Incidence, Regional Variation and Sociodemographic Factors Associated with Second Semester Abortions in India: Evidence from National Family Health Survey (2019-21)

Background

While the majority of abortions occur during the first trimester, a notable percentage of pregnancy terminations worldwide happen during the second trimester. The second trimester abortion refers to the termination of pregnancy occurring between 13 to 28 weeks of gestation. This period is further categorized into the early period, spanning from 13 to 20 weeks, and the late period, ranging from 20 to 28 weeks [1]. Among women of reproductive age, morbidity and mortality estimates are significantly influenced by pregnancy loss, primarily attributed to induced abortion. Annually, over 42 million abortions are conducted worldwide, with a significant proportion of them occurring during the second trimester. More than half of these second trimester abortions are deemed unsafe, significantly increasing the risk of maternal mortality [2]. Despite of heightened risk of complications, particularly when abortion is conducted through unsafe means, a significant number of married women undergo abortion during second trimester in India [3]. Key reasons for opting for second-trimester abortions include delays in recognizing unintended pregnancies, limited involvement in abortion-related decisions, concerns regarding stigma & confidentiality, and financial constraints [4]. Population-based studies in India have estimated induced abortion rates as 27 per thousand women aged 15–49 [5]. Another analysis of the National Family Health Survey reported a 14.3% rate of induced abortion in India [6], studies also have revealed a high prevalence of second trimester abortions in India [7]. Additionally, sex-selective abortion has been identified as a contributing factor to second-trimester abortions in India [3,4]. There is a growing perception in India that second-trimester abortions are still being used for sex selection, prompting discussions on implementing measures such as pregnancy registration and monitoring, as well as restricting second-trimester abortions, to address the incidence of sex-selective abortion [8].

For over five decades since the introduction of the Medical Termination of Pregnancy (MTP) Act in 1971, women in India have had legal access to abortion services provided by registered facilities and certified practitioners [9,10]. These services are available for various reasons, including situations where the mother's life or health is at risk, instances of rape, pregnancies likely to result in children with physical or mental abnormalities, and cases of contraceptive failure. The MTP Act allows abortions up to 20 weeks of gestation without requiring the consent of the husband or guardian for adult women. However, even with the legal framework established by the Medical Termination of Pregnancy (MTP) Act, which was further amended in 2021 to facilitate safer and more accessible abortions for women, [10], majority of the estimated abortions performed annually in India are carried out by uncertified providers in unsafe setting [11]. Induced abortion especially at an advanced gestational age, is associated with complications such as incomplete pregnancy, haemorrhage, sepsis, and other complications related to women's reproductive health [12]. Moreover, these events can lead to psychological trauma for women and their families [13].

In India, the incidence rate of recurrent induced abortion is notably higher compared to Western countries [14]. The prevalence of induced abortion varies significantly depending on the gestational period. Rates are highest in early pregnancy, particularly between 6–8 weeks, followed by 9–11 weeks and 12–20 weeks per thousand pregnancies. Literature have stated that although in India most induced abortions occur in the first trimester, a considerable share still occurs in the second trimester [15]. Early diagnosis of pregnancy and access to safe abortion services can mitigate many complications and maternal health risks [16]. Therefore, understanding the factors associated with induced abortion in different trimesters is crucial. The literature on second trimester abortion in India is sparse, therefore obtaining accurate and

disaggregated data is challenging. While some authors in the past had suggested that India may have the highest number of second trimester abortions globally [17], such claims lacked conclusive supporting data. Though we can get an estimate from the existing studies, there remains limited understanding of the extent to which abortions at an advanced gestational age are driven by various factors. Against this backdrop, this paper aims to investigate the prevalence of second and third trimester abortion using calendar data from a nationally representative dataset also emphasize on factors associated with abortions at an advanced gestational age in India.

Data and methods

Data for this study was derived from the fifth round of India's National Family Health Survey, 2019-21 (NFHS-5). It is a nationally representative household survey conducted across all states and union territories of India. The data incorporated calendar data encompassing the reproductive history of the women spanning from past five years from the date of survey, capturing events such as pregnancy, childbirth, contraceptive usage, and reasons for contraception discontinuation. 7,24,115 women aged 15–49 years were interviewed in the survey. Among them the current study focused on women who experienced at least one pregnancy terminated in abortion during last five years (n = 7,696).

