

# A Study of Utilization of Abortion Service in the Tertiary Hospital of Western Region of Nepal

Rajendra Kumar Chaudhary<sup>1</sup>, Nirmal Kumar Jha<sup>2</sup>, Bijay Manandhar<sup>3</sup>, Krishna Chaudhary<sup>4</sup>

<sup>1</sup> Department of Obstetrics and Gynecology, Pokhara Academy of Health Sciences, Kaski, Nepal

<sup>2</sup> ASEAN Institute for Health Development, Bangkok, Thailand

<sup>3</sup> Marie Stopes Nepal, Kathmandu, Nepal

<sup>4</sup> Universal College of Medical sciences, Ranigaon, Bhairahawa, Rupandehi, Nepal

## Corresponding Author

**Dr. Rajendra Kumar Chaudhary**

Email: drchaudhary2990@yahoo.com

Phone: +977-9856033415

## Access this article online

Quick Response Code



View PDF

Website:  
[www.jkahs.org.np](http://www.jkahs.org.np)

DOI:  
<http://dx.doi.org/10.3126/jkahs.v2i1.24411>

## ABSTRACT

**Introduction:** Unsafe abortion is one of the major public health problems in developing countries including Nepal. After integration of comprehensive abortion care in safe motherhood service, there has been improvement in maternal and women health in Nepal. Furthermore, improvements are required in raising awareness and accessibility to safe abortion services to all the women in throughout the country.

**Methods:** This is a retrospective study carried out in Western Regional Hospital after reviewing the data from the hospital records. Demographic details, parity, types of abortion for spontaneous abortion, and methods of induced abortion were noted and analyzed.

**Results:** Maximum number of women belonged to 20-24 years of age and is Brahmin/Chhetri. Multi-gravida are more than primi and they underwent induced abortion by medical termination of pregnancy. Similarly, incomplete abortion was in highest number among the spontaneous abortion.

**Conclusion:** Easy availability of the safe abortion services and awareness among the people regarding it would certainly improve the maternal health and quality of life.

**Keywords:** Maternal Health, Comprehensive abortion care, Safe abortion.

## INTRODUCTION

Unsafe abortion is still an important public health problem majority of them occurring in developing countries<sup>1</sup>. In 2012; about 7 million women were treated for the unsafe termination of pregnancy and

most of them belonging to developing countries<sup>2</sup>. Despite the legalization of abortion in Nepal, unsafe abortion is still common and has high toll on women.<sup>3</sup> Lack of accessibility to safe abortion services,

education, religion and social stigmas are the factor related with increased number of unsafe abortion<sup>4</sup>. There have been positive hopes after integration of comprehensive abortion care in safe motherhood services and expansion of facilities throughout the country<sup>5</sup>.

Available of unmet needs of contraception, easy access to the health facilities and awareness among the safe abortion will help to reduce the rate of increasing unsafe abortion<sup>6</sup>. This study is carried out analyzing the data of a tertiary referral hospital with the objective to find the pattern of safe abortion care service utilization in western region of Nepal.

## METHODS

This is a retrospective descriptive analysis. The study was carried out retrieving abortion service data from Baisakh 2074 (April-May 2017) to Chaitra 2074 (March –April 2018) available in the record section of Western Regional Hospital, Ramghat, Kaski. The data was collected from patients' records and maternal mortality statistics.

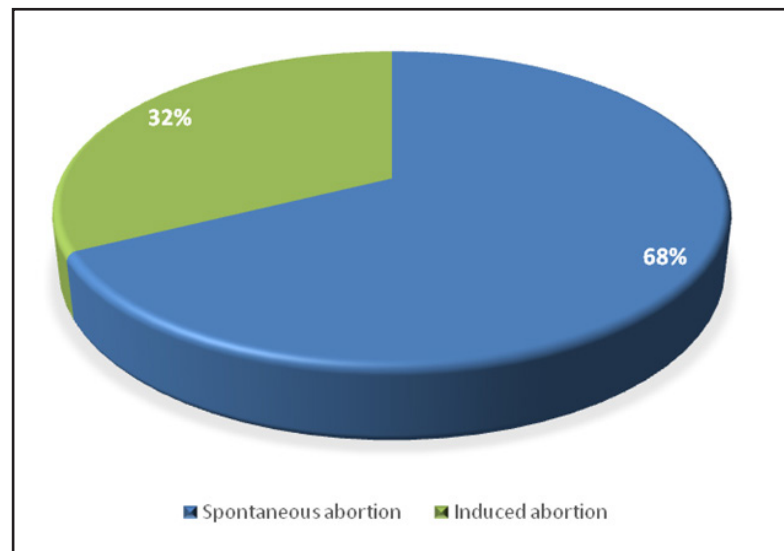
Data of patients with spontaneous abortion, who came for manual vacuum aspiration (MVA) and those who underwent induced abortion were included in the study. Demographic details, parity, types of abortion for spontaneous abortion, and methods of induced abortion were noted.

