ABSTRACT

Background: Abortion is the expulsion of the product of conception before time of fetal viability i.e. 22 weeks and weigh less than 500 grams. The aim of this study was to find out the awareness regarding legalization of abortion among female youth.

Methods: A descriptive cross-sectional study was performed in Gynecological Outpatient Department of Chitwan Medical College Teaching Hospital. A total of 97 respondents were selected by adopting non-probability consecutive sampling technique. Data was collected by using structured interview schedule. Collected data was analyzed and interpreted through descriptive and inferential statistics.

Results: The findings of this study revealed that the majority (78.4%) of female youth were adequately aware about legalization of abortion. There was significant association between place of residence and level of awareness (p=0.002) regarding legalization of abortion among female youth.

Conclusions: It is concluded that considerable percentage of female youth have low awareness regarding legalization of abortion. So, awareness program is needed on legalization of abortion to increase public awareness.

INTRODUCTION

Abortion is the expulsion of the product of conception before time of fetal viability (22 weeks) and weigh less than 500 grams. Abortion is classified into two types - Spontaneous and induced abortion. Spontaneous abortion is the spontaneous termination of pregnancy before the fetus viability whereas induced abortion is the deliberate termination of pregnancy before the fetus viability.1

Approximately 205 million pregnancies that occur worldwide annually are unintended, and about 20% of all pregnancies end in induced abortion. In developing countries, 182 million pregnancies occur among them more than one third are unintended, and 19% end in induced abortion (8% are safe procedure and 11% are unsafe).2Unsafe abortion is the most neglected sexual and reproductive health problems and is a major public health problem in many developing countries because of its reproductive health consequences and impact on maternal morbidity and mortality.3,4Worldwide 13% of maternal death is due to unsafe abortion.5Pre legalization deaths from abortion related complications accounted for over half of all maternal deaths.5

Knowledge about legislation of abortion and conditions of abortion law is low among female youth. Only two-fifth (41%) female youth are aware of abortion legislation in the country. Knowledge on at least one condition of abortion law is only 21% which is even lower.6The objective of this study was to find out the awareness regarding legalization of abortion among female youth attending a teaching hospital, Bharatpur.

METHODS

A descriptive cross-sectional research design was adopted to find out the awareness regarding legalization of abortion among female youth attending a teaching hospital, Bharatpur. The study setting of the research was conducted on the Gynae/Obstetrics Outpatient Department (OPD) of Chitwan Medical College Teaching Hospital (CMCTH), located in Bharatpur-10, Chitwan. The research was done for 2 weeks period i.e. June 30, 2019 to July 13, 2019.

Research approval was obtained from Nursing Research Committee of School of Nursing, Chitwan Medical College (CMC) and ethical approval was obtained from CMC, Institutional Review Committee (IRC), Bharatpur -10, Chitwan. The verbal informed consent was obtained from each respondent by clarifying the purpose of the study prior to data collection. Each respondent
was allowed to have a voluntary choice for participation. Respondent’s dignity was maintained by giving right to reject or discontinue from the research study at any time. Confidentiality of the information was maintained by not disclosing the information and using the information only for the research purpose.

The population of this study was the female youth aged 15-24 years attending a Gynae/Obstetrics OPD of CMCTH for regular checkup. Female youth who were willing to participate in the study were included in the study. The total number of female youth aged 15-24 years attending a Gynae/Obstetrics OPD of CMCTH for regular checkup in last month (Jestha) was 391 and in half month the population was about 196.

Sample size was calculated by using the following formula,

\[ n_0 = \frac{z^2pq}{d^2} \]

Where prevalence \( p \) of previous study is 41%. \( z = 1.96 \) (confidence interval set at 95%) \( p = 0.41 \) q =1-p i.e 0.59 \( d = \) permissible error set at 7%

Hence using the formula, \( n_0 = 190 \)

Where \( N = \) Total estimated population = 196
\( n = n_0 x \frac{N}{N+(n_0-1)} \) = 97

Therefore, total sample size of the study was 97.