Outcome and Predictor Variables

The primary dependent variable was gestational age at the time of pregnancy termination in abortion (categorized in trimester) among respondents aged 15–49 years who had experienced at least one pregnancy in the five years preceding the survey.

Predictor variables included having at least one son (Yes, No), age group (19-24 years, 25-29 years and 30 years & above), number of living children at the time of abortion (no children, one child, two children and more than 2 children), Used any contraceptive method before abortion (Yes, No), method employed in abortion (pills, MVA, surgical and others), Place of abortion (Public, Private and other) reason for abortion (unplanned pregnancy, health related reason, sex of the child and economic reasons) religious affiliation (Hindu, Muslim, Christian, other), urban-rural residence, social class (Scheduled Caste, Scheduled Tribe, Other Backward Classes, Other Caste), educational attainment (Primary, Secondary, Higher), household wealth index (poor, middle, rich), mass media exposure (No, Yes), and geographical regions of India (East, West, North, South, Central, North-east).

Statistical Analysis

We conducted bivariate analysis to assess the prevalence of second and third trimester abortion in India across various socio-demographic factors. Furthermore, we employed a generalized logistic regression model to ascertain the risk factors associated with second trimester abortion. The model's output provides adjusted relative risks of induced abortion in second trimester across various socio-demographic factors among the women in reproductive age group, along with their corresponding 95% confidence intervals (95% CI). Statistical significance was determined at a p-value of < 0.05. Data analysis was carried out using Stata software (version 16.0; Stata Corp LLC, College Station, TX).

Results

Out of the women who had chosen to terminate their pregnancies, the majority opted for termination during the first trimester (86%), while thirteen percent women waited until the second trimester to undergo abortion (Figure 1).

Overall, the percentage of women having abortion during first trimester was higher across various socio-demographic characteristics of the women. Proportion of abortion cases were found to be higher among Hindu women, women residing in rural areas, belonging to OBC category of social castes, having secondary levels of education, falling into the rich wealth index category, with exposure to mass media, and living in the central and east region of the country region of the country. A major proportion of the women reported using medicine to

abort their pregnancies (n = 5,183, 67.3%). Reason for most of the women being unplanned pregnancy (n=3,595, 46.7%), a greater proportion of the women had chosen private facility to carry out the abortion. (n=4,218, 54.8%) (Table 1).

A notable observation was that twenty-eight per cent of the women with no children and fourteen per cent women who mothered a single child had chosen to wait till second or third trimester to abort their pregnancy. Another crucial finding was that among the women who did not have a son, 20.6% of them were observed to have delayed their termination till second or third trimester. A twenty per cent women less than 20 years of age opted for second trimester abortion. Assessing the method employed for abortion it was found that around eleven per cent women had used medicine and another twenty one percent women used other methods which also included unlisted unsafe methods to abort their pregnancies in second or third trimester (Table 1). Another notable finding was that 28% women who had to abort their pregnancy because of health-related reason either of the child or the mother waited till second or third trimester to abort their pregnancy. 17.5% women who had chosen to terminate their pregnancy in second or third trimester stated their reason for abortion as the sex of the unborn child. Among the women who did not carry out their abortion in any healthcare facilities, 3.6% women had second or third trimester abortion. 18.6% of the interviewed women with no education was observed to have delayed their termination till second or third trimester. Second and third trimester abortion among the women from poor wealth quintile was found to be 13% while it was 14.9% and 14.3% among the women in middle and rich wealth quintiles respectively. Highest proportion of second trimester abortion was observed among the Christian women (16.6%), while the results observed within other categories did not vary much. 17.2% women who were not using any contraceptive method before the termination had second or third trimester abortion. In southern region twenty-five per cent among the women who had an abortion chose to terminate their pregnancy in second or third trimester. A fifteen per cent women residing in rural areas had second or third trimester abortion, it was also observed that a greater proportion of the women having no exposure to mass media had second trimester abortion (15%). Results suggested that of all the caste categories, proportion of second or third trimester abortion was highest among the women belonging to Scheduled caste (Table 1).