The data was entered in Microsoft Excel, analyzed, and proportion was calculated.

## RESULTS

Total 614 patients took the safe abortion services during the study period. Among

which 415 (67.6 %) were spontaneous abortion and rest 199 (32.4%) were induced abortions (Figure 1).



**Figure 1:** Types of abortion

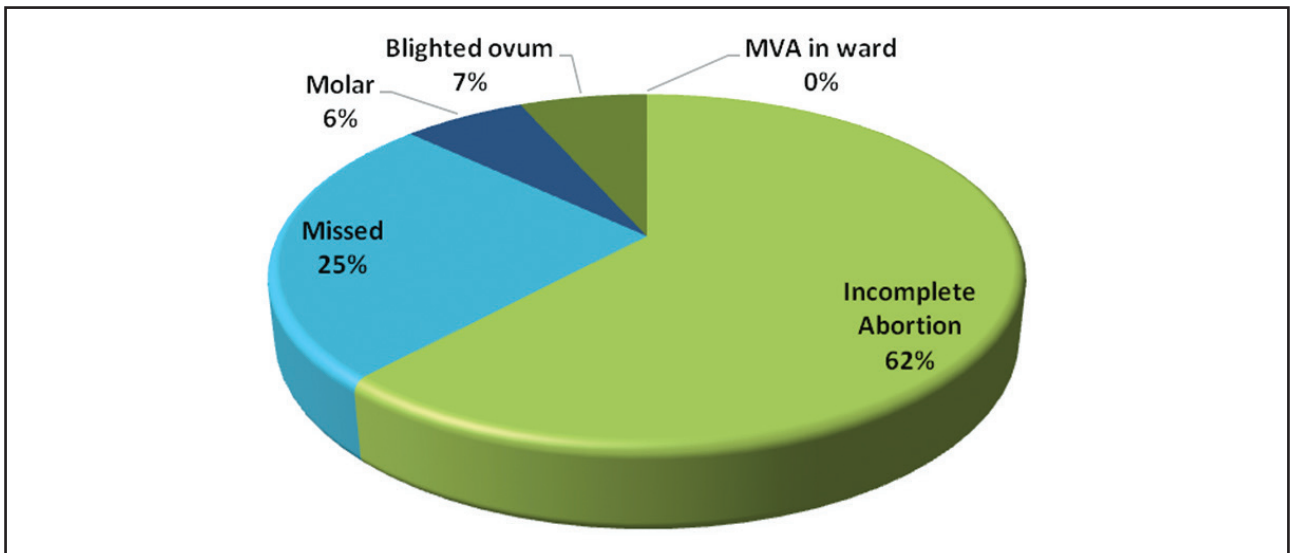
The mean age of the patients was 22.61 and maximum number of cases abortion 185 (30.13%) belongs to the 20-24 years of age group (Table 1).

**Table 1:** Age wise distribution of the patients (N=614)

Age	Number of patients	%
15-19	69	11.24%
20-24	185	30.13%
25-29	166	27.04%
30-34	129	21.00%
35-39	49	7.98%
40-44	16	2.61%
<b>Total</b>	<b>614</b>	

The 378 cases of spontaneous abortion (incomplete abortion, missed abortion, blighted ovum and molar pregnancy) underwent manual vacuum aspiration (MVA) excluding 37 (8.92%) cases (out of 53 cases of threatened abortion) who were discharged receiving conservative management, out of 415 patients seeking safe abortion services (Figure 2).

