item with the highest mean ($m = 3.09$, $SD = 0.87$) was item 14, “the male responsible for the pregnancy should be included in the decision to terminate the pregnancy”, which indicated the participants agreed that the male should be involved in the abortion decision.

Item 4, “governmental agencies should strictly regulate abortions” had the third highest mean as the participants mean score indicated agreement that government should have the authority to regulate abortions.

For the 15 items that pertained to pro-life versus pro-abortion attitudes, the mean scores ranged from 1.19 to 2.90. Only two items had mean scores that indicated pro-abortion attitudes, while the other 13 items were indicative of pro-life attitudes concerning abortion.

Item number 6, “an abortion is indicated if a female’s own health is endangered by the pregnancy” had the highest mean ($m = 2.90$, $SD = 0.92$), implying the strongest pro-abortion attitude.

The second highest pro-abortion attitude result ($m = 2.64$, $SD = 1.00$) was for item number 7, “an abortion is indicated if a female became pregnant from being raped”.

The strongest pro-life attitudes were for item number one, “abortion should be a method of birth control” ($m = 1.19$, $SD = 0.52$) and item number ten, “an abortion is indicated if a woman is married and does not want any more children” ($m = 1.28$, $SD = 0.56$).

By comparison of the different nursing behavior and awareness as regards of abortion. A one way analysis of variance statistical test was done for each item. For 16 of the 17 items there were no statistically significant differences between the three levels of knowledge about abortion amongst studied nurses. However, item 14, regarding that the male responsible for the pregnancy be included in the decision to terminate the pregnancy, was statistically significant ($F = 4.048$, $p = .020$).

A post hoc Scheffe statistical test was performed to ascertain the levels of knowledge amongst studied nurses, that were statistically different. The senior level group had a statistically significant higher mean ($m = 3.38$) than the junior level group ($m = 2.72$). The basic knowledge level group ($m = 3.06$) did not differ significantly from the senior and the junior level groups. Overall the three levels of knowledge amongst studied nurses were similar in regard to their attitudes concerning abortion.

Table (4) Knowledge and attitude of PAC services among staff nurses.

PAC services	Awareness	Practice	Statistical relationship		
	No. (%)	No. (%)	χ^2	p-value	
Counseling	80 (72.8)	30 (27.2)	1.25	0.26	NS
Use of MVA	65(59.1)	45 (40.9)	48.69	0.05	S
Linkages	70 (63.6)	40 (36.36)	4.02	0.05	NS
Community partnership	27 (29.7)	83(70.3)	0.02	0.89	NS
Family planning	27 (29.7)	83(70.3)	0.02	0.89	NS

NS, Not significant; S, Significant

Discussion:

The study aimed to explore the knowledge and attitude of staff nurses in Obstetrics and Gynecology department at Assiut University Hospital regarding Post abortion care services. Abortion is the termination of pregnancy before the viability of the fetus. An abortion can occur spontaneously or it can be purposely induced. An induced abortion defined as a procedure intended to terminate a suspected or known intrauterine pregnancy and to produce a nonviable fetus at any gestational age. **Fatusi,**

Spontaneous abortions (sometimes called miscarriages) are those for which a termination of a pregnancy is not provoked voluntarily. **Gallagher et al** A spontaneous abortion is one that takes place naturally; a situation over which the mother has no control. An induced abortion is one that is brought by medical means, or results from the use of herbal preparations or other traditional practices. **Gebreselassie et al**

Complications occurring after unsafe abortion contribute to maternal mortality and morbidity in developing countries and are recognized by the international community as an important public health problem. **Fatusi,**

Each year, throughout the world, approximately 210 million women become

pregnant and over 135 million of them deliver live born infants. The remaining 75 million pregnancies end in stillbirths, spontaneous or induced abortions. **Gebreselassie et al**