Non-probability consecutive sampling technique was used to select the sample. Data was collected from those female youth who were accessible and met the inclusion criteria were taken as a study sample. The content validity of the instrument for its completeness and clarity was established by consulting with the subject experts, research advisor and research teachers. The instrument was translated into Nepali version by seeking the help of advisor and Nepali language expert and further it was retranslated into English language. Pretesting of the instrument was done among 10% of total sample female youth in Gynae/Obstetrics OPD of CMCTH which was excluded from the final study.

The collected data were organized, coded and entered in statistical package for social science (SPSS) version 20 for analysis. Descriptive statistics (frequency, percentage, median, Interquartile range (IQR)) was used for socio-demographic characteristics and awareness level and inferential statistics (chi-square) was used to measure the association between the level of awareness and selected variables. The findings were presented in table accordingly.

### RESULTS

Out of 97 respondents, 56.7% of the respondents were age group of ≥22 years. Regarding ethnicity 37.1% of female youth belong to Brahmin and 11.3% belong to Dalit. Regarding religion 83.5% followed Hinduism. Concerning place of permanent residence 61.9% belongs from urban. Similarly, nearly two third (63.9%) were married. As regarding education level 43.3% were of higher secondary level (Table 1).

### Table 1: Respondents’ socio-demographic characteristics

| Socio-demographic Variables | Frequency (%) |
|-----------------------------|---------------|
| **Age of Respondent**       |               |
| ≥ 22 year                   | 55(56.7)      |
| < 22 year                   | 42(43.3)      |
| Median (age)= 22, IQR=Q3–Q1(23-20)=3 |
| **Max = 24 years, Min = 16 years** |
| **Ethnicity**               |               |
| Brahmin                     | 36(37.1)      |
| Chhetri                     | 18(18.6)      |
| Janjati                     | 32(33)        |
| Dalit                       | 11(11.3)      |
| **Religion**                |               |
| Hinduism                    | 81(83.5)      |
| Buddhism                    | 13(13.4)      |
| Christianity                | 2(2.1)        |
| Islam                       | 1(1)          |
| **Permanant Residence**     |               |
| Rural                       | 37(38.1)      |
| Urban                       | 60(61.9)      |
| **Marital Status**          |               |
| Unmarried                   | 35(36.1)      |
| Married                     | 62(63.9)      |
| **Educational level**       |               |
| General education           | 4(4.1)        |
| Basic education ( up to 8 ) | 10(10.3)      |
| Higher secondary level (9 to 12) | 42(43.3)      |
| Bachelor and above          | 41(42.3)      |
| **Occupation**              |               |
| Student                     | 34(35.1)      |
| Home maker                  | 39(40.2)      |
| Self employed               | 8(8.2)        |
| Service                     | 16(16.5)      |

Among 52 women who had experienced pregnancy 15.4% of them had unwanted pregnancy and among those who had unwanted pregnancy, 100% had induced abortion. Concerning about reason for induced abortion half of them (50%) had due to unintended pregnancy and other (50%) had due to detection of abortion fetus (Table 2).

### Table 2: Respondents’ history of abortion

| Questions                        | Frequency (%) |
|----------------------------------|---------------|
| **Parity**                       |               |
| Yes                              | 52(53.6)      |
| No                               | 45(46.4)      |
| **Unwanted pregnancy (n=52)**    |               |
| Yes                              | 8(15.4)       |
| No                               | 44(84.6)      |
| **Induced abortion (n=8)**       |               |
| Yes                              | 8(100.0)      |
| No                               | 0             |
| **If yes, reason for induced abortion (n=8)** |       |
| Unintended pregnancy             | 4(50.0)       |
| Detection of abnormal fetus      | 4(50.0)       |
Regarding source of information nearly one third (32%) received information from health personnel and 32% received information from IEC materials and other received information from mass media (internet/newspaper/radio/television), friends and family members (Table 3).

All the respondents (100%) gave correct response to the meaning of safe abortion. Similarly, 90% of the respondents gave correct response to the meaning of unsafe abortion, 77.3% respondents are aware about legalization of abortion in Nepal and 91.8% of the respondents is aware about the time for safe abortion. Similarly, 87.6% respondents is aware about the consent of their parents to undergo abortion for girls less than 16 years. Concerning about the sex selection abortion, 88.7% knows that sex selection abortion is illegal and 79.4% knows that without consent of women abortion is illegal (Table 4).