The maximum number of patient were diagnosed as incomplete abortion 224 (53.98%) followed by missed abortion 91 (21.93%) and blighted miscarriage 24 (5.78%) along with 23 (5.54%) cases of molar pregnancy (Figure 2).

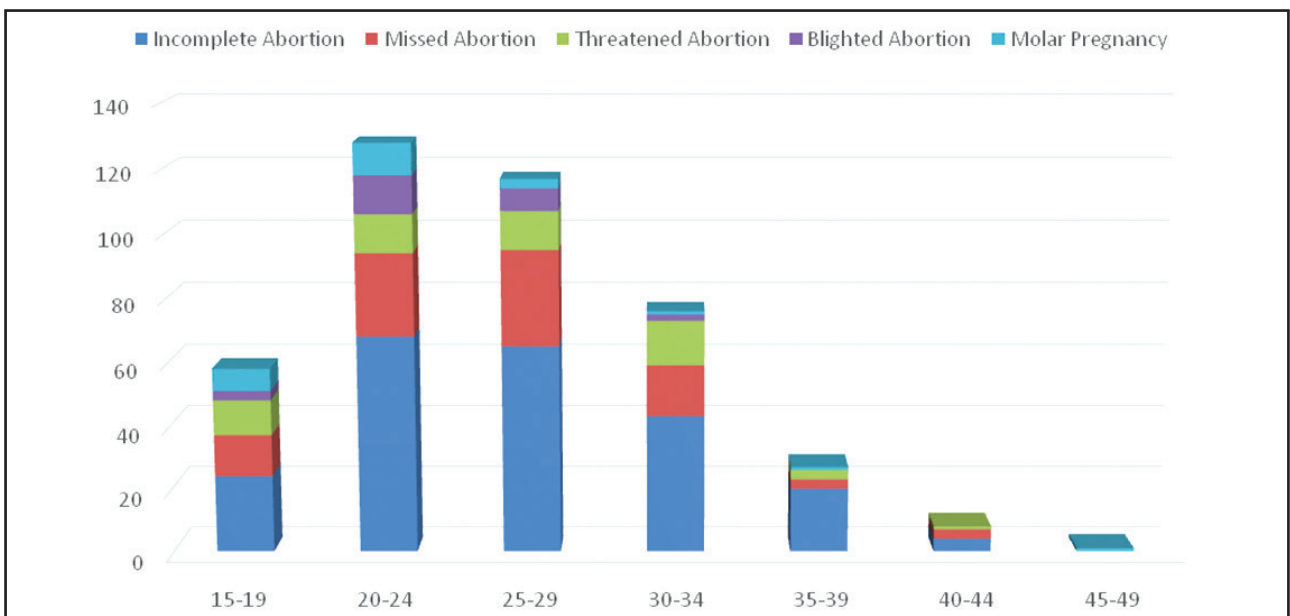


**Figure 2:** Types of spontaneous abortions (N=415)

Among the spontaneous abortion cases, maximum number of cases 128 (30.84%) belong to the 20-24 years of age group (Table 2 and Figure 3).

**Table 2:** Age wise distribution of the patients having spontaneous abortion (N=415)

Age group	Total	%
15-19	58	13.98
20-24	128	30.84
25-29	117	28.19
30-34	76	18.31
35-39	27	6.51
40-44	8	1.93
45-49	1	0.24
<b>Total</b>	<b>415</b>	



**Figure 3:** Types of spontaneous abortion by age group

The cases of spontaneous abortion reaching to service center is high in every month throughout the study period. There are 3 peaks, in Asar-Srawan (June-July), Ashoj (September-October) and Phalgun (February-March) months. However, those peaks are observed mainly due to increments of cases of incomplete abortion (Figure 4).

