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Research Article

Knowledge and Attitude Regarding Abortion among Undergraduate Health Science Students of Kathmandu Metropolitan City

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Abstract:

Background: The World Health Organization (WHO) defines abortion as pregnancy termination prior to twenty weeks of gestation or a fetus born weighing less than 500g. Abortion in Nepal was legalized in 2002, and the first legal abortion services started on March 18, 2004 (Safe Abortion Law). In developing regions, approximately 99% of the global maternal deaths in 2015 and early 8% of maternal deaths are abortion-related. Unsafe abortion is a public health concern because of its serious reproductive health consequences and impact on maternal morbidity and mortality.

Methods: A descriptive cross-sectional study was conducted among 384 undergraduate students in colleges in Kathmandu Metropolitan City. Structured, self-administered questionnaires were used for data collection. Data were processed using IBS SPSS v. 25.0. Descriptive statistics and the chi-square test were used.

Results: The study showed that two-thirds (66.7%) of study participants had good knowledge of abortion, while 33.3% had poor knowledge. Overall, there was a positive attitude toward abortion. Age, sex, residence, religion, ethnicity, type of family, educational level of parents, and occupation of parents were not significantly associated with levels of knowledge on abortion.

Conclusion: Two-thirds of respondents had good knowledge of abortion. Still, a large proportion had poor knowledge regarding abortion, although the study participants were from a health science background. Therefore, it is strongly recommended that health education initiatives target such youth about abortion and its complications, which helps reduce morbidity and mortality associated with unsafe abortion.

Keywords: Abortion, Attitude, Knowledge, Health science, Nepal.

Introduction

The World Health Organization (WHO) defines abortion as pregnancy termination prior to twenty weeks of gestation or a fetus born weighing less than 500g. If abortion occurs before twelve weeks' gestation, it is called early; between twelve and twenty weeks, it is called late [l]. Abortion can occur spontaneously, which is often called a miscarriage. It can also be purposely caused, which is known as induced abortion. The term abortion most commonly refers to the induced abortion of a human pregnancy [2].

Abortion in Nepal was legalized in 2002, and the first legal abortion services started on March 18, 2004 (Safe Abortion Law). The abortion law allows women to terminate a pregnancy up to 12 weeks on demand, up to 18 weeks of gestation in the case of rape or incest at the request of the pregnant woman, and at any gestation if the pregnancy is harmful to the pregnant woman's physical or mental health, as certified by an expert physician. The law prohibits abortions done without the consent of the woman, sex-selective abortions, and abortions performed outside the legally permissible criteria [3]. The World Health Organization (WHO) estimates that worldwide, 210 million women become pregnant each year, and over 130 million of them deliver live infants. The remaining 75 million pregnancies end in miscarriage, stillbirth, or induced abortion. Of the estimated 42 million induced abortions each year, nearly 22 million are performed safely and 20 million are performed unsafely. Unsafe abortions are frequently performed by providers lacking the qualifications and skills to perform induced abortions, and some abortions are self-induced [4]. More than 100,000 women have received safe abortion services from certified service sites since the service began in Nepal in 1960/61. Total Safe Abortion Service (SAS) users were 96,417 women in 2073–74 and 98,640 in 2074–75. The

proportion of adolescents (20 years) among SAS users decreased for both medical and surgical abortions [5]. While it has been 16 years since the legalization of abortion in Nepal, unsafe abortion remains the third highest (7%) direct cause of maternal death in Nepal, and significant numbers of Nepali women remain unaware of the legal status of abortion and have limited or no knowledge of where to obtain safe abortion services [6]. The study conducted on awareness regarding safe abortion among adolescent girls in rural areas of Mahottari district showed that the overall level of knowledge about safe abortion was low. Socio-demographic factors like marital status, level of education, and family income were independently associated with the level of awareness of safe abortion [7]. A study conducted on knowledge and attitudes about induced abortions among female youths attending Naguru Teenage Information and Health Centre, Kampala, Uganda, showed different attitudes towards induced abortion. Most of them were unwilling because they never appreciated the outcome of an induced abortion. They thought an induced abortion exposed the person undergoing it to many complications [8]. The objective of the research is to assess the knowledge and attitude regarding abortion among undergraduate students of Kathmandu Metropolitan City.

Methods

A cross-sectional study was conducted among undergraduate health science students studying in different health science colleges of Kathmandu Metropolitan City, Nepal. Data were collected from August 2022 to September 2022. The sample size was 384. It was calculated using the formula z^2pq/d^2, where the prevalence of 50% at 95% confidence interval, and 5% margin of error were taken. A pretested self-administered questionnaire was used for data collection. The sampling technique was simple random sampling. Ethical approval was received and the ethical aspect was considered.

