

Knowledge and Attitude of Women regarding Safe Abortion in Pokhara Metropolitan City

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ABSTRACT

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Background: Safe abortion is a very crucial part of reproductive health service. Women with adequate knowledge on safe abortion tended to have more liberal attitudes towards access to safe abortion services. The objective of the study is to find out knowledge and attitude of women regarding safe abortion in Pokhara Metropolitan City.

Method: Descriptive cross sectional research design was adopted. Probability simple random sampling technique was used to select 374 women between the age group of 20 to 49 years residing in Pokhara Metropolitan City. Face to face interview technique with structured interview schedule was used. The data was analyzed by using descriptive and inferential statistics (Chi square test).

Results: Out of 374 women 68.7% were aged 40 and above. The mean age of the women was 30.39 years, with a standard deviation of 7.35 years. Among them 72.2% were Hindu, 70.6% were married. Cent percent of them were literate. In the present study, 66.5% of the women were multigravida, 41.7% had two living children and 16.6% had history of abortion. In this study, 35.8% of the women had good knowledge and 52.1% had positive attitude towards safe abortion.

Conclusions: It is concluded that more than half of the women had poor knowledge but positive attitude on safe abortion. In order to increase the level of knowledge and attitude of women, awareness raising programme on safe abortion should be conducted through concerned authority.

Keywords: attitude, knowledge, safe abortion, women

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INTRODUCTION

Abortion is the most neglected and unexplored problem of women's health [1]. It is one of the leading causes of maternal mortality in low- and middle-income countries [2]. Globally, 4.7–13.2% of maternal deaths can be attributed to unsafe abortion [3]. Approximately 73 million induced abortions take place worldwide each year. Around 45% of all abortions are unsafe, of which 97% take place in developing countries. Abortion is reported to be the third leading cause of maternal death in Nepal [4].

Knowledge on safe abortion prepares women to get services and prevent from complications of unsafe abortion [5]. A cross sectional study conducted among 422 women of reproductive age in Ethiopia showed that 69.5% of the respondents had inadequate level of knowledge on safe abortions. Among them 29.9% of the respondents had positive attitude towards safe abortion to be legal and accessible under any circumstances [6]. A cross sectional study conducted in Afghanistan showed that only 23.4% of the participants had a good level of knowledge on abortion. Likewise, 43.3% of the participants aged 18–24 years had poor attitude towards abortion and 89.4% of the widow women attitude toward abortion was found to be poor [7].

A cross sectional descriptive study conducted in Nepal among women of reproductive age showed that 40% of respondents had high as well as fair level of knowledge on safe abortion [8]. Another study conducted in Lalitpur district of Nepal revealed 62.3% of the respondents had fair knowledge and 49.7% of the respondent had positive attitude regarding safe abortion [5]. The provision of abortion law only is not adequate to prevent the complications of unsafe abortion, in fact proper knowledge and attitude on safe abortion is needed [9].

In developing countries, women died from complications of unsafe abortion. Access to safe abortion service is affected by women's knowledge and attitude towards abortion [10].

Different studies have conducted in different part of the world shows different level of knowledge and attitude on safe abortion. Limited studies have been documented in Nepal. So this study aimed to assess the level of knowledge and attitude regarding safe abortion among women of reproductive age in Pokhara Metropolitan City.

METHODS

The descriptive cross sectional research design was used to find out knowledge and attitude of women regarding safe abortion in Pokhara Metropolitan City. It consists of total 33 wards. A simple random sampling technique was used to select the ward. Among them ward number 1, 2, 3, 5, 8, 9, 13, 14, 15, 17, 21, and 23 were selected by lottery method. The starting point in each ward was selected in a central location of ward. A bottle was spin at this central point. The area pointed by the bottle at the end of spinning was chosen. First house of the ward was the first sample. Subsequent household was selected by going to the house whose front door was closest to the just visited house until the number of households was reached. Similar technique was used in other remaining wards for further sample selection. The married and unmarried women of reproductive age residing in Pokhara Metropolitan City were the study population. Sample size was determined by using the Cochran's formula, $n = (Z\alpha^2pq)/d^2$. The total sample of the study was 374 women. Thirty-four women of reproductive age were taken from each ward. If more than one woman was living in same house, lottery method was done to select the participant.