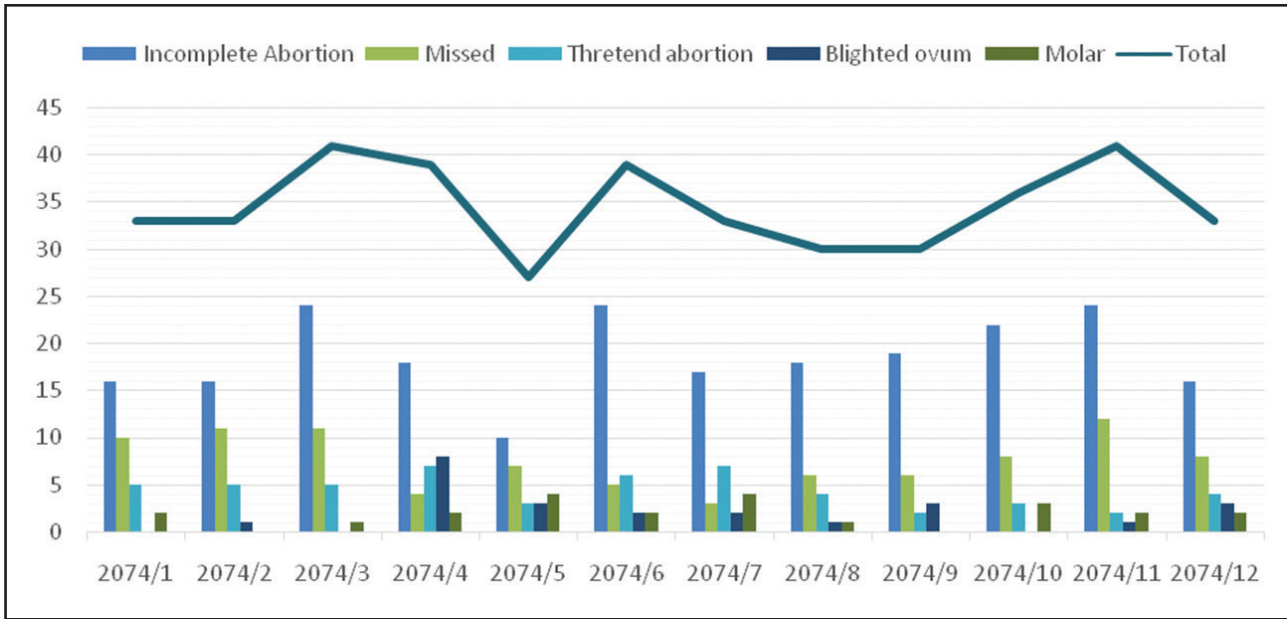


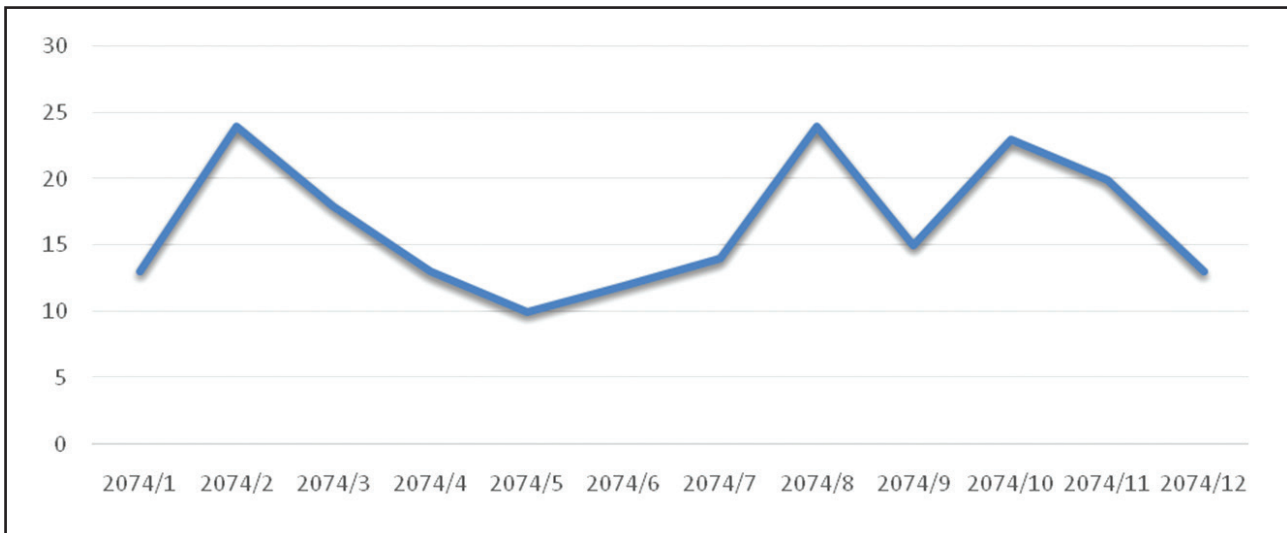
Figure 4: Types of spontaneous abortions by month (N=415)

At the same time, among those abortion cases, 199 cases are induced abortion. The maximum number of cases 159 (79.9%) belongs to from 15 to 34 years of age group (Table 3).

