Galore International Journal of Applied Sciences and Humanities
[Indexed, Peer-Reviewed Journal]
Vol. 10; Issue: 2; April-June 2026
Website: www.gijash.com
Research Paper *P-ISSN: 2456-8430*

Factors Affecting Induced Abortion Women Attending Clinic at Kathmandu

Shashi Panday[1], Jarina Shrestha[2], Shraddha Adhikari[3]

[1]M. Sc. Nursing in Obstetrics and Gynaecology, Assistant Professor, Norvic College of Health Science and Technology (NCHST) Kathmandu, Nepal.
[2]M. Sc. Nursing in Paediatric Nursing, Assistant Professor, Om Health Campus, Kathmandu, Nepal.
[3]Bachelor of Nursing Science (BNS), Marie Stopes, Kathmandu, Nepal.

Corresponding Author: Shashi Panday

DOI: https://doi.org/10.52403/gijash.20260208

ABSTRACT

Introduction: Induced abortion is described as surgical or medical termination of a live fetus before the time of fetus viability. According to the World Health Organization (WHO), induced abortion can be safe or unsafe abortion causes a significant proportion of maternal deaths and morbidity each year, 22 million unsafe abortions are estimated to take place globally and it is a leading cause of morbidity and mortality in many sub-Saharan African countries
Method: A descriptive cross-sectional design was adopted for the study. Non probability convenience sampling technique was used to select the 140 women. Descriptive statistics like mean, median, frequency and standard deviation for calculating frequency and percentage and inferential statistics such as chi square test or fisher exact was used to determine the association between knowledge of induced abortion and selected socio-demographic variables. The logistic model was assessed significant predictors of induced abortion using Hosmer- Lemeshow test.
Result: The majority (88.6%) literate education status participants and who have one child was number of participants more than one fourth (34.3 %). All most (92.1%) of participants had high knowledge on induce abortion while only (7.9 %) of participants had low knowledge on induced abortion. There is statistically significant association between the levels of knowledge on induced abortion with residence, number of children, education status (0.016), (0.005), (0.001) respectively however, no association found with other socio-demographic variables at p-value <0.05 level. This logistic regression analysis shows that education status is the only significant predictor of induced abortion. The model explains 28.9% of variance (Nagelkerke R^2), with a good fit (Hosmer-Lemeshow p=0.911).
Conclusion: It can be concluded from the study that major reasons behind undergoing abortion were to unintended pregnancy and no time for child rearing as well as low economic status factor affecting induced abortion.

Keywords: Factor affecting, Induced abortion, women.

INTRODUCTION

Induced abortion is described as surgical or medical termination of a live fetus before the time of fetus viability. Globally, from 2010 to 2014 25% of pregnancies ended in abortion and the global annual rates of abortion were estimated at 35 abortions per 1000 women of childbearing age [1].

Each year an estimated 36- 53 million abortions are performed worldwide and from this, around 20 million abortions are considered unsafe. World Health Organization estimates showed that the abortion complications range from 8% in Western Asia to 26% in South America, with a worldwide average of 13%. Complications of unsafe abortion cause between 50,000 and 100,000 women's deaths annually [2].

Study conducted in Denmark and Uganda, the strongest determinant of women's decision to have an abortion is being single, followed by being under the age of 19, having two or more children, being a student, or being unemployed. In Ethiopia, similar findings were revealed that unwanted pregnancy, single marital status, young age, low income, occupational status, the mother's level of education, is the major contributing factors to induced abortion [3].

Globally, an estimated 73 million induced abortions occur each year, roughly 29%of all pregnancies. Among the unintended pregnancies, 61%end up in an abortion, and most of these abortions are clandestine and unsafe [4].

Globally a large number of women die due to birth and pregnancy-related complications and of the total, nearly 99.0% of maternal death occurs in low- and middle-income countries [5].

Least safe abortions are classified as abortions provided by untrained individuals using dangerous methods such as ingestion of caustic substances, insertion of foreign objects, and the use of traditional herbal mixtures or tonics [6].

