ABORTION INCIDENCE AND UNINTENDED PREGNANCIES IN NEPAL

INTRODUCTION

In the last two decades, abortion services in Nepal have undergone significant changes, with the government taking steps to liberalize the country's abortion laws and improve access to safe and legal abortion services.[1,2] This has been driven by the recognition of the need to address Nepal's high rates of maternal mortality and morbidity, as well as the importance of upholding women's reproductive rights.[3]

Prior to 2002, Nepal's abortion laws were highly restrictive – abortion was only permitted when the pregnant woman's life was at risk.[4,5] During this time, around 20 percent of people who were incarcerated were those who had used "illegal abortion" services.[6] Then, in 2002, the government formulated the Eleventh Amendment of the *Muluki Ain,* Nepal's national code, which expanded the grounds for legal abortion to include cases of fetal impairment or when the pregnancy posed a risk to the physical or mental health of the pregnant woman, and on request until 12 weeks of pregnancy.[7,8,9]

The legalization of abortion in Nepal came at a crucial juncture – when the country was experiencing a high rate of maternal mortality.[10] One reason for this problem was the lack of access to safe and legal abortion services, which forced many women to seek out illegal methods that were often unsafe and carried high risks of complications.[11,12] By legalizing abortion, the government was able to provide women with safer options for terminating pregnancies, which reduced the number of unwarranted deaths related to unsafe abortions. The legalization was also seen as a way to empower women and give them greater control over their own reproductive health.[13,14,15]

The country has come a long way ever since. The number of abortion service providers has increased significantly, from one single site at the time of legalization to facilities in all seven provinces.[16] Nepal also introduced medical abortion, which allows women to terminate pregnancies using medication rather than surgery.[17] This has made it easier for women to access abortion services, as medical abortion can be provided at a wider range of facilities and does not require specialized equipment or physicians.[18,19] Furthermore, the Government of Nepal has made abortion services free of charge for all women, removing a major barrier to accessing these services.[20,21] In addition to these practical improvements, Nepal has also taken steps to ensure that abortion is legally protected through constitutional guarantees and a subsequent act.[22,23]

This framework has secured women's access to safe and legal abortion services. It is of the utmost importance to highlight that the inclusion of abortion in the basic health service package signifies that it is now recognized as a fundamental right.[24] This means that individuals are entitled to access abortion services as part of their basic healthcare, just as they would be entitled to any other necessary medical treatment. The expansion of abortion services to 12 weeks and beyond was also an important milestone.[25,26] Moreover, the task-shifting approach to provide the aspects of abortion care implemented in the country by expanding the base of the provider was successful in increasing access to safe abortion services.[27]

Data from studies clearly show the changes brought about by this necessary initiative. The maternal mortality rate in Nepal has decreased significantly since the legalization of abortion in 2002. In 1996, the rate was 539 deaths per 100,000 live births, but by 2016, it had dropped to 239 per 100,000 live births.[28,29] The rates of maternal death and morbidity are significantly associated with unsafe abortion. According to a 1998 study, abortion was a contributing factor in 10 percent of maternal deaths in hospital audits and was the reason for 54 percent of gynecological and obstetric hospital admissions for complications related to induced abortions.[30] Additionally, recent data from the Maternal and Perinatal Death Surveillance and Response system show that the number of maternal deaths related to abortion complications has been declining, with two percent of maternal deaths in 2020/21 and 2021/22 being due to abortive complications.[31]

A further analysis of the Nepal Demographic and Health Survey data over the years showed that the abortion rate in Nepal had increased between 1996 and 2016.[32] After the legalization of abortion, the rate of reduction increased to 13 percent per year, compared to 11 percent per year between 1996 and 2001.[33,34]

The success that Nepal has achieved after the legalization of abortion services is undeniable. However, the program also faces several challenges, which can be categorized into different systems: healthcare, social, and legal.