Table 3: Age wise distribution of the induced abortion cases (N=199)

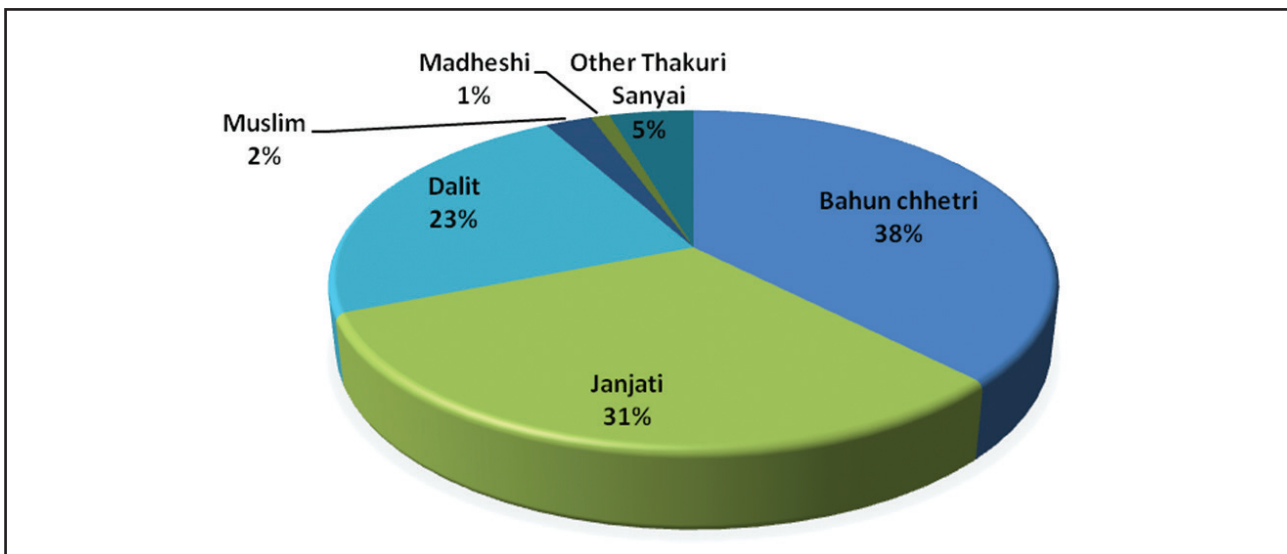
Age	Number of patients	%
15-19	11	5.53
20-24	57	28.64
25-29	49	24.62
30-34	53	26.63
35-39	22	11.06
40-44	7	3.52
45-49	0	
<b>Total</b>	<b>199</b>	

The service seeking seasonality of induced abortion cases is also observed who were reaching to center in every month of the study period. There are 3 peaks as well, in Jesh-Asar (May-June), Mansir-Poush (October-November) and Magh-Phalgun (January-February) months (Figure 5).