Another crucial observation from the current study was that women aged 30 years or more are more likely to go for second trimester abortion as compared to the age less than 20 years of age (OR:1.11) (Table 2). As compared to the women who had terminated their pregnancies with medicine, women aborting pregnancies with any other methods are in a higher likelihood of delaying the abortion till second or third trimester (ORs: 1.45 for MVA, 1.72 for surgical method and 1.61 for any other method). The women who choose to abort their pregnancies due to health-related reasons and because of sex of the child shows three-fold and double fold risk of delaying the abortion till second trimester respectively compared to the women who chose abortion because of unplanned pregnancies (OR 3.78 and 2.62 respectively), again the women choosing abortion because of economic constraints on their end had a higher likelihood of delaying abortion to later gestational age when compared to the women facing unplanned pregnancy (OR:1.92). Women with some education when compared to their uneducated counterparts and women belonging to middle or rich wealth quintile when compared to the poorer counterparts showed less likelihood for carrying out the abortion in second trimester (Table 2). As compared to the women with no children women with children are less likely to go for second trimester abortion (ORs: 0.77, 0.61 and 0.54 for women with single, two and more than two children respectively). Another notable finding was that the women who were mother to at least one son were less likely to delay their abortion till second or third trimester when compared to the women with no son (OR:0.78). Women who were using any contraceptive method before the termination showed lower likelihood of delaying abortion till

advanced gestational age when compared to the women who did not use any (OR: 0.79). Women residing in the Southern region of India were observed to have a higher likelihood for delayed abortion as compared to the women residing in the Northern part of the country (OR: 1.56). Women residing in rural areas and belonging to southern region are more likely to go for second trimester abortion as compared to their urban counterparts (OR: 1.44). It was also suggestive from the current study that the women having exposure to Mass media as compared to the women who did not have any and the women from all the other categories of caste when compared to the women belonging to Scheduled caste had a lower likelihood of getting second or third trimester abortion (Table 2).

Discussion

We conducted an analysis to estimate the abortion cases specifically in the second and third trimester, along with their predictors. Several significant findings emerged from our analysis. While the prevalence of abortion was higher in the first trimester, a notable proportion of the women underwent abortion in second or third trimester which exhibited disparities across various socio-economic domains. A crucial finding revealed that women without sons were more inclined to opt for second or third trimester abortions. Existing literature underscores the persistence of son preference and the continued occurrence of sex-selective abortions in certain regions of India [18]. Despite numerous government efforts, a portion of women still choose sex-selective abortion. Effective policies aimed at raising awareness about laws prohibiting sex detection are necessary in these regions. It was observed that a greater proportion of the women in the younger reproductive age group had opted second or third trimester abortion. Women in the younger reproductive age groups are more prone to have experienced unwanted pregnancies as their awareness about reproductive health, available services and contraceptive methods are limited [19], stigma associated with abortion also might cause the delay in seeking abortion care for the young women. Bivariate analysis highlighted that second or third trimester abortion were comparatively higher among the women who had aborted their pregnancies due to health-related reasons, A plausible explanation for this could be that since the pregnancy wasn't unwanted, women may opt to wait to see if they can carry it to term. Additionally, in cases of fetal anomaly, the waiting period for diagnostic tests and the decision-making process might result in a delay in seeking abortion until the pregnancy has advanced to a later gestational age [20]. The study further unveiled that the Christian women, women with no formal education, belonging to scheduled caste or tribe, and residing in rural areas exhibited a higher proportion of second or third trimester abortions. This highlights persistent socioeconomic disparities that influence the decision-making process of women or their families [21]. Women without children displayed a relatively higher proportion of second or third trimester abortions, possibly due to their strong desire to have children despite facing obstacles. This desire may contribute to delays in seeking abortion among these women. Nulligravida women are prone to certain underlying health conditions and certain issues such as spontaneous uterine rupture, rendering the womb unsuitable for sustaining the pregnancy which can compel women to undergo abortion at a later stage of gestation [22]. Women who were not using any contraceptive methods before were found to have delayed seeking abortion till second or third trimester. Existing literature indicates that contraceptive usage among women in India remains low [23], which increases the risk of subsequent pregnancies [24]. Moreover, non-use of any contraceptive method suggests a potential desire for children, this may subsequently result in abortions due to some underlying reasons, as it was also revealed from the finding that women in the middle and rich wealth quintiles are less likely to go for an abortion at later gestational age so another possible explanation being marginalized and disadvantaged sections of society who lack access to effective contraceptive methods often encounter logistical and cost-related barriers to access safe abortion services, which in turn cause delays in seeking timely care. A major proportion among the women residing in the

southern region of the country were found to have sought abortion at a later gestational age, in comparison to other regions of India, women in southern India tend to have higher levels of educational attainment, which may contribute to making more informed choices regarding their reproductive health. Additionally, their career-oriented approach often leads to cause delay in child-bearing, thereby increasing the risk of foetal anomalies [25].