Thus, findings may not represent all women seeking abortions and may instead reflect women who have access to or require facility-based care. Other studies have examined why women obtain abortions during a particular trimester of pregnancy [7].

The World Health Organization (WHO) estimates that worldwide 210 million women become pregnant approximately 130 million, deliver live infants. The remaining one third of pregnancies ends in miscarriage, stillbirth, or induced abortion. This represents about 13% of all pregnancy-related deaths. Almost all unsafe abortions take place in developing countries, and this is where 98% of abortion-related deaths occur [8]. Various researchers conducted in different places revealed that there are various factors associated with abortion. One of the recent study from rural China identified that age of women, education, the number of total birth, the number of pregnancy, income and contraceptive methods were significantly associated with having an induced abortion [9].

MATERIALS & METHODS

The study area was Maries Stopes clinics of Gongabu, Kathmandu which was selected conveniently. The Marie Stopes clinic of Gongabu provides abortion services to 150 to 200 women per month. A total of 140 women who had undergone abortion were selected convenience for the study. Women, who have undergone abortion, were willing to participate. Participants were face to face interviewed only after obtaining informed verbal consent from them by using the semi-structured questionnaire. The participants were assured about the privacy and confidential of the information generated from them. For that purpose, they were fully convinced about the used for information solely for this study only. But prior to startup of data collection process ethical clearance was obtained from Research Review committee of Nepal health research council (NHRC) and approval was also obtained from Sunaulo Pariwar, Nepal.

Statistical Analysis

The collected data was checked reviewed and organized for its accuracy, consistency and completeness. The coding of the independent as well as dependent variables was done and data was entered into SPSS version 20. The analysis was done using descriptive statistics such as percentage, frequency to classify the socio-demographic characteristics and level of knowledge on

induced abortion. Chi-square test, fisher exact test and logistic regression was carried out to assess the association of level of knowledge on induced abortion with selected variable at 95% confidence level. For all statistically chi-square a p-value less than 0.05 was taken to indicate a significant difference. Model fitness was assessed using the Hosmer-Lemeshow goodness-of-fit test, and multicollinearity was checked using the variance inflation factor (VIF). The overall predictive power of the model was also evaluated using the Nagelkerke R^2 statistics. The analyzed data was presented in tables and narrative forms.

RESULT

Table 1. Demographic Characteristics of the Participants (n = 140).

Variable	Frequency (n)	Percentage (%)
Age (years)		
15–20	20	14.3
21–25	45	32.1
26–30	47	33.6
>31	28	20.0
Residence		
Urban	100	71.4
Rural	40	28.6
Religion		
Hinduism	83	59.3
Islam	14	10.0
Buddhism	40	28.6
Christianity	3	2.1
Marital Status		
Married	114	81.4
Unmarried	25	17.9
Divorced	1	0.7
Number of Children		
No child	48	34.3
One child	48	34.3
Two children	30	21.4
Three children	8	5.7
≥4 children	6	4.3
Age of Last Child (n=92)		
1 year	36	25.7
2 years	20	14.3
3 years	7	5.0
≥4 years	29	20.7

Table 1shows that demographic variables of 140 women attending for induced abortion. Who attended for abortion age group 26-30 years (33.6%). The majority of the (71.4 %) participants were urban residence. The more than half 59.3% of participants were Hinduism. The majority (81.4%) of participants were married. The children and family related information in socio - demographic variables of the participants. Who have no any child and who have one child was equal number of participants more than one fourth (34.3 %). One fourth (25.7%) the participants was attended 1year age of last child.

Table 2. Socioeconomic Characteristics of the Participants (n = 140).