### Table 3: Respondents’ sources of information

| Sources of Information                          | Frequency (%) |
|------------------------------------------------|---------------|
| Mass media (Internet, Newspaper, Radio, Television) | 22(22.7)      |
| Health Personnel                                | 31(32.0)      |
| Friends                                         | 7(7.2)        |
| Family members                                  | 6(6.2)        |
| IEC materials                                   | 31(32.0)      |

### Table 4: Respondents’ awareness regarding legalization of abortion

| Questions                                                                 | Correct Response | Frequency (%) |
|---------------------------------------------------------------------------|------------------|---------------|
| Termination of pregnancy by trained person using correct techniques & necessary equipment in sanitary environment with consent of mother is known as safe abortion | 97(100.0)        |
| Abortion is illegal in Nepal #                                             | 75(77.3)        |
| Safe abortion is women’s right                                             | 97(100.0)        |
| Appropriate time for safe abortion is before 12 weeks of gestation         | 89(91.8)        |
| Pregnant women cannot do safe abortion at anytime during her pregnancy if fetus is deformed # | 33(34.0)        |
| Pregnant women can do safe abortion at anytime during her pregnancy if her health is at risk with the advice of medical practitioner | 94(96.9)        |
| Girls less than 16 years of age can undergo abortion with her wish without the consent of their parents # | 85(87.6)        |
| Pregnant women can do safe abortion up to 18 weeks of gestation if pregnancy has resulted from rape or incest | 61(62.9)        |
| Abortion without the consent of the pregnant women is legal #              | 77(79.4)        |
| Sex selection abortion is illegal                                          | 86(88.7)        |
| Safe abortion can also be done by traditional healer #                     | 91(93.8)        |
| There are many health institutions which are authorized by the government to do safe abortion | 93(95.9)        |
| A procedure for terminating an unwanted pregnancy, performed either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both is also known as safe abortion # | 90(92.8)        |
| Complications will not occur if abortion is conducted by untrained person # | 88(90.7)        |

# Negative response item

Level of awareness regarding legalization of abortion among female youth in which 78.4% respondents had adequate awareness level and 21.6% respondents had inadequate awareness level (Table 5)

### Table 5: Respondents’ level of awareness regarding legalization of abortion

| Level of Awareness | Frequency (%) |
|--------------------|---------------|
| Adequate awareness(≥7) | 76(78.4)      |
| Inadequate awareness (<7) | 21(21.6)      |
| Total              | 97(100.0)     |

Median = 7, Max = 11, Min = 3

There was statistically significant association between level of awareness and place of residence with p-value 0.002 which indicates that those who live in urban areas had good awareness level than those who live in rural areas (Table 6).

**DISCUSSION**

The descriptive cross-sectional study was conducted to find out awareness regarding legalization of abortion among female youth. The study population consisted of 97 female youth attended at Chitwan Medical College. In this study, 78.4% of respondent had adequate awareness regarding legalization of abortion which is high compare to the study conducted among female youth in Nepal which showed that 41% female youth was aware of abortion legalization. So, by comparing the result of both studies we can conclude that still large population of the women is unaware that abortion is legal in Nepal so advocacy and awareness campaign about abortion law are strongly needed in our country.

Present study showed that 100% answered the correct meaning of safe abortion, this study is supported by the study conducted on Lekhnath, Kaski in which 100% of undergraduate students had answered correct meaning of safe abortion. The
Table 6: Association between level of awareness and selected variables