The data were entered and analyzed using IBM SPSS Statistics version 25.0. Based on the distribution and variance, appropriate statistical tests were used for analysis. Descriptive analysis was used to describe background characteristics. Chi-square test was used to test the difference between the categorical variables, and $p < 0.05$ was considered statistically significant.

Result

The study population consisted of males (241; 62.8%) and females (143; 37.2%). A total of 384 participants took part in the research, ages 8 to 30. The majority of participants were unmarried (96.9%), and nearly two-thirds (64.3%) of the respondents live in urban areas. The majority of respondents were Hindu (77.9%), followed by Buddhist (12.5%) and Christian (9.6%). The majority of respondents were Janajati (168, 43.8%), followed by Brahmins/chettri (163) (42.4%), Terai/Madhesi (23, 6%), and Dalits (30, 7.8%). 70.6% of respondents lived in a nuclear family, while 29% lived in a joint or extended family (Table 1).

Table 1: Demographic characteristics of participants

Variable	Frequency (n)	Percentage (%)
Age		
18-25	343	88.4
26-30	45	11.59
Sex		
Male	241	62.8
Female	143	37.2
Marital status		
Unmarried	372	96.9
Married	12	3.1
Residence		
Rural	136	35.4
Urban	248	64.6
Religion		
Hinduism	299	77.9
Buddhism	48	12.5
Christianity	37	9.6

The majority of the respondents (41.9% had a positive attitude toward abortion, which is not a crime. More than half (52.9%) had a negative attitude toward abortion among unmarried women, which is unacceptable in the community. The majority (79.4%) had a positive attitude toward the idea that women should always have the right to an abortion in the case of an unwanted pregnancy. 82.6% had a positive attitude toward abortion at unregistered clinics, which is more harmful than at registered clinics. The majority of respondents (77.9%) had a positive attitude toward the fact that unmarried women have more complications from abortion than married women. 25.8% were neutral on the fact that doctors usually charge unmarried women more for an abortion. 90.1% had a positive attitude toward the fact that a woman can die from an abortion done in an unsafe condition (Table 2).

Table 2: Attitude regarding abortion

Statement	Positive attitude	Neutral	Negative attitude
Abortion is not a crime.	161 (41.9)	117 (30.5)	106 (27.6)
Abortion among unmarried women are acceptable in this community.	111 (28.9)	70 (18.2)	203 (52.9)
Unmarried women prefer to have abortion outside public health clinics.	223 (58.1)	69 (18)	92 (24)
A woman should always have the right to an abortion in the case of an unwanted pregnancy.	305 (79.4)	47 (12.2)	32 (8.3)
If the pregnant women are less than 16 years of age, the nearest guardian or relative can give consent for abortion service.	281 (73.2)	52 (13.5)	51 (13.3)
Abortion clients are treated in privacy in Nepal.	242 (63)	94 (24.5)	48 (12.5)
Abortion at unregistered clinics are more harmful then at registered clinics.	317 (82.6)	29 (7.6)	38 (9.9)
Unmarried women have more complication from abortion than married women.	299 (77.9)	58 (15.1)	27 (7)

Among 384 respondents, two- thirds (66.7%) had good knowledge on abortion while one third (33.3%) had poor knowledge on abortion (Table 3).

Table 3: Level of knowledge regarding abortion

Variable	Frequency	Percentage (%)
Poor Knowledge	128	33.3
Good Knowledge	256	66.7

Table 4: Association between socio demographic factor and level of knowledge

Variable	Poor knowledge	Good knowledge	P-value
Sex			
Male	86 (35.7)	155 (64.3)	0.204
Female	42 (29.4)	101 (70.6)	
Residence			
Rural	51 (37.5)	85 (62.5)	0.200
Urban	77 (31)	171 (69)	
Type of family			
Nuclear	93 (34.3)	178 (65.7)	0.526
Joint/extended	35(31)	78 (69)	

Table 5: Description on association between socio demographic factor and level of knowledge (n=384)