Several healthcare system challenges have impacted the safe abortion program. Procuring necessary supplies, such as drugs and equipment, can be difficult due to shortages or disruptions in the supply chain.[35] Additionally, the onus of listing health facilities to provide abortion services now lies with provincial and local governments, which lack the capacity to undertake this role.[36] Some facilities may be denied listing even if they offer abortion services. Finally, programmatic and clinical support, including mentorship and training for providers, can be inadequate, leading to a decrease in the quality of care, among other challenges.[37] This has led to a situation where many women seeking abortions are forced to obtain care from untrained providers, who may use unsafe methods or charge exorbitant fees (58 percent of the abortions in 2014 were considered illegal).[38]

1. (Rogers et al. 2019)
2. (Shrestha, Regmi, and Dangal 2018)
3. (Engel et al. n.d.)
4. (Ramaseshan 1997)
5. (Guttmacher Institute 2017)
6. (Samandari et al. 2012)
7. (Samandari et al. 2012)
8. (Rogers et al. 2019)
9. (Anon 2002)
10. (Guttmacher Institute 2017)
11. (Shrestha et al. 2018)
12. (Chemlal and Russo 2019)
13. (Guttmacher Institute 2017)
14. (Center for Reproductive Rights 2011)
15. (CREPHA 2006)
16. (Rogers et al. 2019)
17. (Puri, Tamang, and Singh 2022)
18. (Puri et al. 2022)
19. (Wu et al. 2017)
20. (Ipas 2015)
21. (Puri et al. 2022)
22. (Mishra 2022)
23. (Goldberg 2011)
24. (Goldberg 2011)
25. (Andersen et al. 2016)
26. (Wu et al. 2017)
27. (Wu et al. 2017)
28. (Samandari et al. 2012)
29. (Poudel 2021)
30. (Pradhan et al. 2010)
31. (Government of Nepal, Ministry of Health and Population, and Family Welfare Division 2022)
32. (MOH/Nepal, ERA/Nepal, and ICF 2017)
33. (Pradhan et al. 1997)
34. (Health/Nepal, ERA/Nepal, and Macro 2002)
35. (Rogers et al. 2019)
36. (Department of Health Services. Ministry of Health and Population 2022)
37. (Andersen et al. 2016)
38. (Guttmacher Institute 2017)

A major challenge for the social system is demand generation. The safe abortion program in Nepal often struggles with increasing awareness and understanding of the availability and importance of abortion services among those who may need them.[39] This is difficult in settings with cultural or societal taboos surrounding abortion or a lack of comprehensive sexual and reproductive health education.[40] The absence of education about reproductive health and rights means that there is low awareness about the availability and legality of abortion services. This has resulted in women seeking abortions in secret, often using dangerous methods.[41,42] Consequently, safe abortion programs have been unable to meet the demand for their services, especially among marginalized or underserved populations.[43]

Similarly, in terms of the legal system, there is a contradiction between the provisions of the penal code and the principles of sexual and reproductive health and rights (SMRHR) when it comes to the issue of abortion.[44] The principles of SMRHR recognize the right to access safe, legal, and comprehensive abortion services as an essential aspect of reproductive health care. This contradiction can create confusion and challenges for women in Nepal who may seek abortion, as well as for healthcare providers who may fear prosecution for providing such services.[45]

In conclusion, the liberalization of abortion laws and the improvement of access to safe and legal abortion services in Nepal have had a significant impact on the country's maternal health outcomes.[46] Prior to the legalization of abortion, Nepal had high rates of maternal mortality and morbidity, largely due to the lack of access to safe and legal abortion services. By expanding the grounds for legal abortion and increasing the availability of safe and legal abortion services, the Government of Nepal has been able to reduce the number of deaths related to unsafe abortions and empower women to make informed decisions about their reproductive health.[47,48]

The inclusion of abortion in the basic health service package, the introduction and quick scale up of medical abortion, and the training of non-physician health workers or the expansion of providers to provide abortion care have all contributed to the improvement of maternal health outcomes in Nepal.[49] While there is still more work to be done to ensure that all women in Nepal have access to safe and legal abortion services, the progress made in the last two decades is a testament to the positive impact that expanding access to abortion can have on maternal health.[50]

OBJECTIVE OF THE STUDY

The objective of the study was to calculate the abortion rate and determine the percentage of legal abortions in Nepal. Additionally, estimating the number of unplanned pregnancies was a key aspect of the study.