An estimated 21.6 million unsafe abortions took place worldwide in 2008, almost all in developing countries. Access to safe abortion can be restricted by the law, and this may make women turn to illegal or often unsafe abortion, or make them hesitant to seek care when urgently needed because of complications of an unsafe abortion. **Haney M.** Many of these abortions end in serious complications and even death; globally, an estimated 47,000 women die every year as a result of unsafe abortions, while many more experience severe health consequences. **Gebreselassie et al**

Family planning services must be expanded and improved to reduce the burden of abortion; and post-abortion care (PAC) services are essential to be supported to lessen repetitive abortion. Abortion-related morbidity and mortality can be prevented in three ways: by preventing unintended pregnancy, by providing a safe legal abortion, and by providing PAC. **Hanna, D.R.** Thus, PAC packages have been implemented in many countries with restrictive abortion laws to address the complications associated with unsafe abortion. **Htay TT**

Standard PAC includes emergency care (such as resuscitation using blood transfusions, intravenous lines, antibiotics etc.); contraceptive counselling; treatment of sexually transmitted infections; human immunodeficiency virus (HIV) counselling; and community empowerment. **Ahman, E., 2002.**

Implementation of the policy PAC services in treatment of incomplete abortion caused by spontaneous or induced abortion enables nurses to lessen abortions related complications. In spite of this progressive policy nurses and midwives largely lack the proper training to provide PAC. This shortage of qualified providers limits the availability of safe emergency obstetric care, including PAC. **Huntington, A. D. (2005)**

Therefore, the researchers tried to explore knowledge and attitude of post abortion care services among nurses in Obstetrics and Gynecology department at Assiut University Hospital. All of the PAC services nursing staff received a letter with the study questionnaire. Out of the 200 questionnaires distributed, a total of 110 completed questionnaires were returned. This represents an overall return of 55 percent. The results of the study are presented in terms of sample characteristics of the participants and the research questions used to investigate nursing staffs' attitudes concerning abortion.

The results of this study indicated that nursing staff in Obstetrics and Gynecology department in Assiut University Hospital had primarily basic level of knowledge and attitudes towards abortion.

Being categorized according to this level of knowledge and attitudes towards abortion into basic level, junior, and senior level and showed similarity in regard to their attitudes concerning abortion. However, the results need to be interpreted with caution

due to the 55 percent return rate of the completed surveys. The low return rate might be due to the changing duty shift times interfering with answering the questionnaires, as they were distributed just prior to shift and collected near its end. Therefore the actual sample size was 110 questionnaires which was returned.

All participants were females. In terms of the educational level in the PAC program, senior nurses were over represented and basic knowledge level and junior nurses were under represented.

In regard to sample characteristics, the basic knowledge level, junior and senior level students were similar in regard to most of the background characteristics as regards to abortion care services. The only two characteristics that were significantly different between the basic knowledge level, junior, and senior nurses were if they had taken a training course and had cared previously for someone who had an abortion. Both of these differences are related to the level of experience in caring for aborted women and having clinical experiences in the maternity area during their junior year. Therefore, the basic knowledge level nurses would most likely not have had the opportunity to provide care to a woman who had an abortion.

Other studies showed that nurses' experiences of providing abortion services were generally focused on abortion care as particularly demanding work, requiring complex physical and psychological nursing skills, provided in challenging (and sometimes hostile) care environments. **IntraHealth International Jagnayak SS Kade, K., Kaposy, C. Lipp, A. Lipp, A Lipp, A. (2005)**

Reports revealed that the abortion law in Cambodia establishes women's rights to first-trimester abortion on any grounds, performed by a qualified doctor, medical assistant or midwife at public or private health facilities licensed by the Ministry of Health. **Lipp, A.** (2011)

In Bangladesh, the government collaborates with nongovernmental organizations to train female paramedics called "family welfare visitors" rather than nurses to perform "menstrual regulation" with manual vacuum aspiration up to 10 weeks of pregnancy. In 2001, nearly 7000 trained paramedics were providing menstrual regulation in government clinics, with many more in private practice. **Lipp, A.**(2009),

In Mozambique, evaluation of the performance of mid-level providers with 3 years' intensive training in surgical procedures not nurses documented successful surgery in 90% of 7080 emergency surgeries undertaken by these providers at rural hospitals. Emergency uterine evacuation following unsafe abortions accounted for 26% of the procedures. In fact, they show successful gynaecological procedures that were much more complicated than vacuum aspiration abortion, including Caesarean sections and hysterectomies. **Long C** (2001).