Variable	Poor knowledge	Good knowledge	P-value
Educational level of Mother			
Illiterate	24 (37.5)	40 (62.5)	
Primary level	33 (31.4)	72 (68.6)	0.429
Secondary level	47 (37.6)	78 (62.4)	
Higher secondary	19 (28.4)	48 (71.6)	
Level			
University level	5 (21.7)	18 (78.3)	
Educational level of Father			
Illiterate	10 (45.5)	12 (54.5)	
Primary level	33 (37.9)	54 (62.1)	0.219
Secondary level	40 (32.3)	84 (67.7)	
Higher secondary Level	35 (34)	68 (66)	
University level	10 (20.8)	38 (79.2)	
Religion			
Hinduism	107 (35.8)	192 (64.2)	
Buddhism	12 (25)	36 (75)	0.160
Christianity	9 (24.3)	28 (75.7)	
Ethnicity			
Brahmin/chettri	58 (35.6)	105 (64.4)	
Terai/madhesi	10 (43.5)	13 (56.5)	0.387
Dalit	7(23.3)	23 (76.7)	
Janajati	53 (31.5)	115 (68.5)	

Discussion

The mean age of the participants in this study was 170.93. In this study, two-thirds (66.7%) had good knowledge on abortion, which was a huge difference from the study conducted in Ethiopia (9.1%) [9]. Another study conducted in Nigeria and Pokhara University had good knowledge on abortion of 88.3% [10]and 94.4% [2], respectively, while a study conducted in Mahotari, Nepal, had good knowledge regarding abortion of 45.6% [7], which was similar to the study conducted in a middle-income country in Southeast Asia with 47.6% [11].

The majority of the respondents (41.9% had a positive attitude that abortion is not a crime. This finding was contrary to a study conducted in Nigeria, where a very small proportion (5.3%) believes this [10]. More than half, 52.9%, had a negative attitude toward abortion among unmarried women, which is acceptable in the community, despite the fact that a study conducted in Rupandehi showed that 32% had a negative attitude [12]. 79.4% had a positive attitude that women should always have the right to an abortion in the case of an unwanted pregnancy, like the study conducted in Nepal, which had 83.3%. In the study, 82.6% had a positive attitude toward abortion at unregistered clinics, which is more harmful than abortion at registered clinics, while the study conducted in a teaching hospital had 94.8% [11]. In this study, 25.8% were neutral on whether doctors usually charge unmarried women more for an abortion. It is in contrast to the study conducted in Rupendahi, which showed most respondents had a positive attitude (68%) [12]. In this study, 90.1% and 93.2% had a positive attitude toward the fact that a woman can die from an abortion done in an unsafe condition or by untrained providers, and unsafe abortion is a serious health problem in Nepal, which is similar to a study conducted in a teaching hospital with 89.4% and 94.8%, respectively. In the study, 48.2% were neutral on whether women prefer to have surgical rather than medical abortions, as another study conducted at the Teaching Hospital had 63.5% [13].

In this study, there was no significant association between age, sex, residence, religion, ethnicity, type of family, educational level of mother and father, occupation of mother and father, monthly family income, or source of information and level of knowledge on abortion. It is consistent with the study conducted in Nigeria, where associations between age and religion and level of knowledge were seen [10]. However, in the study conducted in Ethiopia, the marital status of respondents (P = 0.001) and the income status of the respondent's family (P = 0.001) were found to be statistically significant with the level of knowledge on abortion [14]. According to a study in Nepal, age, ethnicity, and occupation were not significantly related to knowledge of abortion [15]. Similarly, in a study conducted in Zambia, there was no association between age group and level of knowledge [16]. Likewise, another study revealed that there was no significant association between selected variables like age, gender, ethnicity, type of family, and education faculty [2].

Conclusion

Two-thirds of study participants had good knowledge of abortion, while one-third had poor knowledge of abortion. Overall, there was a positive attitude toward abortion. The study showed that there was no significant association between age, sex, residence, religion, ethnicity, type of family, educational level of parents, occupation of parents, monthly family income, and source of information and level of knowledge on abortion. It is strongly recommended that health education initiatives target such youth about abortion and its complications, which helps reduce morbidity and mortality associated with unsafe abortion.

Ethics approval and consent to participate

Ethical approval was taken and informed consent was also taken from participant during the time of data collection.

Data Availability

Data will be available upon request from corresponding author.

Conflicts of Interest

No conflicting interest exist.

Funding Statement

It is self-funded by authors.

Contribution of Authors

All authors contributed for the accomplishment of this research work. AKC made substantial contributions to the concept and design of the research, collected the data, acquired, analyzed, or interpreted the data, and drafted the article. AB made a central contribution in drafting the research article, revised it critically for important intellectual content, acquired, analyzed, or interpreted data, and approved the version to be published. RC, KKC, BKB and CB conceived and helped to design the research. All authors read and approved the final manuscript.

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