The presence of son preference in Indian societies was evident in the current study, as women without sons showed a higher propensity for opting for second-trimester abortions. Existing literature frequently discusses sex-selective abortion in India [26], highlighting the necessity for effective measures to address this issue. Furthermore, the finding is supported by another result that the women who stated that they aborted their pregnancy due to the sex of the child showed a significantly higher risk of undergoing second or third trimester abortion. Number of living children also showed to have contributed to the decision of delaying abortion to a later stage, desire for child bearing serve the explanation to this finding [27]. Regarding demographic factors, our study found that women aged more than 30 years had a significantly higher likelihood of having a second trimester abortion compared to younger age groups. Several plausible explanations exist for this finding, it's possible for some women on that age group have achieved their desired family size but face an unmet need for contraception, influencing them to seek abortion. Additionally, advancing age increases the risk of foetal anomalies, which could lead to women's decisions for second or third trimester abortions [28]. With increasing level of education, a lower likelihood of undergoing second trimester was observed when compared to uneducated women abortion possible reason maybe with higher levels of education had a lower chance of experiencing abortion, potentially due to better reproductive health awareness and economic empowerment.

Women who were using contraceptive method before abortion showed a lower likelihood of delaying their abortion A plausible explanation for this might be that women with access to contraceptive methods also have access to other reproductive health services making it easier for them to seek timely care. Women living in rural areas and those with no exposure to mass media were observed to be more likely to delay seeking abortion until the second or third trimester. Accessibility and awareness of available services also awareness about safe period of aborting a pregnancy could offer a plausible explanation for this trend. Socio cultural disparity in reproductive health decisions among the women was also evident from the study when it was found that the women belonging to scheduled caste exhibited higher likelihood of delaying abortion seeking when compared to the other categories of caste. Women residing in the southern part of India showed a significant increased likelihood of delaying abortion till second or third trimester. One recent study carried out in southern India had found that most of the second-trimester termination were due to congenital anomalies [29]. The widespread prevalence of consanguineous marriage in the southern part of India [30] remains a risk factor for congenital anomalies [31]. Moreover, the delayed age of childbearing due to career and economic reasons may also contribute to foetal anomalies and in turn causing delay in abortion seeking.

While our study benefits from a nationally representative dataset and a robust methodology, limitations such as reliance on self-reported data and the cross-sectional nature of the study should be acknowledged. Future research should explore additional reproductive health variables and consider longitudinal designs to better understand the complexities of abortion and its consequences on women's health. Another study conducted in the same region revealed that the majority of women sought second-trimester abortions due to unsuccessful attempts with unsafe methods or informal providers during the first trimester [32].

The findings underscore the urgent need for addressing son-preference prevalent in some parts of India. Initiatives are required to reduce the obstacles women face when seeking abortions, especially, to guarantee that marginalized section and economically disadvantaged women

have access to safe and timely abortion services. Comprehensive dissemination of awareness regarding the locations of suitable abortion facilities, the provision of free services in the public sector, and women's entitlement to access these services and make abortion decisions is crucial. Efforts should also emphasize the significance of early pregnancy termination and the importance of seeking abortion from qualified providers rather than resorting to unsafe methods or relying on unqualified providers and pharmacists. This study also serves the evidence indicating that having a son and number of living children plays a significant role in second-trimester abortions, there is a urgent need for more effective implementation of the Pre-natal Diagnostics Techniques (Regulation and Prevention of Misuse) Act (PNDT Act). In addition to ongoing efforts to change deeply entrenched social norms favouring sons in most of the Indian societies, it is essential to address the misconception that second and third trimester abortions are solely driven by sex selection motives. This paper highlights the impact of poverty, restricted access to facilities, and inadequate education as potential factors influencing abortions at a later gestational age.