METHODOLOGY

Analysis plan and procedure for estimating abortion rates

The estimation of the national incidence of abortion was done through three distinct components: abortions (both medication and surgical) performed in facilities (such as the public facilities, the private sector, and NGOs); medication abortions that took place outside these facilities; and abortions conducted outside of these facilities using methods different from medication abortion or using traditional procedures.

39. (Rogers et al. 2019)
40. (Pokhrel 2021)
41. (Pokhrel 2021)
42. (Baral 2021)
43. (Samandari et al. 2012)
44. (Center for Reproductive Rights 2021b)
45. Ibid
46. (Rogers et al. 2019)
47. (Rogers et al. 2019)
48. (Puri et al. 2022)
49. (Andersen et al. 2016)
50. (Wu et al. 2017)

Component 1: Facility-based abortions

A total of 767 health facilities were surveyed across the country to determine the availability of abortion services and the monthly and annual caseloads. The study also recorded the types of abortions and assessed the preparedness of health facilities to provide abortion services. Official data from Marie Stopes International (MSI) and the Family Planning Association of Nepal (FPAN) were collected and verified using the survey data. The health facility survey (HFS) was used to estimate the mean annual number of abortions.

Furthermore, the weight for each health facility was calculated based on its type. The sample weight was determined using the Nepal Health Facility Survey 2021 sampling frame, and it was verified using the Nepal Health Facility Registry.

Component 2: Medical abortion outside health facilities

The second component for the calculation of induced abortions was the number of medical abortions (MA) that took place outside of health facilities. This data was collected from super stores (distributors). Several adjustments were then made to the MA sales data; these were based on expert opinion, survey data, and assumptions regarding the distribution of MA across the provinces and the presence of counterfeit drugs from India. The adjustments, including cross-border factors and wasted/expired/damaged items, were confirmed through key informant interviews and pharmacy surveys.

To determine the value of this component, the data on MA drug sales was adjusted by subtracting the estimated number of medication abortions performed in public, private, and non-governmental organization (NGO) health facilities (based on information from the HFS and NGO clinic data). This adjustment was made to avoid duplicate counting.

Component 3: Other abortions

This component consisted of women who had undergone abortions using methods different from medication abortion or traditional procedures, from sources not included in the HFS. Data on this specific group was challenging to gather due to its limited size. To assess this group, the study employed an indirect approach and relied on existing findings, as direct estimation from other surveys or sources was not feasible. Consultation with experts helped determine the current number of women obtaining abortions through non-medication abortion or traditional methods, and adjustments were made accordingly based on their input.

The household survey of 2286 women of reproductive age (WRA) revealed that five percent of abortions were potentially carried out by untrained providers using unsafe methods, such as sticks and roots, herbal medicines, abdominal massage, or in unhygienic conditions. This data was triangulated by expert opinions.

The National Demographic Health Survey (NDHS) of 2016 had found that around 5 percent of abortions were conducted through other methods. A later survey conducted by KAPI-Ipas (among 717 WRA) in 2022 showed a higher prevalence around 8 percent. International literature[51] from similar settings reported a prevalence of five percent.

51. (Singh et al. 2018)

Table 1: Total number of facilities by provinces and types

	Koshi	Madhesh	Bagmati	Gandaki	Lumbini	Karnali	Sudurpaschim	Total
Federal hospitals/teaching hospitals	4	4	12	3	6	1	1	31
Provincial hospitals	14	7	13	11	14	10	9	78
Local hospitals	57	41	55	37	42	34	23	289
Private hospitals	70	68	183	50	50	11	22	454
Clinics (private, NGO, polyclinics)	48	71	567	54	49	20	19	828
FPAN clinics	9	4	8	3	11	2	6	43
MSI clinics	3	3	5	2	7	1	1	22
HPs	656	751	646	491	568	333	376	3821
BHSC (UHCs, CHUs)	506	275	406	460	491	511	509	3158
Total	**1367**	**1224**	**1895**	**1111**	**1238**	**923**	**966**	**8724**

KEY FINDINGS

ABORTION INCIDENCE IN NEPAL

FACILITY-BASED ABORTIONS

The Table 1 outlines the distribution of various healthcare facilities across Nepal's seven provinces. It shows a total of 8724 health facilities, with 31 federal hospitals/teaching hospitals, 78 provincial hospitals, 289 local hospitals, 454 private hospitals, and 828 clinics (private, NGO, polyclinics) and 65 MSI and FPAN clinics. Basic Health Service Centers (BHSC) have the highest number of facilities, comprising health posts, Urban Health Centers (UHCs) and Community Health Units (CHUs) with a total of 6,979.