A structured interview schedule was constructed by the researcher through extensive literature review. The first part included the questions about background information and obstetric characteristics of the women. The second part included questions related to knowledge and the third part included statements related to attitude on safe abortion. In the knowledge questions, score one was given for each correct answer and zero for the wrong

answer. For multiple response questions, score one was given for each option and zero score for no response. Then the score was summed up to obtain an overall score for each participant. The level of knowledge was categorized into good and poor by taking reference of Mekonnen et al. [11] which was 70% and above was considered good and below 70% was considered poor knowledge on safe abortion. Similarly, the overall attitude of the women was categorized into positive and negative attitude based on the mean score. Mean and above mean score was considered positive and mean below was considered negative attitude [5]. Data was collected after getting ethical approval from Institutional Review Committee of Institute of Medicine and Office of Pokhara Metropolitan. The IRC approval reference number was 560(6-11) E²/079/80. Purpose of the study was explained to the women. An informed written consent was obtained from each participant prior to data collection. The participants were assured voluntary participation. Confidentiality of the information was maintained by not disclosing the information and using the obtained information for the study purpose only. The data was collected from 29th May to 28th June, 2023 through face to face interview technique

The collected data was edited, organized, coded and analyzed using computer package with SPSS (Statistical Package for Social Science) software version 16. Data was analyzed by using descriptive and inferential statistics. Descriptive statistics i.e., frequency, percentage, mean, range, standard deviation was computed for the study variables. Inferential statistics i.e., Chi square test were used to find out the association. A *p* value of less than 0.05 was considered significant.

RESULTS

Out of 374 women, 68.7% of the women were between the age of 40 years and above. The mean age was 30.39 ± 7.350 years. Regarding ethnicity and religion, 34.5% of them were Brahmin or Chhetri and 72.2% were Hindu. Similarly, 70.6% of the women were married and 60.7% of them

had 10 years of marriage duration. All of them were literate. Among them, 37.2% of the women had secondary level of education. Likewise, 33.6% of the women were home maker and 48.4% of the women had family income sufficient for one year and surplus. Regarding women's husband, 22.2% had secondary level of education and 19.3% had service. In this study, 61.3% of the women were living with joint family and 72.7% of the women had got information on abortion through radio, television and newspaper.

More than half (66.5%) of the women were multigravida and 41.7% had two living children. Out of 374 women, 16.6% had history of abortion. Among them 38.7% had miscarriage and 40.3% had done abortion in government hospital. Majority (75.9%) had done abortion before 10 weeks and less and 51.6% had done abortion through methods of medical abortion. Regarding complications, 27.5% had complications after abortion and 22.5% seek medical help after complications. Less than half (35.8%) of the women had good level of knowledge on safe abortion. More than half (52.1%) of the women had positive attitude on safe abortion. There was significant association between marital status (*p* = 0.004), and duration of marriage (*p* = 0.01) with attitude on safe abortion.

The majority (79.1%) of the women answered the correct meaning of safe abortion. The majority of the respondents reported that vaginal bleeding and expulsion of product of conception were the signs and symptoms of abortion which was 87.2% and 85.0% respectively. Most (93.3%) of the women replied hospital was the best place for safe abortion. Less than half (43.3%) reported that the best week of gestation for safe abortion was 12th week. The majority of the women mentioned that medical abortion was a method of safe abortion, with 84% reporting knowledge of this method and 81.6% having information specifically about medical abortion. Among them only 28.3% knew the correct week of gestation for medical abortion. Most (94.1%) of the women responded

government health centers was the free place of safe abortion. Only 27.3% of the women answered up to 6 months were the correct birth interval after abortion. (Table 1)

Table 1: Knowledge of Women regarding Safe Abortion, n=374

Variables	Frequency	Percent
Meaning of safe abortion		
Termination of pregnancy by trained health personnel with the consent of woman in a government certified place	296	79.1
Sign and symptoms of abortion*		
Vaginal bleeding	326	87.2
Lower abdominal pain	295	78.9
Backache	253	67.6
Expulsion of product of conception	318	85.0
Best place for conducting safe abortion*		
Primary health care Centre	229	61.2
Hospital	349	93.3
Marie- stopes Centre	212	56.7
Family planning Association of Nepal	226	60.4
Urban Health Centers/Health Posts	216	57.8
Best week of gestation for safe abortion		
Up to 12 weeks	162	43.3
Methods for safe abortion*		
Medical abortion	314	84.0
Manual Vacuum Aspiration (MVA)	225	60.2
Dilatation and Evacuation	289	77.3
Medical Induction (MI)	149	39.8
Information on Medical abortion	305	81.6
Best Week of gestation for Medical Abortion		
Up to 10 weeks	106	28.3
Free Place for Safe abortion Service		
Government health centers	352	94.1
Birth Interval after Abortion		
Up to 6 month	102	27.3