In Kenya, the PRIME II Project collaborated with the Kenya Ministry of Health, the Nursing Council of Kenya, National Nursing Association of Kenya and others to train private and nongovernmental organization sector nurse-midwives in post-abortion care at 44 private sector facilities in six districts, serving both urban and rural populations, starting with a pilot programme in 1999, which was scaled up in 2004. **Nicholson** (2010).

In Uganda, as part of the same PRIME-assisted project, 24 midwives from 13 public

sector facilities in nine districts received training, followed by supervisory visits for quality assurance and for monitoring post-training performance. Nurse,

In India, both a nationwide study published in 2004 **Paul et al** and a study in Rajasthan in 2004 found that providers such as auxiliary nurse-midwives were providing abortions to low-income women, mostly without the benefit of training, often leading to complications.

Rajasthan study recommended that the feasibility of providing training for nursing staff to offer safe abortion services, particularly for terminations in early pregnancy, should be explored at policy, programme and research levels. **Polit, 1999.**

Similar recommendations were made in a study in Ethiopia, before abortion was legalized there, which also found high complication rates as a result of a lack of training of nurses. It recognized that making abortion safe would only be possible if nursing staff were trained, particularly in low socioeconomic and rural areas. **Rasch V.** (2011)

In Myanmar, following a study in 2000 showing high mortality rates from unsafe abortions, post-abortion care and contraceptive services were integrated into the township health system, led by township medical officers in the initial towns participating in the project, with the intention of scaling up services if the outcomes were good. Hospital-based doctors and nurses, clinic midwives, village midwives and other volunteer health providers, including traditional birth attendants, were all trained but the key providers were the medical officers and midwives. The role of the local clinic midwife was extended to make follow-up home visits to the women with post-abortion complications and provide them

with contraception when requested. Indeed, one of the reasons why it has been considered important to involve midwives has been to link post-abortion contraceptive provision with abortion care. **Schorge J et al (2008)**

The responses of the sample indicate basic attitudes toward the majority of the abortion survey items. Only two of the fifteen questionnaire items had mean scores that indicated good abortion attitudes amongst studied nursing sample, while the other 13 items represented weak attitudes. Thus, the overall survey represented a pro-life view of the respondents. The item with the highest mean indicated the sample agreed that “the male responsible for the pregnancy should be included in the decision to terminate the pregnancy”.

In another study of college students, Coleman and Nelson (1999) found that favoritism of high male involvement in the abortion decision were predicted from pro-life attitudes and low levels of agreement were predicted from agreement with the statement that “abortion represents a strictly female issue”. **Singh S et al (2009)**

Additionally, two items with the highest mean scores, indicating the strongest abortion attitude, were the questions about the indication of an abortion in the instances when “ a female’s own health being endangered by the pregnancy” and “if a female became pregnant from being raped”. **Carlton and colleagues (2000) Sundby J (2013)** in their study found similar responses to these items. However, in our study we did not find support for aborting a fetus that had a suspected mental or physical disability. Yet, in both of the other studies there was support for having an abortion if the fetus had a “birth defect”. **Vaz F Sundby J (1999)**

Reasons for this difference in supporting abortion in the cases of rape and

woman’s health, but not for the case of disabilities in the fetus, may be attributed to their nursing background and the all-inclusive philosophy of nursing that nursing students are taught.

The two items with the strongest attitude for abortion as a method of birth control and abortion being done if a married woman doesn’t want any more children. **Carlton and colleagues (2000) Sundby J (2013)** in their study showed that the support of abortion was less likely if the reason for the abortion was that the female already had children or if the birth of another child was perceived as a threat to the relationship. Our study showed comparable findings.