There exists a significant knowledge gap related to second and third trimester abortions in India. It is evident that raising community awareness about the legal status of abortion in India is imperative, particularly considering PNDT act that may have suggested to some section of the society that all abortions are illegal, which is not the case.

Conclusion

In summary, this study sheds light on the socioeconomic factors influencing second delayed abortion among Indian women. To adequately meet the needs of the target population, it is essential to strengthen family planning services in India. The widespread prevalence of termination of pregnancy at an advance gestational age in India emphasizes the critical need for accessible and affordable pregnancy termination facilities, safeguarding women's reproductive health rights. Moreover, the high rates of second or third trimester termination are often compounded by factors like domestic violence which increases the risk to women’s health, highlight the need for enhancing access to high-quality healthcare services strengthening the referral services from the remote facilities. Furthermore, the implementation of evidence-based and safe abortion and contraceptive services, alongside comprehensive abortion care, offers potential in mitigating maternal morbidity and mortality rates.

References

- S. Lalitkumar, M. Bygdeman, and K. Gemzell-Danielsson, "Mid-trimester induced abortion: a review," Human Reproduction Update, vol. 13, no. 1, pp. 37–52, 2007.
- Facts on Induced Abortion Worldwide, The Guttmacher Institute, New York, NY, USA, 2007.
- Elul, B.,et al., 2004b.Unwanted pregnancy and induced abortion in Rajasthan, India: a qualitative exploration. New Delhi: Population Council.
- Ganatra, B.R., 2008. Maintaining access to safe abortion and reducing sex ratio imbalances in Asia. Reproductive Health Matters, 16 (31 supplement), 90-98.
- Singh S, Shekhar C, Acharya R, Moore AM, Stillman M, Pradhan MR, et al. The incidence of abortion and unintended pregnancy in India, 2015. Lancet Glob Heal. 2018;6(1):e111–20.
- Tiwary B, Nilima N, Kumar A, Kaushik S, Khan M, Pandey PK. Spatial evaluation of pregnancy loss among child-bearing women in India. GeoJournal. 2021;1–12.
- Dalvie, S. S. (2008). Second trimester abortions in India. Reproductive Health Matters, 16(sup31), 37-45.
- Pallikadavath S, Stones RW. Maternal and social factors associated with abortion in India: a population-based study. Int Fam Plan Perspect. 2006;120–5.
- Government of India (GOI), 1971.The medical termination of pregnancy act (Act. No.34).NewDelhi: Government of India.
- Government of India (GOI), 2021.The medical termination of pregnancy amendment act. NewDelhi: Government of India.
- Singh S, Shekhar C, Acharya R, Moore AM, Stillman M, Pradhan MR, et al. The incidence of abortion and unintended pregnancy in India, 2015. Lancet Glob Heal. 2018;6(1):e111–20.
- Rehnström Loi U, Lindgren M, Faxelid E, Oguttu M, Klingberg-Allvin M. Decision-making preceding induced abortion: a qualitative study of women's experiences in Kisumu, Kenya. Reprod Health. 2018 Oct;15(1):166.
- Dellicour S, Aol G, Ouma P, Young N, Bigogo G, Hamel M, et al. Weekly miscarriage rates in a community-based prospective cohort study in rural western Kenya. BMJ Open. 2016;6:e011088.
- Patki A, Chauhan N. An Epidemiology Study to Determine the Prevalence and Risk Factors Associated with Recurrent Spontaneous Miscarriage in India. J Obstet Gynaecol India. 2016 Oct;66(5):310–5
- Kalyanwala S, Zavier AJF, Jejeebhoy S, Kumar R. Abortion experiences of unmarried young women in India: evidence from a facility-based study in Bihar and Jharkhand. Int Perspect Sex Reprod Health. 2010 Jun;36(2):62–71.
- Kassahun EA, Gelagay AA, Muche AA, Dessie AA, Kassie BA. Factors associated with early sexual initiation among preparatory and high school youths in Woldia town, northeast Ethiopia: a crosssectional study. BMC Public Health. 2019;19(1):1–8
- Chhabra, R. (1996). Abortion in India: an overview. Demography India, 25, 83-92.
- Zavier, A. F., Jejeebhoy, S., & Kalyanwala, S. (2012). Factors associated with second trimester abortion in rural Maharashtra and Rajasthan, India. Global Public Health, 7(8), 897-908.