*Multiple responses

More than half (66.8%) of the women replied the correct meaning of unsafe abortion. Majority of the women replied heavy bleeding and incomplete abortion was the complications of unsafe abortion which was 86.4% and 81.3% respectively. Regarding preventive measures for unsafe abortion, 73.5% reported that abortion should be performed by trained health personnel. Majority (84.2%) of the women had information about legalization of abortion in Nepal. Among them 62.8% answered conceived due to rape or incest up to 28th weeks was the legal conditions for abortion. (Table 2)

More than half (59.1%) of the women completely agreed upon the statements safe abortion is the right of the woman, if she wants, she can terminate the pregnancy. Similarly, 42.2% of the women completely disagreed upon the statements safe abortion service can be used as alternative of family planning methods. The mean score upon the statements, safe abortion is the right of the woman, if she wants, she can terminate the pregnancy was 4.39 ± 0.889 . The mean varies from 2.05 ± 1.168 to 4.39 ± 0.889 . (Table 3)

There was significant association between age ($p=0.001$), religion ($p=0.01$), husband's level of education ($p=0.01$), gravida ($p=0.005$), duration of marriage ($p=0.001$), number of living children ($p=0.002$), history of abortion ($p=0.03$) and the level of knowledge on safe abortion. (Table 4)

Table 2: Knowledge of Women regarding Unsafe Abortion and Abortion Law, n=374

Variables	Frequency	Percent
Meaning of Unsafe Abortion		
Termination of pregnancy by untrained person	250	66.8
Complications of Unsafe abortion		
Heavy bleeding	323	86.4
Incomplete abortion	304	81.3
Damage to internal organs	232	62.0
Infertility	249	66.6
Infection	246	65.8
Death	246	65.8
Preventive measures for Unsafe Abortion		
Use of effective family planning method	263	70.3
Proper antenatal checkup	164	43.9
Strict prohibition of sex selection	226	60.4
Conducting abortion by trained health personnel	275	73.5
Legalization of abortion	315	84.2
Legal conditions for abortion*		
Fetus up to 12 th week, with the consent of the pregnant woman	223	59.6
Fetus up to 28 th weeks that there may be danger upon the life of the pregnant woman or disabled infant may be born	207	55.3
Fetus remained due to rape or incest up to 28 th weeks	235	62.8
Fetus up to 28 th weeks with the consent of the woman who is suffering from H.I.V. or other incurable disease of such nature	213	57.0
Disability in the fetus due to genetic defect or any other cause up to 28 th weeks	214	57.2

*Multiple response

Table 3: Attitude of Women regarding Safe Abortion (n=374)

Statements	CD (%)	D (%)	N (%)	A (%)	CA (%)	Mean±SD
Safe abortion is the right of the woman, if she wants, she can terminate the pregnancy.	6 (1.6)	9 (2.4)	40 (10.7)	98 (26.2)	221(59.1)	4.39±0.889
Abortion should not be done for any reason.*	22(5.9)	74 (19.8)	58(15.5)	193(51.6)	27(7.2)	3.34±1.059
Abortion should not be discussed in the family in front of everyone.*	38(10.2)	104(27.8)	48(12.8)	168(44.9)	16(4.3)	3.05±1.143
Safe abortion service should be legal and accessible for everyone.	6(1.6)	15 (4.0)	75 (20.1)	142(38.0)	136(36.4)	4.03±0.933

Sex selection abortion should be legal and accessible.*	72(19.3)	117(31.3)	79(21.1)	69(18.4)	37(9.9)	2.68±1.252
If a married woman wants an abortion legally, she must have her husband's permission.*	127(34.0)	155(41.4)	32 (8.6)	44 (11.8)	16(4.3)	2.11±1.128
Fetus having multiple abnormalities should be aborted.	3(0.8)	9(2.4)	64(17.1)	185(49.5)	113(30.2)	4.06± 0.800
Abortion among unmarried women is acceptable in case of unwanted pregnancy.	2 (0.5)	14 (3.7)	52 (13.9)	197(52.7)	109(29.1)	4.06±0.791
Safe abortion services should be available at health center and hospital	0(0.0)	6(1.6)	44 (11.8)	170(45.5)	154(41.2)	4.26±0.725
Safe abortion should be done by trained health personnel.	0(0.0)	2 (0.5)	49(13.1)	193(51.6)	130(34.8)	4.21±0.677
Provision of safe abortion after unwanted pregnancy can prevent mother's life.	0(0.0)	4 (1.1)	72(19.3)	162(43.3)	136 (36.4)	4.15±0.760
Infertility will be developed in later life after safe abortion.*	73(19.5)	109(29.1)	95(25.4)	87(23.3)	10(2.7)	2.60±1.122
Safe abortion service can be used as alternative of family planning methods*	158 (42.2)	112(29.9)	43(11.5)	48 (12.8)	13(3.5)	2.05±1.168