| Variables                              | Adequate No. (%) | Inadequate No. (%) | $\chi^2$ | p-value |
|----------------------------------------|------------------|--------------------|----------|---------|
| Age of respondents                     |                  |                    |          |         |
| <22 years                              | 32(76.2)         | 10(23.8)           | 0.204    | 0.652   |
| ≥ 22 years                             | 44(80.0)         | 11(22.0)           |          |         |
| Ethnicity                              |                  |                    |          |         |
| Brahmin/Chhetri                        | 43(79.6)         | 11(20.4)           | 0.117    | 0.732   |
| Others (Dalit and Janjati)             | 33(76.7)         | 10(23.3)           |          |         |
| Religion                               |                  |                    |          |         |
| Hinduism                               | 63(77.8)         | 18(22.2)           | 0.095    | 0.758   |
| Non hindu(Budhhism, Christianity, Islam)| 13(81.2)       | 3(18.8)            |          |         |
| Educational level                      |                  |                    |          |         |
| Up to higher secondary level           | 43(76.8)         | 13(23.2)           | 0.191    | 0.662   |
| Bachelor and above                     | 33(80.5)         | 8(19.5)            |          |         |
| Occupation                             |                  |                    |          |         |
| Employed                               | 20(83.3)         | 14(16.7)           | 0.467    | 0.494   |
| Unemployed                             | 56(76.7)         | 17(23.3)           |          |         |
| Marital Status                         |                  |                    |          |         |
| Unmarried                              | 29(75.8)         | 6(24.2)            | 0.656    | 0.418   |
| Married                                | 47(82.9)         | 15(17.1)           |          |         |
| Permanent residence                    |                  |                    |          |         |
| Rural                                  | 23(62.2)         | 14(37.8)           | 9.241    | 0.002   |
| Urban                                  | 53(88.3)         | 7(11.7)            |          |         |
| Parity                                 |                  |                    |          |         |
| Yes                                    | 40(76.9)         | 12(23.1)           | 0.135    | 0.714   |
| No                                     | 36(80.0)         | 9(20.0)            |          |         |
| Unwanted Pregnancy                     |                  |                    |          |         |
| Yes                                    | 5(62.5)          | 3(37.5)            | 1.108    | 0.293   |
| No                                     | 35(79.5)         | 9(20.5)            |          |         |
| Reason for induced Abortion            |                  |                    |          |         |
| Unintended Pregnancy                   | 2(50.0)          | 2(50.0)            | 0.533    | 0.465€  |
| Detection of Abnormal Fetus            | 3(75.0)          | 1(25.0)            |          |         |

Significant level at p<0.05

Findings of this study showed that most of the respondents (89%) correctly stated that up to 12 weeks of gestation, any pregnant women can do safe abortion on her own will which is nearly equal with the study in which 83.3% of undergraduate students had correct knowledge that a pregnant women can terminate pregnancy on her own will up to 12 weeks of gestation. Current study findings revealed that, 61% of respondents correctly stated that up to 18 weeks of gestation, pregnant women can do safe abortion with her will, if pregnancy resulted from rape or incest which is higher than the findings of the study which showed only 45.3% of reproductive age women knew legal provision for abortion in case of rape or incest.

Present study showed that 33% of the respondents stated that pregnant women can do safe abortion anytime during her pregnancy if fetus is deformed similarly the findings of the study showed that 32.3% were aware that pregnant women can do safe abortion anytime during her pregnancy if fetus is deformed. The findings of this study showed that 94% of the respondents stated that pregnant women can do safe abortion at anytime during her pregnancy if her health is at risk as advised by medical practitioner which is contrast to the findings which showed that 20% were aware that it is permitted if pregnancy affects the heath of the mother.

In this study 86% of respondents had knowledge that abortion followed by sex selection of baby is illegal similarly 95.6% of undergraduate students had knowledge that sex selection abortion is illegal. Present study showed that 93% of the respondents had awareness about health institutions for safe abortion which is not consistent with the study which showed only 15.6% respondent had awareness about places for safe abortion and also is contrast to the study which showed that large population (71%) of the women were unaware of the availability of abortion services.

Likewise, present study shows that there is significant association between level of awareness and place of residence with p value = 0.002 which is consistent with the study which showed that there was significant association between level of awareness and place of residence with p value <0.001.
Study was based on structured questionnaire and consecutive sampling technique. The study findings may not be utilized to represent the whole country as the sample size is small and is conducted in only one setting at particular time of 2 weeks period.

CONCLUSION

It is concluded that more than three fourth of the female youth have an adequate awareness regarding legalization of abortion. Level of awareness is associated by place of residence. Those who lived in urban area have adequate awareness than those who lived in rural area. The hospital administration should plan and implement of awareness programme to increase public awareness among female youth regarding legalization of abortion.

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CONFLICT OF INTEREST: None

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