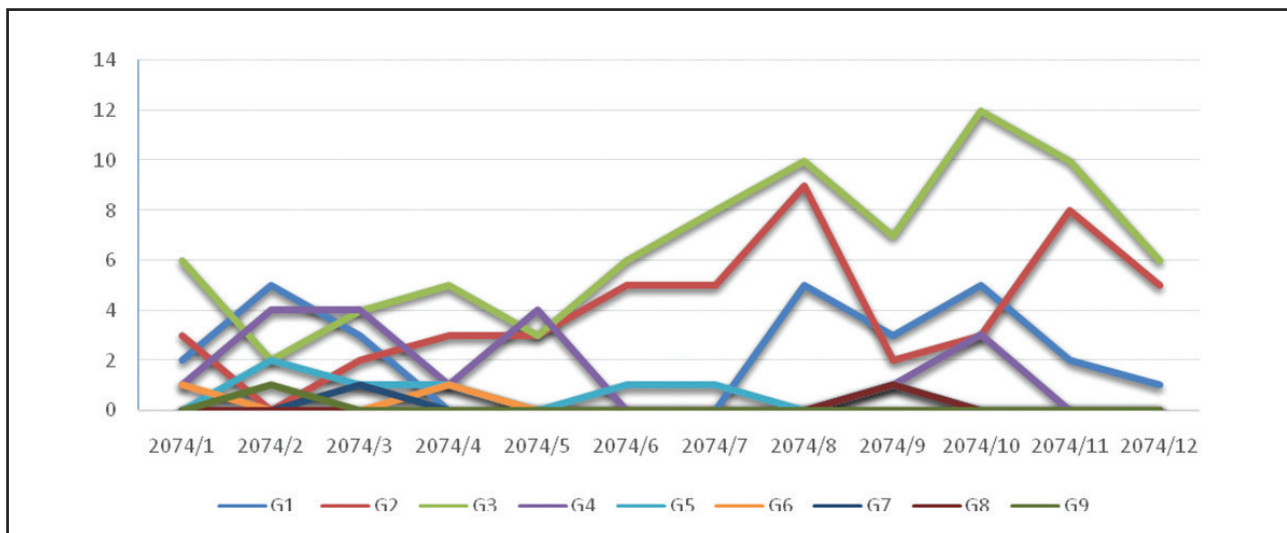
**Figure 5:** Induced abortions by month (N=199)

Cast wise maximum of service seekers belonged to Brahmin/Chhetri group followed by Janajati and Dalit. Madheshi and Muslims are significantly low, most probably, due to their low population in the hospital’s catchment area (Figure 6).



**Figure 6:** Caste wise distribution of those who underwent induced abortion (N=199)

Information about gravidity of the 16 cases were missing out of 199 cases of induced abortion. Most of the women among 186 cases, with available information, who underwent induced abortion were either G2 48 (26.23%) cases or G3 79 (43.17%) cases. Primi gravida occupies third position with 26 (14.21%) cases followed by G4 with 18 (9.84%) cases (Figure 7).



**Figure 7:** Induced abortions by gravida per month (N=199)

Among all induced abortions, method of medical termination of pregnancy were used for around 60% cases.

## DISCUSSION

World Health Organization estimates that about half of the abortions occurring worldwide are unsafe and almost all of them (98%) occurs in the developing and least developed countries.<sup>7</sup> Nepal being one of it has high prevalence of abortion and the rate of unsafe abortion is alarming.<sup>4</sup>

Our study demonstrated that the number of women who had spontaneous abortion is higher than that of those receiving service for induced abortion. Similar result has been demonstrated in the study conducted in India<sup>8</sup> where the rate of spontaneous abortion was twice the induced abortion. This finding may be due to our study center being the tertiary referral government hospital of the region and for the methods of induced abortion there are other health facilities too.

Most of the women receiving the abortion service in our study belong to the age group of 20-24. Earlier similar studies conducted in a medical college and maternity hospital have shown that the highest number of women taking the abortion service were between the age group of 25-29.<sup>9,10</sup> The increasing younger age groups for utilization of abortion services might suggest the declining use of contraception methods and trend of induced abortion among the younger age groups.

In our study, the most of the people belongs to the Brahmin/Chhetri followed by Janajati. This may be

the ethnic distribution in our study area where the majority of the people residing were same ethnic group.

Among those utilizing the induced abortion services, majority of them underwent medical termination of pregnancy followed by MVA. Medical methods being easier and convenient more prefer this method over MVA which is in consistent with the study conducted in hilly district hospital of Eastern Nepal.<sup>11</sup>

Incomplete abortion is the major cause of spontaneous abortion followed by missed and threatened abortion. This finding is in accordance with other similar study conducted in medical college of Pokhara.<sup>9</sup>

A seasonal pattern of increments of both spontaneous and induced abortion cases were observed, however, it's difficult to explain the reasons behind.

After the legalization of abortion there has been improvement in maternal health and likely contributed towards declining the maternal mortality in Nepal.<sup>12</sup> Though there is still need for improvement as young, poorest and uneducated women are likely undergo unsafe abortion.<sup>4</sup> Improvement and implementation of program and policies, increase access to contraceptive care and expansion of abortion care are required for the better and standard of safe abortion care services.

