

# Abortion Law awareness and Abortion Services Utilization among reproductive age women of Inarwa municipality of Eastern Nepal

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## ABSTRACT

**Introduction:** Globally, reproductive health and quality of life among female population has been found to be unsatisfactory in developing world. Until 1963, Nepal's 1854 legal code known as MulukiAin was revised numerous times that banned abortion exempting risk of women's life. Enactment of New Abortion Policy from 2003 brought landmark reforms to the women's choice in family planning methods and ended the sufferings of lengthy prison sentences for abortion crimes. This study was conducted to explore the level of awareness about abortion law with regard to health care utilization among women of reproductive age group along with its association with socio-demographic characteristics. **Methodology:** A cross-sectional study was conducted in March 2014, in Inarwa Municipality among women of reproductive age group (16 to 49 years). Convenient sampling was done to collect data from households. Data was entered and analyzed in SPSS 11.5 and presented in tabular form. Chi-square test was used to show association of awareness of abortion law and socio-demographic variables. **Results:** education, age at first marriage and age at 1<sup>st</sup> pregnancy was found to be significant (p value: <0.005). **Conclusion:** As media was the most used source of information, more education on awareness of abortion law and health care utilization should be disseminated through this medium.

**Key words:** - Abortion Law, Reproductive health, Utilization

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## INTRODUCTION

Globally, reproductive health and quality of life among female population has been found to be unsatisfactory in developing world.<sup>1</sup> Estimates of unsafe abortions in 2008 accounted for a death of 47000 worldwide with decline in deaths by 50 in 1990 to 30 in 2008.<sup>2</sup> About 97% of all unsafe abortions are in developing countries while 55% are in Asia (South Central Asia).<sup>3</sup> It is difficult to extract relevant data regarding unsafe abortion from countries where access to abortion is legally restricted.

Until 1963, Nepal's 1854 legal code known as Muluki Ain was revised numerous times that banned abortion exempting risk of women's life. About 1/4<sup>th</sup> of women were branded as murderers on the basis of pregnancy termination under charges of infanticide and homicide. Most of these victimized women belonged to poor communities and were illiterate, reported to police mostly by their relatives while women from affluent families resorted to neighboring countries like India for abortion practices.<sup>4</sup>



Enactment of New Abortion Policy from 2003, brought landmark reforms to the women's choice in family planning methods and ended the sufferings of lengthy prison sentences for abortion related 'crimes' representing Nepal globally as a model for change.<sup>5</sup>

Being a patrilineal country with many patriarchal societies, Nepal bears cultural and social norms where women are restricted to silence and dominance. Premarital pregnancy is considered culturally unacceptable in developing country like Nepal<sup>6,7</sup> leading to unsafe abortions while bearing a son is considered culturally acceptable irrespective of number of children<sup>8,9</sup>. Preference for son over daughter has led to sex selective abortion despite being charged with imprisonment for such crime. Such practices have led to unsafe abortion which is underreported keeping the lives of these women at stake.<sup>10</sup>

As we embark in Sustainable Development Goal (SDG 2016-2030), Nepal has experienced a tremendous achievement with decline in Maternal Mortality Rate (MMR) from 1990 (850/100000 Live Births) to 2011(229/100000 Live births). The pillars for the success in decline in MMR in achieving the target for Millennium Development Goal (MDG) 2015 lies not only with the improvement in healthcare services but also with the Amendment of Abortion Law 2002 to certain extent.<sup>11</sup>

The Abortion law has given women liberty with permission of abortion upto 12 weeks of gestation. Under the new policy, which went into effect from 2003, women are permitted abortion for up to 12weeks of gestation on request and under certain medical/legal conditions thereafter specifications of Nepal's 2002 Abortion Law, pregnancy termination is available under these circumstances: up to 12 weeks' gestation for any indication, by request, up to 18 weeks' gestation in the case of rape or incest, at any time during pregnancy if mental/physical health or life of the pregnant woman is at risk with approval from a medical practitioner, if fetus is deformed and incompatible with life with approval from medical practitioner. Additional considerations includes punishment for sex selective abortion, right of pregnant women to choose or discontinue pregnancy, minors (<16 years) with mental incompetence, a consent by legal guardian is a must and only providers certified in safe abortion care are eligible to provide induced abortion services<sup>12</sup>