Table 2 presents data regarding the average annual number of induced abortions in Nepal. The figures were gathered through a survey of health facilities, and the highest average was found in federal and academic settings at 551 cases, followed by FPAN/MSI with 501 cases. BHSC facilities had the lowest average at 42 cases, and the nationwide total was 37,368.

Table 2: Mean number of induced abortion cases per annum

	Mean	Sum	HFs offered abortion	Total HFs surveyed
Federal and academia	550.8	11016	20	24
Provincial	328.9	6906	21	21
Local	129.6	1296	10	12
BHSC (HPs, UHCs and CHUs)	42.1	2064	49	393
Private hospitals	111.6	6138	55	82
Clinics	62.4	3432	55	222
FPAN/MSI	501.2	6516	13	13
Total	**167.6**	**37,368**	**223**	**767**

Source: Health Facility survey, 2022

Table 3 presents data on the annual number of induced abortions in Nepal, taking into account the number of facilities. According to the calculations, the total annual number of induced abortions in Nepal was 176,216. The data reveals that the highest number of induced abortions occurred in peripheral healthcare facilities, with 35,383 cases, followed by private hospitals with 33,984 cases. In contrast, federal and academic facilities had the lowest number of induced abortions per year, with 12,668 cases.

Table 3: Total induced abortions per annum weighted by total number of facilities providing abortion services

Type of HFs	Weighted National	Weighted National (from listed sites)
Federal hospitals/teaching hospitals	12668	12668
Provincial hospitals	22362	22362
Local hospitals	26438	26438
BHSC (HPs, UHCs and CHUs)	35383	35383
Private hospitals	33984	23001
Clinics (Private, NGOs, Polyclinics)	12800	8036
FPAN/MSI	32580	32580
Total	**176,216**	**160,469**

Source: Health Facility survey, 2022

DISTRIBUTION OF INDUCED ABORTIONS BY TYPE

According to this survey, 50 percent of abortions were conducted through medical means, while 5 percent, 40 percent, and 4 percent were performed through Medical Induction (MI), Manual Vacuum Aspiration (MVA), and Dilation and Evacuation (D&E), respectively.

Table 4: Total induced abortions by type

Abortion services	Abortion numbers	Percentage
MA	89035	50.5
MI	9652	5.5
MVA	69884	39.7
D&E	7645	4.3
Total abortions in HFs	**176,216**	**100**

Source: Health Facility survey, 2022

ABORTION OUTSIDE HEALTH FACILITIES

Table 5 presents information regarding the distribution of MA drugs in Nepal. In 2021, super distributors sold a total of 239,141 MA drugs. After factoring in a 10 percent reduction for expiring and damaged drugs, the remining quantity was 215,227. Among these, 98,681 were used in health facilities outside of the designated ones.

Cross-border illegal trade of MA drugs poses a significant issue in Nepal, with estimates ranging between 10 and 20 percent of the total MA drugs. The highest estimate indicates that 47,828 MA drugs were traded illegally, with the lowest estimate suggesting 23,914.

Table 5 also includes the calculation details of the total induced abortions in outside facilities, which amounted to 140,460. To prevent duplication, the number of induced abortions in health facilities was subtracted from the total, based on MA drug sales.

Table 5: Details of MA drugs sold and induced abortion in outside facilities.

Total number of MA sold by super distributors	239,141
Total number of MA drugs adjusted for expiration and damage (10%)	23,914
Total number of MA drugs used outside HF*	116,546
Cross-border illegal trade of MA drugs (10% of total MA drugs)	23,914
Cross-border illegal trade of MA drugs (15% of total MA drugs)	35,871
Cross-border illegal trade of MA drugs (20% of total MA drugs)	47,828
Total induced abortion at outside facilities	140,460

** **Note:** The number of MA occurring in HF (component 1) were removed from the total number of abortions based on MA drug sales, to avoid duplication.*

ABORTION THROUGH OTHER METHODS

After reviewing various scenarios and findings, this study adopted a five percent estimate for induced abortions conducted using other methods. The total number of induced abortion cases in health facilities and outside facilities was 316,676. Component 3, representing abortions performed through other methods, was estimated to be 16,667, accounting for five percent of the total abortion cases in health facilities and outside. Consequently, the overall estimated total of induced abortion cases, including components 1,2, and 3, reached 333,343.