Our study being retrospective and single centered study had limitations regarding exploring the socioeconomic background of those taking abortion services. Furthermore, studies are recommended to identify the other factors associated with the abortion care and its hindrances in utilization in our scenario.

## CONCLUSION

This study concludes that in our center there were higher number of women presented with spontaneous abortion, most of them belonged to 20-24 years of age and are Brahmin/Chhetri. Multi gravida females outnumbered primi and they underwent induced abortion by medical termination of pregnancy. Similarly, incomplete abortion was in highest number among the spontaneous abortion. Easy availability of the safe abortion services and awareness among the people regarding it would certainly improve the maternal health and quality of life.

## REFERENCES

- Ganatra B, Gerdt C, Rossier C, Johnson B, Tunçalp Ö, Assifi A et al. Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *The Lancet*. 2017;390(10110):2372-2381. PMID: 28964589 DOI: 10.1016/S0140-6736(17)31794-4
- Singh S, Maddow-Zimet I. Facility-based treatment for medical complications resulting from unsafe pregnancy termination in the developing world, 2012: a review of evidence from 26 countries. *BJOG: An International Journal of Obstetrics & Gynaecology*. 2015;123(9):1489-1498. PMID: 26287503 DOI: 10.1111/1471-0528.13552
- Puri, Singh, Sundaram, Hussain, Tamang, Crowell. Abortion Incidence and Unintended Pregnancy in Nepal. *International Perspectives on Sexual and Reproductive Health*. 2016;42(4):197. PMID: 28825899 DOI: 10.1363/42e2116
- 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 and Childbirth*. 2018;18(1):376 PMID: 30223798 DOI: 10.1186/s12884-018-2011-y
- Samandari G, Wolf M, Basnett I, Hyman A, Andersen K. Implementation of legal abortion in Nepal: a model for rapid scale-up of high quality care. *Reprod Health*. 2012;9(7):1742-1755. PMID: 22475782 DOI: 10.1186/1742-4755-9-7
- Wu WJ, Maru S, Regmi K, Basnett I. Abortion Care in Nepal, 15 Years after Legalization: Gaps in Access, Equity, and Quality. *Health Hum Rights*. 2017;19(1):221-230. PMID: 28630554
- Facts on Induced Abortion Worldwide [Internet]. Who.int. 2012 [cited 27 December 2018]. Available from: [https://www.who.int/reproductivehealth/publications/unsafe\\_abortion/induced\\_abortion\\_2012.pdf](https://www.who.int/reproductivehealth/publications/unsafe_abortion/induced_abortion_2012.pdf)
- Kant S, Srivastava R, Rai SK, Misra P, Charlette L, Pandav CS. Induced abortion in villages of Ballabgarh HDSS: rates, trends, causes and determinants. *Reprod Health*. 2015;12(1):51. PMID:26021473 DOI: 10.1186/s12978-015-0040-9
- Shrestha R, Adhikari P. Trends of Abortion Care Utilization in a Medical College of Western Region of Nepal. *Journal of Gandaki Medical College-Nepal*. 2018;11(1):14-16. DOI: <https://doi.org/10.3126/jgmcn.v11i1.20788>
- Paudel P, Paudel L, Bhochohibhoya M, Vaidhya SA, Shah N, Khatiwada D. Pattern of abortion care in a tertiary level maternity hospital in Nepal. *J Nepal Med Assoc*. 2013 Jul-Sep; 52(191): 432-6. PMID:
- Panta O, Bhattarai D, Parajuli N. Medical Abortion Versus Manual Vacuum Aspiration in a Hilly District Hospital of Eastern Nepal: A Comparative Study. *Kathmandu University Medical Journal*. 2015;11(3):206-209.
- Henderson JT, Puri M, Blum M, Harper CC, Rana A, Gurung G, et al. Effects of abortion legalization in Nepal, 2001-2010. *PLoS One*. 2013 May 31;8(5):e64775. PMID: 23741391 DOI: 10.1371/journal.pone.0064775

### How to cite this article?

Chaudhary RK, Jha NK, Manandhar B, Chaudhary K. A Case Study of Utilization of Abortion Service in the Tertiary Hospital of Western Region of Nepal. *Journal of Karnali Academy of Health Sciences* . 2019;2(1):27-33

Conflict of Interest: None Source of Support: None