- Mentula, M. J., Niinimäki, M., Suhonen, S., Hemminki, E., Gissler, M., & Heikinheimo, O. (2010). Young age and termination of pregnancy during the second trimester are risk factors for repeat second-trimester abortion. American journal of obstetrics and gynecology, 203(2), 107-e1.
- Bryant, A. G., Grimes, D. A., Garrett, J. M., & Stuart, G. S. (2011). Second-trimester abortion for fetal anomalies or fetal death: labor induction compared with dilation and evacuation. Obstetrics & Gynecology, 117(4), 788-792.
- González-Rábago, Y., Rodriguez-Alvarez, E., Borrell, L. N., & Martín, U. (2017). The role of birthplace and educational attainment on induced abortion inequalities. BMC Public Health, 17, 1-7.
- Abbas, A. M., Sheha, A. M., Ali, M. K., Ali, S. S., Salem, N. Z., Talaat, E., & Hassan, A. (2017). Second-trimester spontaneous uterine rupture after laparoscopic electromyolysis in nulligravida: A case report. Middle East Fertility Society Journal, 22(1), 73-76.
- Das, L., Shekhar, C., Sengupta, S., & Mishra, A. (2024). Adoption of contraception following a pregnancy loss in India. International Journal of Gynecology & Obstetrics.
- Das, L. (2021). Uptake of post-abortion contraceptive method in India: Evidence from national family health survey 5. Frontiers in Global Women's Health, 4, 39.
- Goetzinger, K. R., Shanks, A. L., Odibo, A. O., Macones, G. A., & Cahill, A. G. (2017). Advanced maternal age and the risk of major congenital anomalies. American journal of perinatology, 7(03), 217-222.
- Arnold, F., Kishor, S., & Roy, T. K. (2002). Sex- selective abortions in India. Population and development review, 28(4), 759-785.
- Pallikadavath, S., & Stones, R. W. (2006). Maternal and social factors associated with abortion in India: a population-based study. International family planning perspectives, 120-125.
- Loane, M., Dolk, H., Morris, J. K., & a EUROCAT Working Group. (2009). Maternal age- specific risk of non- chromosomal anomalies. BJOG: An International Journal of Obstetrics & Gynaecology, 116(8), 1111-1119.
- Agarwal, P., & Dasari, P. (2021). Clinical profile of women seeking medical termination of pregnancy at a tertiary care institute South India. Int J Reprod Contracept Obstet Gynecol, 10, 1580-1586.
- Sharma, S. K., Kalam, M. A., Ghosh, S., & Roy, S. (2021). Prevalence and determinants of consanguineous marriage and its types in India: Evidence from the National Family Health Survey, 2015–2016. Journal of Biosocial Science, 53(4), 566-576.
- Tayebi, N., Yazdani, K., & Naghshin, N. (2010). The prevalence of congenital malformations and its correlation with consanguineous marriages. Oman medical journal, 25(1), 37.
- Varkey, P., Balakrishna, P. P., Prasad, J. H., Abraham, S., & Joseph, A. (2000). The reality of unsafe abortion in a rural community in South India. Reproductive Health Matters, 8(16), 83-91.

Tables and figures

Table 1: Sample characteristics of the women having abortion at different trimesters (First and second & third trimester) (NFHS-5, 2019-21)

Variables	**First trimester**	**Second & third trimester**	**Total**
Age at abortion			
Less than 20	80.4	19.6	153
20-24	84.1	15.9	1,559
25-29	86.1	14.0	2,696
30 or more	87.2	12.8	2,867
Method of abortion			
Medicines	89.4	10.6	5,183
MVA	80.2	19.9	888
Surgical	79.3	20.7	1,263
Other	79.1	20.9	354
Reason of abortion			

Unplanned pregnancy	
	94.6
	5.4
	3,595
Health related reasons	
	72.2
	27.9
	2,186
Sex of the child	
	82.5
	17.5
	474
Economic reasons	
	87.9
	12.1
	1,434
Place of abortion	
Public facility	
	81.0
	19.0
	1,597
Private facility	
	83.7
	16.3
	4,218
Elsewhere	
	96.4
	3.6
	1,873
Educational qualification	
No education	
	81.4
	18.6
	1,011
Primary	
	90.0
	10.0
	889
Secondary	
	86.7
	13.3
	4,285
Higher	
	85.9
	14.1