Nepalese women in patriarchal society are facing many challenges in battling Right to reproductive and Sexual Health<sup>5</sup>. Despite the legalization of abortion law, there lies a challenge of unsafe abortion as a study in 2008 in

Nepal showed that the number of abortions performed by unregistered providers was likely equal to those done by registered providers<sup>13</sup> indicating that Nepalese women were lacking utilization of health care facilities for safe abortion. This study was conducted to explore the level of awareness about abortion law and to assess the utilization of abortion services among women of reproductive age group.

## METHODS

A cross-sectional study was conducted in Inarwa Municipality of Sunsari district of Eastern Nepal using non-probability convenient sampling based on household sample of reproductive aged women (15-49 years) purposively. Data was collected for a month in March, 2014.

Inarwa Municipality has 6195 population household with 7946 female of reproductive age group 15-49 years.<sup>14</sup> There are 10 wards in Inarwa Municipality<sup>15</sup>. Among 10 wards, the ward number 1, 2, 7,8, 9 and 10 were randomly selected by lottery method using simple random sampling.

The population of interest were all women of reproductive age group (16-49) years regardless of their marital status at the time of the survey living in the Inarwa Municipality of eastern Nepal.

This Municipality was chosen for a number of reasons. Firstly, the aim of the study was to get a local community's perspective on the research questions so the semi-urban areas of Inarwa were relevant. Secondly, no similar study had previously been conducted in the area. Thirdly, the area was also chosen on the basis of convenience as Inarwa hospital stands as one of the teaching hospital of B.P. Koirala Institute of Health Sciences.

For ethical reasons the age limit was set to 16 years and older as the topic of interest was within the field of sexual and reproductive health and rights, which could be perceived as a culturally sensitive subject for Nepalese female youths. For the survey, a non-probability sampling technique in the form of convenient sampling was used to reach the respondents.

In total, 375 of 391 respondents who were eligible participated in this study: reasons for non- participation were that women were not healthy to participate (n=6), women were busy with household chores (n=8) and women refused (n=2). Sample size calculation was based on the reference taken by study done by Thapa S and Sharma SK<sup>16</sup> where 32% of women were aware about the legalization of abortion law using single proportion

formula.

Written ethical clearance was taken from institutional review committee of BPKIHS. Informed consent was obtained from each participant prior to interviewing them by signing a consent form. In order to ensure confidentiality, the questionnaires were anonymous, which meant that no names were noted but instead the questionnaire were coded.

Data was coded, entered in excel program and was analyzed by using Statistical Package for Social Sciences (SPSS) software version 11.5. Finally, descriptive data was presented in table and association of knowledge with sociodemographic data was shown by using chi-square test.

**RESULTS:**

A total of 375 respondents out of 391 women of reproductive age group (16-49 years) participated in this study. This gave a response rate of 95.91%.

**I) Sociodemographic Characteristics**

Majority (65.6%) of respondents belonged to age group 26-45 years with mean ±SD:30.75±7.884 (Min-Max=17-49 years) with 94.9% of them belonging to Hindu religion. The maximum, 48% of the respondents had secondary level education. Among the total married women (93.3%), there were 44 respondents (13%) who were married at less than 16 years of age while only 15 (4%) were married above 24 years with mean age at marriage ± SD: 17.52± 5.649 (Minimum age: 4 years-Maximum age: 29 years). More than half (63.53%) of married respondents of had 1-2 children while eight respondents (2.27%) had more than 5 children. About three-fourth (80.5%) of the respondents were homemakers by occupation as shown in table 1.