Variable	Frequency (n)	Percentage (%)
Type of Family		
Nuclear	98	70.0
Joint	30	21.4

Extended	4	2.9
Single	8	5.7
Educational Status		
Literate	124	88.6
Illiterate	16	11.4
Level of Education		
No formal education	16	11.4
Can read and write	11	7.9
Primary education	29	20.7
Secondary education	33	23.6
Higher secondary education	39	27.9
University level education	12	8.6
Occupation		
Homemaker	57	40.7
Service	28	20.0
Business	11	7.9
Student	30	21.4
Others	14	10.0
Gravida		
Primi	58	41.4
Multi	82	58.6
Economic Status (Monthly Income)		
< ₹10,000	53	37.9
₹10,001–20,000	54	38.6
₹20,001–30,000	18	12.9
₹30,001–40,000	12	8.6
> ₹40,000	3	2.1
Sources of Information		
Health personnel	91	36.8
Friends	58	23.5
Television	7	2.8
Radio	1	0.4
Newspaper	7	2.8
Internet	83	33.6

The table shows that, Majority (70%) of participants lives in nuclear family. The majority (88.6%) literate education status participants but less than one third (27.6 %) of participants studied higher secondary level of education. More than one third (40.7%) of participants worked homemaker who have occupation. The more than half of (58.6%) participants were attended (more than one pregnancy) multigravida. More than one third (38.6%) of participants earned 10,001 to 20,000 per month economically. More than one third (36.8%) of participants said about abortion source of information from health personnel.

Table 3. Participants' Level of Knowledge on Induced Abortion (n = 140).

Level of Knowledge	Frequency (n)	Percentage (%)
Low	11	7.9
High	129	92.1
Total	**140**	**100.0**

Table 3 shows that participant's knowledge on induced abortion. Almost (92.1%) of participants had high knowledge on induced abortion while only (7.9 %) of participants had low knowledge on induced abortion.

Table 4 Association between participants 'Level of knowledge on induced abortion and Socio-demographic Variables. n=140

		Induced Abortion			
		No	**Yes**	**Chi square value**	**p-value**
Knowledge level	low	0	11 (100)		0.123[F]
	high	31 (24.2)	97 (75.8)		
Age	up to 25	17 (26.2)	48 (73.8)	1.045	0.307
	26 and above	14 (18.9)	60 (81.1)		
Residence	urban	17 (17)	83 (83)	5.782	0.016**
	rural	14 (35.9)	25 (64.1)		
Religion	Hinduism	20 (24.1)	63 (75.9)	0.383	0.536
	others	11 (19.6)	45 (80.4)		
Marital status	married	24 (21.2)	90(78.8)	0.829	0.661
	unmarried	7 (28)	18(72)		
number of Children	upto 1 child	9 (12.7)	62 (87.3)	7.947	0.005**
	more than one child	15 (34.9)	28(65.1)		
age of last child	upto 2 years	9 (16.1)	47 (83.9)	4.024	0.045**
	more than 2 years	12(34.3)	23(65.7)		
Type of family	Nuclear/Single	21 (20)	84 (80)	1.313	0.252
	Joint/Extended	10 (29.4)	24 (70.6)		
Education status	literate	22 (17.7)	102 (82.3)	13.790	<0.001**
	illiterate	9 (60)	6 (40)		

****Significant at p-value <0.05; F=Fisher Exact**

Table 4 shows that, there is statistically significant association between the levels of knowledge on induced abortion with residence, number of children, education status (0.016), (0.005), (0.001) respectively however, no association found with other socio-demographic variables at p-value <0.05 level.

Table 5. Ranking of Factors Affecting Induced Abortion Among Participants (n = 140).

Factors Affecting Induced Abortion	**Frequency (n)**	**Percentage (%)**
Unintended pregnancy	108	77.1
No time for child rearing	76	54.3
Single mother	64	45.7
Low economic status	58	41.4
Insufficient financial condition	48	34.3
Having enough children	44	31.4
Health condition	38	27.1
Abroad migration/work	37	26.4
Student status	36	25.7
Student	35	25.0
Unmarried status	22	15.7
Birth spacing	13	9.3
Young mother	9	6.4
Elder mother	3	2.1

Table 5 shows that majority of the (77.14%) participants affecting factor for abortion main factor as an unintended pregnancy while second factor more than half (54.29 %) participants answered the no time for child rearing. In this table illustrates that, low economic status, single mothers near half (41.43%), (45.71%) were another reason for abortion respectively.

Table 6. Factors affecting with induced Abortion (n = 140).