*Negative attitude, CD (Completely Disagree), D (Disagree), N (Neutral), A (Agree), CA (Completely agree)

TABLE 4: Association between the level of Knowledge and Selected Variables

Variables	Level of Knowledge		χ^2 value	p Value
	Good	Poor		
Age in completed Years				
20-34	11(19.3%)	46(80.7%)	14.124	0.001
35 -39	15(25%)	45(75%)		
40 and above	108(42%)	149(58%)		
Religions				
Hindu	104(38.5%)	166(61.5%)	4.319	0.01
Buddhist	14 (24.1%)	44(75.95)		
Muslim and Christian	16(34.8%)	30 (65.2%)		
Husband's educational level				
Informal education	2(8.7%)	21(91.3%)	8.501	0.01
Basic and secondary	60(33.9%)	117(66.1%)		
Bachelor and above	27(42.2%)	37(57.8%)		
Gravida				
Primigravida	28(45.9%)	33(54.1%)	7.956	0.005
Multigravida	48(26.5%)	133(73.5)		
Duration of Marriage				
Up to 10 years	100(44.1%)	127(55.9%)	16.989	0.001
More than 10 years	34(23.1%)	113(76.9%)		
Number of living Children				
One child	28(45.9%)	33(54.1%)	9.266	0.002
More than one child	45(25.1%)	134(74.9%)		
History of abortion				
Yes	119(38.1%)	193(61.9%)	4.376	0.03
No	15(24.2%)	47(75.8%)		

p-value significant at <0.05

DISCUSSION

Poor knowledge and negative attitude are main hindrances to access safe abortion services. In the present study 35.8% of the women had good level of knowledge on safe abortion which was consistent with the findings of the study conducted in Ethiopia [10] and contrast with the study done in South Africa [12]. The finding was slightly lower than the finding of previous study conducted by Desalegn et al. in Ethiopia which was 55.9% had good level of knowledge [13]. These differences in knowledge could be due to availability of health education and level of awareness on abortion.

In the current study, 52.1% of the women had positive attitude on safe abortion which was similar to previous study conducted in Ethiopia by Desalegn et al. and study of Mutinta in South Africa [12-13]. This finding was also supported by the study conducted in Nepal which was 49.7% [5]. The level of attitude was contradicted with findings of the previous study conducted by Adhikari et al. in Nepal which was 90% [9].

In this study, there was significant association between age, religion, duration of marriage, husband's level of education, gravida, number of living children, history of abortion and the level of knowledge on safe abortion. The previous study conducted in Ethiopia by Abdissa et al. showed association with marital status, educational level and place of residence [14]. Likewise, another study conducted in South Africa revealed significant association with marital status, family education, residence, age, and information on abortion with the level of knowledge on abortion [12]. The finding of this study was not supported by the previous study done by Chaudhary et al. in Nepal where there was no significant association was found between the level of knowledge on abortion and selected background variables [15].

In the current study there was significant association between marital status and duration of marriage with the level of attitude on safe abortion whereas the previous studies conducted

in Nepal depicted no association between the selected variables and attitude [5,9].

CONCLUSION

It is concluded that more than half of the women had poor knowledge but positive attitude on safe abortion. In order to increase the level of knowledge and attitude of women, awareness raising programme on safe abortion should be conducted among reproductive age group women through concerned authority of Pokhara Metropolitan.

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Authors Contributions: RT, BG, and SS reviewed the literature, conceptualized the research, and conducted the data collection. RT and UKP handled the data analysis, interpretation, and preparation of results. RT and SS prepared the manuscript, which was reviewed and approved by all authors. All authors have agreed to be accountable for all aspects of the research work.

Ethical Approval: This research was approved by IRC of TU IOM. The IRC reference number is 560(6-11) E² /079/80 was received on 29 March, 2023.

Data Availability Statement: The data that support the findings of the study are available from the corresponding author upon request.

Conflict of interests: The authors declare no conflict of interest.

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Layman Summary

Safe abortion is a key part of reproductive health services. Women who know more about safe abortion usually have a more positive attitude towards it. This study aimed to assess the knowledge and attitudes of women regarding safe abortion in Pokhara Metropolitan City. Face

to face interviews were conducted using structured interviewed schedule with women of reproductive age. The study found that many women had limited knowledge about safe abortion, but most had a positive attitude towards it. To improve women's understanding and attitudes, it is important to provide more information and awareness programs about safe

abortion. Knowledge about safe abortion was connected to factors like age, religion, husband's education, number of pregnancies, length of marriage, number of children, and past abortions. Attitudes towards safe abortion were also linked to marital status and the length of marriage.

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