**Table 1.** Socio-demographic characteristics of women of reproductive age group of Inarwa Municipality, 2014

Characteristics	Categories	n (%)
Age of the respondent ( in years) (n=375)	≤25	118 (31.4)
	26-45	246 (65.6)
	≥46	11 (2.9)
Mean ±SD:30.75±7.884 (Min-Max=17-49 years)		
Religion (n=375)	Hindu	356 (94.9)
	Muslim	2 (0.5)
	Kirat	5 (1.3)
	others	12 (3.2)

Education (n=375)	Illiterate	55 (14.7)
	Primary	35 (9.3)
	Secondary	183 (48.8)
	Higher Secondary	72 (19.2)
	Above Higher Secondary	30 (8)
Marital Status (n=375)	Married	350 (93.3)
	Unmarried	24 (6.4)
	Divorced/ Widow	1 (0.26)
Age in years at Marriage (n=349)	≤13	14(4.01)
	>13 <-16	30 (8.6)
	16-24	290 (83)
	>24	15 (4)
Mean ±SD= 17.52±5.649 (Min-Max=4-29 years)		
Number of children(n=349)	No children	31 (9.40)
	1-2 children	223 (63.53)
	3-4	87 (24.78)
	≥5	8 (2.27)
Occupation of respondents (n=375)	Homemaker	302 (80.5)
	Labour	3 (0.8)
	business	25 (6.7)
	Farmer	43 (11.5)
	others	2 (0.5)

**II) Abortion and Misconceptions**

Among the total participants, 345 (92%) of respondents had an idea about abortion and the most (82.6%) used source to gather information was found to be mass media as shown in table 2.. One fourth (25%) respondents had misconception regarding abortion as a taboo. Out of 93 (25%) respondents, 82 of them believed it to be a curse.

**Table 2.** Misconception regarding abortion among women of reproductive age of Inarwa Municipality, 2014

Characteristics	Categories	n(%)
Idea about abortion (n=375)	Yes	345 (92)
	No	30 (8)
Sources of information about abortion *	Friends/ neighbour	119 (31.7)
	Mass media	310 (82.6)
	Health Professionals	73 (19.46)
Presence of taboo regarding abortion (n=375)	Yes	93(25)
	No	282 (75)
Type of taboo regarding abortion (n=93)	Curse	82 (88)
	Karma	10 (11)
	Others	1 (1)

\*multiple responses

**III) Knowledge Regarding Abortion Law**

With regard to abortion, larger proportion (65%) had knowledge on abortion law. The most well-known condition among 242(65%) respondents were two under

which abortion is legal under some grounds in Nepal (81.40%) and abortion is illegal on basis of sex selection (76.03%). However, it was found that least knowledge (13.22%) was regarding abortion legalization upto 18 weeks on rape/incest. Larger proportion (87%) among 242 respondents reported of self-decision regarding right to abortion, while 6.6% reported as right of in-laws (Table 3).

**Table 3.** Knowledge regarding abortion law among women of reproductive age of Inarwa Municipality, 2014

Characteristics	Categories	n (%)
Knowledge regarding abortion law (n=375)	Yes	242 (65)
	No	133 (35)
Specific knowledge regarding abortion law* (n=242)		
Abortion is legal on some grounds in Nepal		197 (81.40)
Abortion is legal upto 12 weeks upon request		109 (45.04)
Abortion is legal if pregnancy poses danger to mothers health		134 (55.37)
Abortion is not legal on the basis of sex selection		184 (76.03)
Abortion is not legal without the consent of women		114 (47.10)
Abortion is legal incase of fetal abnormality		146 (60.33)
Abortion is legal upto 18 weeks on rape/incest		32 (13.22)
Opinion regarding right to make decision on abortion * (n=242)	Self	210 (87)
	husband	180 (86.77)
	In-laws	16 (6.6)
	Others	5 (2.47)

\*multiple responses

IV) Utilization of Abortion Related Health Services

Out of total respondents, 52 (14%) had history of abortion and among those respondents, more than half (60%) had gone to hospitals for abortion. While 24 (45%) had surgical abortion, 19 (36%) had spontaneous abortion with majority (50%) belonging to 12-28 weeks of period of gestation at time of abortion. Reason for abortion was marked as maternal/fetal complications by 28(54%) respondents and one participant gave the reason as gender preference. Nearly half (42.3%) of respondents who underwent abortion had 2 children. These finding have been shown in table 4.