Nurses’ attitudes were found to be generally supportive in cases of confirmed fetal demise, severe fetal anomaly, life or health endangerment of the pregnant woman, and instances of conception resulting from rape or incest **World Health Organization (1999)**.

Supportive attitudes towards abortion and nurses’ subsequent willingness to participate in abortion care decreased as gestational age increased, and when abortion was performed for non-lethal fetal anomaly and sex selection. **WHO World Health Organization** Common personal attributes of nurses that influenced their perspectives were cited as: moral/ethical beliefs, religious affiliation or level of religious observance, previous experience with abortion work, and previous experience with grief and loss. **WHO World Health Organization**

These attitudes were shown to affect the degree to which nurses willingly participate in abortion work and further, for those who do participate in abortion work, their attitudes are “reflected in the subsequent standard of care they provide”. **World Health Organization**

Nurses' roles in abortion services have been addressed by a number of studies. Researchers have mainly investigated: (a) nurses' attitudes towards abortion and women undergoing abortion, both in general and in the context of doing abortion work **WHO World Health Organization**; (b) the ways nurses experience providing abortion care; **IntraHealth International. Lipp, A** and, (c) the emotional impact of abortion work on nurses. **Yeneneh H Yumkella F.(2003)**

The fundamental suggestion made in these studies is that factors directly related to nurses and nursing care—the ways nurses perceive and understand their work, the ways their work impacts them, and the ways they are able to enact their care roles—affect the delivery and quality of abortion care. In other words, nursing care has been shown to affect women's access to physically and psychologically safe abortion services.

Results in attempt to study the abortion attitudes amongst nursing staff are rare. Therefore, more studies investigating the abortion attitudes amongst nursing staff are needed. This study differed from the majority of previous studies that investigated the attitudes towards abortion amongst nursing staff in the fact that previous studies primarily had a sample that was under 21 years of age, while this sample of this study had a larger age range.

Previous studies also had a larger percentage of male nursing staff in the sample than this study, which was a sample predominantly comprised of female nursing staff. Finally, other studies focused mainly on investigating a component of abortion knowledge. However, this study did not as it was assumed that our nursing staff have studied nursing sciences, therefore they had baseline knowledge of abortion.

CONCLUSIONS

The overall findings indicate that the sample held attitudes regarding abortion, agreed that the male responsible for the pregnancy should be involved in the decision, favored governmental regulation of abortions, and supported that abortion is indicated in situations when the female's health was at risk or if the female had been raped. Some of the findings are similar to other studies, particularly those that have involved a sample comprised of nursing students. This study is different from existing studies as it is the first that studied baccalaureate nursing students, it includes a predominately female sample, and it encompasses a larger age span in its sample.

RECOMMENDAIONS

- This study has implications for nursing education as well as for further research. Nursing teaching and training programs should incorporate abortion issues into their curriculum.
- Educational curricula for nurses and midwives need to be revised in order to promote task sharing in PAC, including contraceptive counselling.
- Strategic planning among policy makers in relation to effective implementation of task sharing and the scaling up of misoprostol use for uterine evacuation would improve the quality of care and accessibility of services. This would result in a reduced abortion-related mortality and morbidity.
- Various methods of incorporating the issue of abortion into the curriculum

include case studies involving abortion and ethical topics in addition to enabling nursing students to explore their personal attitudes towards abortion.

- A subsequent research could address if nursing attitudes towards abortion is sufficient or not. Another topic for further research could be to examine the reasons behind attitudes towards abortion, whether pro-choice or pro-life. Abortion attitudes of nursing staff with a more equally distributed gender sample would also be exciting to assess.
- Improving women's access to safe abortion care
- Guiding additional research or policy and practice changes in field of nursing care following abortion.
- Health education program for nurses should be started to spread the scientific knowledge about safe abortion.

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Conflict of Interest

There are no competing financial or non-financial interests involved in this study.

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