Variable	B	S.E.	Wald	df	Sig.	AOR	95% C.I. for Exp(B) Lower	95% C.I. for Exp(B) Upper
Residence	-0.389	0.684	0.323	1	0.570	0.678	0.178	2.589
Child number	-0.486	0.632	0.591	1	0.442	0.615	0.178	2.124
Age of last child	-1.086	0.588	3.414	1	0.065	0.338	0.107	1.068
Education status	-2.175	0.922	5.569	1	0.018*	0.114	0.019	0.692
Constant	6.602	1.563	17.835	1	0.000	736.638		

Nagelkerke R^2 = 0.289; Hosmer and Lemeshow Test $\chi^2(6) = 2.089$, p = 0.911
***Significant at p < 0.05**

Table 6 shows that, this logistic regression analysis shows that education status is the only significant predictor of induced abortion. The model explains 28.9% of variance (Nagelkerke R^2), with a good fit (Hosmer-Lemeshow p=0.911). The major factor affecting induced abortion is education status (AOR: 0.114(0.019-0.692)) with p-value 0.018 indicating illiterate are less likely to have abortion with compared to literate.

DISCUSSION

The objective to assess the factor affecting induced abortion among women attending at clinic. A total of 140 women who attend in clinic for abortion were included in the study.

The socio- demographic findings of the study reveal that out of 140 participants, one third (33.6%) of the participants belonged to age group (26-30) years and the majority (71.4%) participants were urban residence. The more than half (59.3%) of participants were Hinduism. In contrast study, out of 125 female youths 75.2% were age between 20-25 years the mean age was found out to be 20(SD=3). The majority of respondents 91.2% belonged to Hindu religion and 96% were married. Most of the female youths 47.2%h had secondary education; however, 4.6% respondents were housewives [10].

Who have no any child and who have one child was equal number of participants more than one fourth (34.3 %). One fourth (25.7%) the participants was attended 1year age of last child.

The majority (81.4%) of participants were married. The majority (88.6%) literate education status participants but less than one third (27.6 %) of participants studied higher secondary level of education. More than one third (40.7%) of participants worked homemaker who have occupation. In similar study around 88 % of the respondents were literate. Majorities (91.8%) were married [11].

The more than (58.6%) of participants were attended (more than one pregnancy) multigravida women. More than one third (38.6%) of participants earned 10,001 to 20,000 per month economically. More than one third (36.8%) of participants said about abortion source of information from health personnel. In contrast study, about half of the cases and the controls had Ninety-three (63.3%) of the cases and about one-fourth (24.8%) of the controls earned less than 100 dollars (USD) per month [1].

All most (92.1%) of participants had high knowledge on induced abortion while only (7.9 %) of participants had low knowledge on induced abortion. In contrast study, Women with no knowledge of contraceptive methods were 4.6 times likely to seek induced abortion (OR 4.64, CI 1.39–15.4). Compared with women who had not had induced abortion, women with a high number of pregnancies and no contraceptive knowledge were more likely to have induced abortion [12]

There is statistically significant association between the levels of knowledge on induced abortion with residence, number of children, education status (0.016), (0.005), (0.001)

respectively however, no association found with other socio-demographic variables at p-value <0.05 level. In contrast study, the financial problems of the respondents were found to be the prime determinants of unwanted pregnancy and induced abortion, proportion being 52.8% and 552% respectively, whereas to keep gap between the births (12.8%) was also associated. The association between use of contraceptive method and unwanted pregnancy was not found to be statistically significant [10]

The majority (77.14%) of the participants affecting factor for abortion main factor or higher rank as an unintended pregnancy while second factor more than half (54.29 %) participants answer the no time for child rearing. In this table illustrates that, low economic status, single mothers near half (41.43%), (45.71%) were another reason for abortion respectively.

This logistic regression analysis shows that education status is the only significant predictor of induced abortion. The model explains 28.9% of variance (Nagelkerke R^2), with a good fit (Hosmer-Lemeshow p=0.911). In contrast study, the predictors of abortion practices based on sociodemographic factors were; age (AOR=6.170, p=0.002), marital status (married; AOR=0.438, p=0.025; divorced/widowed/separated; AOR=0.063, p=0.001) and number of children (AOR=0.379, p=0.007) [13].