	1,512
Wealth Index	
Poor	
	86.9
	13.1
	2,902
Middle	
	85.1
	14.9
	1,666
Rich	
	85.7
	14.3
	3,128
Religion	
Hindu	
	86.2
	13.8
	6,499
Muslim	
	86.9
	13.2
	880
Christian	
	83.4
	16.6
	120
Others	
	86.9
	13.1
	198
Number of living children at the time of abortion	
No children	
	71.8
	28.2
	1,277
Single	
	86.1
	13.9
	2,658
Two	
	91.2
	8.8
	2,304
More	

	91.3
	8.7
	1,450
Have at least one son	
No	
	79.4
	20.6
	2,309
Yes	
	89.2
	10.9
	5,387
Used any contraceptive method before abortion	
No	
	82.8
	17.2
	4,854
Yes	
	92.1
	7.9
	2,842
Region	
North	
	87.3
	12.8
	875
Central	
	91.0
	9.0
	1,874
East	
	88.5
	11.5
	1,819
North	
	94.0
	6.0
	444
West	
	87.4
	12.6
	1,091
South	
	74.6

	25.4
	1,593
Place of Residence	
Urban	
	88.7
	11.3
	2,866
Rural	
	84.8
	15.2
	4,830
Media Exposure	
No	
	84.9
	15.1
	1,376
Yes	
	86.5
	13.5
	6,320
Caste	
Scheduled caste	
	85.0
	15.0
	1,775
Scheduled tribe	
	86.3
	13.7
	445
OBC	
	85.8
	14.2
	3,271
Others	
	87.8
	12.2
	2,205
Total	
	6,636
	1,060
	7,696

Table 2: Factors associated with delaying abortion from first trimester to second & third trimester (NFHS-5, 2019-21)

Variables	OR (95% CI)
Age at abortion	
Less than 20 ®	
20-24	0.95 (0.6 1.51)
25-29	1.02 (0.64 1.62)
30 or more	1.11 (0.69 1.78)
Method of abortion	
Medicines ®	
MVA	1.45*(1.17 1.78)
Surgical	1.72*(1.44 2.05)
Other	1.61*(1.18 2.21)
Reason of abortion	
Unplanned pregnancy ®	
Health related issues	3.78*(3.11 4.58)
Sex of the child	2.62*(1.96 3.51)
Economic reasons	1.92*(1.54 2.4)
Place of abortion	
Public ®	
Private	0.84*(0.72 0.99)
Elsewhere	0.31*(0.24 0.42)
Educational qualification	
No education ®	
Primary	0.63*(0.47 0.84)
Secondary	0.62*(0.5 0.78)
Higher	0.45*(0.33 0.59)
Wealth Index	
Poor ®	
Middle	0.85 (0.7 1.05)
Rich	

	0.83(0.67 1.03)
Religion	
Hindu ®	
Muslim	0.97 (0.77 1.22)
Christian	0.9 (0.58 1.39)
Others	0.78 (0.55 1.12)
Number of living children at the time of abortion	
No children ®	
Single	0.77*(0.64 0.94)
Two	0.61*(0.48 0.76)
More	0.54*(0.41 0.72)
Have at least one son	
No ®	
Yes	0.78*(0.67 0.92)
Used any contraceptive method before abortion	
No ®	
Yes	0.79*(0.67 0.94)
Region	
North ®	
Central	0.7*(0.54 0.91)
East	0.87 (0.67 1.14)
North	0.46*(0.34 0.62)
West	0.81 (0.61 1.08)
South	1.56*(1.24 1.97)
Place of Residence	
Urban ®	
Rural	1.44*(1.21 1.71)
Media Exposure	

No ®	
Yes	0.96 (0.78 1.18)
Caste	
Scheduled caste ®	
Scheduled tribe	0.93 (0.71 1.23)
OBC	0.91 (0.76 1.1)
Others	0.94 (0.76 1.17)
Constant	0.21*(0.11 0.37)

Pseudo R^2= 0.158
Note: Significance level *p < 0.1. **p < 0.05. ***p < 0.01
® : Reference category