**Table.4** Utilization of abortion related health services among women of reproductive age of Inarwa Municipality, 2014

Characteristics	Categories	N (%)
History of Abortion (n=375)	Yes	52 (14)
	No	323 (86)
Place of abortion (n=52)	hospital	31 (60)
	Private clinic	12 (23)
	others	9 (17)
Type of abortion (n=52)	medical	10 (19)
	surgical	24 (45)
	spontaneous	19 (36)
Number of children of termination seekers(n=52)	No	1 (1.92)
	1	10 (19.2)
	2	22 (42.3)
Period of gestation at time of abortion (n=52)	≥3	18 (34.61)
	<12 weeks	23 (44)
	12-28 weeks	26 (50)
	>28 weeks	3 (6)
Reason for abortion (n=52)	Maternal/Fetal complication	28 (54)
	Unplanned Pregnancy	15 (29)
	Gender Preferences	1 (2)
	Financial burden	1 (2)
	Others (Limit family number etc.)	7 (13)

Table 5 shows that education, age at marriage and age at birth of first child were found to be significantly related with the awareness about abortion.

**Table 5.** Association between having awareness of legal abortion in Nepal and socio-demographic characteristics

Characteristics	Categories	Abortion law awareness		p- value
		Yes (%)	Non (%)	
Age	≤25 years	74(62.7)	44(37.3)	0.617
	≥26 years	168(65.4)	89(34.6)	
Religion	Hindu	230 (64.6)	126(35.4)	0.898
	Others	12(63.2)	7(36.8)	
Education	Illiterate	15(27.3)	40(72.7)	<0.001**
	Literate	227(70.9)	93(29.1)	
Occupation of female	Home-maker	193 (63.9)	109(36.1)	0.417
	others	49(69.0)	22(31.0)	
Age at 1 <sup>st</sup> marriage	≤15 years	18(40.9)	26(59.1)	0.001*
	≥16 years	202(66.2)	103(33.8)	
Age at birth of 1 <sup>st</sup> child	≤16 years	5(26.3)	14(73.7)	<0.001**
	>16 years	198(66.2)	101(33.8)	

\*highly significant (p value<0.01); \*\* very highly significant (p<0.001)

## DISCUSSION

This study was carried out to describe abortion related awareness of law and hospital services utilization among women of reproductive age group (16 to 49 years) of Inarwa Municipality.

This study was conducted in similar setting as Makwanpur district<sup>6</sup> where the majority (36.4%) of female participants were of similar age of 26 to 45 years group as in our study (65.6%). Likewise, a hospital based study in Kathmandu found that the participants belonged to 30-34 years irrespective of their complains and symptoms.<sup>17</sup> In a study conducted at Kapan VDC, the education among the respondents was found to be Post higher secondary (47%) which is comparable to our study where the highest level of education was found to be secondary (48.8%).<sup>18</sup> It was surprising to see that 4.01% of respondents in this study were married by 13 years of age and 8.6% were married before 16 years which can also be seen as a consequence of abortion in studies in India<sup>19</sup> where 2.6% were married before 13 years of age and 22.6% were married before age 16. Another study in Northern Ethiopia showed that by age 15 almost 50% girls were married.<sup>20</sup> The legal age for marriage is taken to be 18 years in Nepal for women.