CONCLUSION

In this study, major reasons behind undergoing abortion were to unintended pregnancy and no time for child rearing as well as low economic status factor affecting induced abortion.

Therefore, this study suggests family planning methods and sterilization services should be made accessible to women so that they could prevent unwanted pregnancy. Also, there is need of strengthening counseling services for contraceptive use to women coming for abortion repeatedly so that they will not use abortion as an alternative means to family planning services.

Declaration by Authors

Ethical Approval: Approved

Acknowledgement: None

Source of Funding: None

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

REFERENCES

1. Megersa BS, Ojengbede O, Deckert A, Fawole O. Factors associated with induced abortion among women of reproductive age attending selected health facilities in Addis Ababa, Ethiopia: A case control study. BMC Womens Health. 2020 Sep 3; 20:188.
2. Gutema R, Dina G. Knowledge, attitude and factors associated with induced abortion among female students ‘of Private Colleges in Ambo town, Oromia regional state, Ethiopia: a cross-sectional study. BMC Womens Health. 2022 Aug 18;22.
3. Abebe M, Mersha A, Megersa N, Gebremeskel F, Kefelew E, Molla W. Determinants of induced abortion among women received maternal health care services in public hospitals of Arba Minch and Wolayita Sodo town, southern Ethiopia: unmatched case-control study. BMC Womens Health. 2022 Apr 9;22.
4. Bearak J, Popinchalk A, Ganatra B, Moller A-B, Tuncalp O, Beavin C, et al. Unintended pregnancy and abortion by income, region and the legal status of abortion: estimates from a comprehensive model for 1990-2019. Lancet Glob Health. (2020)8(9): e1152-61.doi 10.1016/S2214-109X (20)30315-6.
5. Yogi A, K.C. P, Neupane S. Prevalence and factors associated with abortion and unsafe abortion in Nepal: a nationwide cross-sectional study. BMC Pregnancy Childbirth. 2018 Sep 17;18.
6. Rogers C, Sapkota S, Paudel R, Dantas J. Medical abortion in Nepal: A qualitative study on women’s experiences at safe abortion services and pharmacies. Reprod Health. 2019 Jul 15;16.
7. Chae S, Desai S, Crowell M, Sedgh G. Reasons Women Have Induced Abortions: A Synthesis of Findings from 14 Countries. Contraception. 2017 Jul 1;96.
8. Alemayehu B, Addissie A, Ayele W, Tiroro

S, Handiso D. Magnitude and associated factors of repeat induced abortion among reproductive age group women who seeks abortion Care Services at Marie Stopes International Ethiopia Clinics in Addis Ababa, Ethiopia. Reprod Health. 2019 Jun 4;16.
9. Gao G, Zhang R, Zhang X, Jia X, Li D, Li X, et al. Prevalence and associated factors of induced abortion among rural married women: A cross-sectional survey in Anhui, China. J Obstet Gynaecol Res. 2014 Nov 1;41.
10. Sen M, Neupane P.R., Shrestha M.T., determinants of unintended pregnancy and Induced Abortion among female youths in western Regional Hospital, Nepal. Nepal Med J 2019:01 (02); 32:6.
11. Thapa N, Maharjan S. Factors associated with induced abortion among women attending Marie stopes clinics in Kathmandu Valley. journal of universal college of Medical Science 2015 Dec 31(3).
12. Klutsey EE, Ankomah A. Factor associated with induced abortion at selected hospitals Ghana. International Journal Womens Health. 2014; 6:809-816.
13. Okenyoru DS, Matoke V, Wekesa C,Murugi L, Odhiambo F, Kemboi SJ. Socio-demographic factors influencing abortion practices among women attending Mbagathi Hospital, Nairobi County, Kenya. Int. J.Community Med Public Health. 2024;11 (10);3787-3794.

How to cite this article: Shashi Panday, Jarina Shrestha, Shraddha Adhikari. Factors affecting induced abortion women attending clinic at Kathmandu. *Galore International Journal of Applied Sciences & Humanities*. 2026; 10(2): 53-60. *DOI: 10.52403/gijash.20260208*

******