Table 6: Total induced abortions in Nepal, 2021

Induced abortion by methods	
Component 1-Total induced abortions at health facilities	176,216
Component 2-Total abortions outside health facilities	140,460
Component 3-Other abortion methods	16,667
Total (Component 1 + Component 2+ Component 3)	**333,343**

LEGAL ABORTION

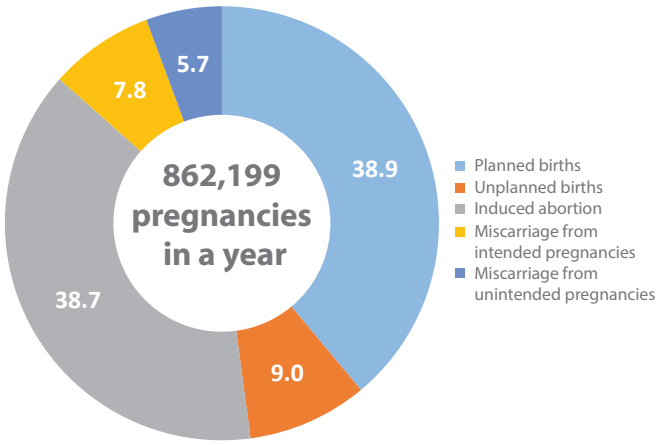
The study provides an estimation of the prevalence of both legal and illegal abortions in Nepal, adhering to the existing definition. According to this definition, only those abortions conducted in officially registered health institutions are deemed legitimate. Therefore, certain abortions estimated in component 1, as well as all abortions estimated in components 2 and 3, were deemed to be against the law. Based on the study's findings, it was determined that 52 percent of abortions in Nepal were categorized as illegal.

ABORTION RATE

The abortion rate is calculated by considering the total number of abortions and the population of women of reproductive age (WRA). According to the 2021 Nepal Census, the country had a total of 8,354,327 WRA, and the estimated annual induced abortion rate in Nepal was 41 per 1000 WRA. This rate provides a rough indication of the prevalence of induced abortions in the country. It can be used as a benchmark for international comparisons and to monitor changes in the incidence of induced abortions over time.

UNINTENDED PREGNANCIES IN NEPAL

This study drew data from multiple sources. The total number of live births (412,935) was obtained from the 2021 Nepal Census. The estimated abortion data



(333,343) was collected through this health facility survey. To account for unplanned births, this study applied a multiplier from the NDHS 2016, which indicated that 19 percent of live births were unplanned. Additionally, insights from international literature revealed a 20 percent miscarriage rate for unplanned births and a 10 percent miscarriage rate for induced abortions. An estimated total of 862,199 pregnancies occurred in 2021. Among these, only 39 percent were planned births, while 53 percent were unintended. Out of the unintended pregnancies, approximately 73 percent were resolved through induced abortion.

CONCLUSION

- In Nepal, abortions conducted in unlisted facilities are considered to be against the law. Based on this study, approximately 52 percent of abortions in the country were deemed illegal.
- Around 39 percent of pregnancies were terminated through induced abortion, which means that two out of every five pregnancies end in abortion.
- The abortion rate in Nepal was estimated to be 41 induced abortions per 1000 women of reproductive age.
- Among all pregnancies, only 39 percent were planned births, while the remaining 53 percent were unintended. Out of the unintended pregnancies, about 73 percent were resolved through induced abortion.

Ipas Partners for Reproductive Justice
NEPAL

Ipas Nepal
Baluwatar, Kathmandu
PO Box: 11621
Tele: +977-1-4520787

Government of Nepal
Ministry of Health and Population
Department of Health Services
Family Welfare Division
Teku, Kathmandu, Nepal