Misconception regarding abortion was seen among 93 (25%) participants as taboo which is in resonance with studies conducted among marginalized underserved community of 6 districts under FPAN of Nepal<sup>21</sup> where 23 (19.65%) respondents thought abortion was sin. Mass media (82.6%) comprised most used source of information in our study while least source of information was friends/ neighbours (31.7%) which has also been reflected by a study at Nepal Medical College<sup>17</sup> with friends (6%) and media (92%). As abortion is a stigmatized issue in our country though legalization, this might be the reason for neighbours/friends not to be much source of information. However, a contradictory finding has been reported in study in Rupandehi District.<sup>22</sup>

More than half (65%) of respondents had a knowledge about abortion law with 81.40% knowing that abortion was legal in our country. In addition, a study done at Kathmandu Marie Stopes clinic<sup>23</sup> showed that among the abortion seekers 59% knew that abortion was legal and two most conditions for abortion was mentioned as health status of mother (43.4%) and in case of rape/incest (32.2%). Likewise, a study by Hald SC et al.<sup>6</sup> showed that knowledge regarding sex selection being illegal was most known condition (89.1%), a finding that mirrors our study with response of 76.03%.

Nepal like other developing country is a patriarchal country where husbands hold decision making for the family. Such is the case seen even when it comes to reproductive health and right of women even in neighboring country India.<sup>24</sup> Our study shows that decision for abortion by self and husband is comparatively similar (87% vs 86.77%).

History of abortion was given by 3.2% respondents in a study by Anderson et al<sup>22</sup> while our study had a 14% respondents with history of abortion. The increase in our respondents may be due to the fact of inclusion of women of reproductive age group 16-49 years, as in earlier study the sample included women of 16-24 years only. As one of the most noted reason for pregnancy was maternal and fetal complication (54%), this might be the reason for most (50%) termination of pregnancy between 12-28 weeks of gestation as seen in our study. Unplanned pregnancy that accounted for 29% of cause was second reason for abortion as compared with other study<sup>23</sup> where it was first cause for termination accounting for 53.3% responses. Other reasons for abortion was found to be limiting of family size (13%) where the respondents were found to larger proportion (42.3%) of children at the time of survey. Similar study had been conducted in 2001 in urban Nepal<sup>25</sup> where the most given reason (34.4%) for abortion was too many children with most (43%) of women having 2 children. Such finding is also supported by study in Srilanka.<sup>26</sup> Among the total respondents who had undergone abortion (52), the reason for gender preference was only seen among 1 participant. There might have been social desirability bias and the respondents might have feared punishment for crime if reported to police as it is illegal. However, preferences for son still exist among the society as son is considered culturally valuable for performing various death rituals and continuing generation.

It was found that there was an association between literacy and awareness on abortion law (p value<0.001) which was also seen in similar other studies.<sup>23, 27</sup> Report from national data also highlights that nearly two thirds of women with higher Secondary education and half with secondary education believed that abortion was legal<sup>28</sup>. The reason for better knowledge on abortion law might be the fact of exposure to information on abortion as inclusion of reproductive health in school curriculum. Age at 1<sup>st</sup> marriage in Nepal was reported by 18 years (55%) and by 20 years (70%)<sup>28</sup> but in this study age at marriage was found to be among aged ≤13 years (4.01%). A study reported that with increase in education level there was a gradual decline in early age at marriage.<sup>29</sup> This might be

the reason the women who marry above 16 years in our study have better knowledge than the women who resort to marriage at early age of less than 15 years as education engulfs studies related to sexual and reproductive health. This study findings of better abortion law awareness were found more among women who were married and had their first children when they were 16 years and above than those who had early marriages and were pregnant before 16 years of age.

The reasons for this could be the fact that after marriage, women are bound by social responsibilities and has limited independence forcing her to drop out of school as well.

Lack of this knowledge regarding abortion law has made the vulnerable teenagers and youths more prone to unsafe abortion and lesser utilization of healthcare services.<sup>30</sup>

## CONCLUSION

This study highlights the need to focus education on abortion law among illiterate women and females of adolescent age group. The overall awareness level was satisfactory and use of media was effective for dissemination of information. Of total, 17% respondents had got abortion services from others places than the hospital and clinics. So, more campaigning and health education program should be conducted in the community where early marriages are prevalent.

**Conflict of interest:** None

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