

**Pathways to induced abortion among unmarried young women:
Are the unmarried more vulnerable than the married?**

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1. Introduction:

Pre-marital sexual relations have increasingly been documented in India. For example, a sub-national study of youth in six states of India observes that 2-7 per cent of young women and 9-17 per cent of young men aged 15-24 had experienced pre-marital sexual relations (IIPS and Population Council 2009, forthcoming); a review of small and unrepresentative studies has also concluded that fewer than 10 per cent of young women and 15-30 per cent of young men had experienced pre-marital sex (Jejeebhoy and Sebastian 2004). These studies have also suggested that few youth have used condoms or any other contraceptive method consistently and raise the possibility of unintended pregnancy among the unmarried. Indeed, one recent study of unmarried college-going students suggested that 8-12 per cent of sexually experienced young women or girlfriends of sexually experienced young men had ever had an unintended pregnancy and all of these pregnancies were terminated (Sujay 2009).

Several facility-based studies from India have also suggested that the young and the unmarried constitute significant minorities of all abortion clients (see for example, Ganatra 2000; Chhabra et al 1988; Solapurkar and Sangam 1985; Dhall and Harvey 1984; Rao and Rao 1990; Salvi et al. 1991; Government of India 1996). Indeed, these studies have implied that young abortion-seekers are more vulnerable than adult abortion-seekers (see Ganatra 2000 for a review) and that *unmarried* young abortion-seekers are even more vulnerable than their *married* counterparts in that they are more likely to delay abortion-seeking and seek abortion from unqualified providers (see, for example, Aras, Pai and Jain 1987). Few studies (an exception is Ganatra and Hirve 2002) have explored other characteristics of the abortion-seeking experience that reflect the vulnerability of the young and unmarried, such as, for example, partner support, type of facility preferred and attempts made, decision-making processes and fear of disclosure; few studies, likewise, have explored the roles these may play in delaying abortion among unmarried adolescent and young women compared to their married counterparts.

The objective of this paper is to shed light on the vulnerability of unmarried young abortion-seekers aged 15-24 and compare their experiences with those of married abortion-seekers of the same age. We hypothesise that unmarried young women's experiences make them more vulnerable to unsafe abortion-related outcomes than do those of married young women in a number of respects. They are, as the literature suggests, more likely to delay the procedure, make multiple attempts to terminate the pregnancy and seek it from unqualified providers. Other factors – often implied but rarely explored in research – that may exacerbate the vulnerability of the unmarried include delayed recognition of pregnancy, a limited role and delays in decision-making regarding when and where to seek termination, fear of disclosure and consequent priority to confidential rather than skilled services, lack of partner support and second-trimester abortion. While none of these necessarily suggests that the abortion sought will be unsafe, it is clear that these characteristics would potentially heighten the risk of unsafe abortion and abortion-related complications. The paper thus explores the pathways followed by the unmarried and the married, and assesses the extent to which these different pathways are associated with the finding observed in previous studies of delayed abortion-seeking among the unmarried. Data are obtained from a study undertaken in facilities in two poorly developed states of India with weak health systems, Bihar and Jharkhand.

2. Background

Although abortion has been legally available since 1972, just one million of the roughly 6-7 million abortions conducted annually are conducted in authorized facilities and by certified providers (Chhabra and Nuna 1994), and 8 per cent of all maternal deaths are attributed to unsafe abortion (Registrar General, India 2006). While available evidence suggests that abortion seekers in India are typically married, multiparous and aged 20-29, significant minorities are young, unmarried and nulliparous.

Insights about the age and marital status profiles of abortion-seekers have been both community-based and facility-based and come largely from studies focused on all abortion-seekers rather than young or unmarried abortion-seekers in particular. For example, several facility-based studies of abortion-seekers of all ages suggest that adolescents (below 20) or young women (below 25) constitute considerable but varying proportions of all abortion-seekers: 27 per cent of all abortion-seekers in Sevagram, Maharashtra (Chhabra et al. 1988), 30 per cent of those in Solapur, Maharashtra (Solapurkar and Sangam 1985), 5 per cent and 40 per cent of those aged under 20 and under 25, respectively, in Delhi hospitals (Dhall and Harvey 1984) and 67 per cent of those seeking to terminate their first pregnancy in Manipur (Devi et al. 2007). Likewise, a community-based study of abortion-seekers in rural Maharashtra reports that young women aged 15-24 constituted over half of abortion seekers in the area (Ganatra and Hirve 2002).

Some studies have also reported the marital status of young abortion clients. One community based study suggests that just 6 per cent of young abortion-seekers were unmarried, likely an underestimate (Ganatra and Hirve 2002). Facility-based studies report higher percentages, ranging from 15 per cent to 90 per cent of all adolescent or young abortion-seekers (Aras and Pai 1987; Trikha 2001; Salvi et al. 1991; see Ganatra 2000 for a review). A study in Manipur that focused on those seeking to terminate their first pregnancy, found that 76 per cent of these nulliparous abortion-seekers were unmarried (Devi et al. 2007). A study of adolescent abortion seekers aged 14-19 in Rohtak, Haryana, observed that 90 per cent were unmarried (Trikha 2001).

A few studies have compared abortion-seeking experiences of married and unmarried young women. Those that have done so have focused on the timing of abortion and highlight that the unmarried are indeed more vulnerable than the married (Ganatra 2000, Dalvie, 2008). For example, in a study in Mumbai, Maharashtra, and while as many as 59 per cent of unmarried adolescents sought second trimester abortion; fewer married adolescents (26 per cent) had done so (Aras et al 1987). Even in rural areas, as many as 72 per cent of unmarried abortion seekers, mostly adolescents, delayed seeking services until the second trimester, compared to 43 per cent of married abortion seekers (Chhabra et al 1988).

Other abortion-related experiences encountered by unmarried adolescents are less well studied. Evidence from a community-based study in Pune district suggests that large numbers of unmarried young women reported that pregnancy occurred as a result of non-consensual sex. Many had, moreover, sought termination from an unqualified provider, travelled a long distance to obtain the abortion and held concerns about confidentiality to be paramount in determining choice of partner (Ganatra and Hirve 2002). Other experiences noted have been delayed recognition of pregnancy and limited awareness of locations of appropriate services, limited involvement in abortion-related decision-making, fear of stigma and resulting preference for confidential rather than safe services and lack of family and partner support (Ganatra 2000).

3. Study setting

The study was located in Bihar and Jharkhand, two neighbouring states that lag behind other states in India on most indicators of development, including those available for sexual and reproductive health. Compared to India as a whole, women in Bihar and Jharkhand marry early, are less likely to practise contraception and are less likely to have access to pregnancy-related care -- factors that exacerbate young women's vulnerability. Access to health services is limited and quality, by and large, indifferent.

The study was located in clinical settings of the NGO Janani, a DKT International affiliate that operates in both Bihar and Jharkhand and provides a range of reproductive health services through a network of facilities and outreach activities. Its clinics are certified under the Medical Termination of Pregnancy (MTP) Act to provide abortion and each clinic has at least one doctor who is registered to provide abortion. Janani is a major provider of abortion services in these states. First and second trimester abortion is provided, both medical and surgical abortion services are available, and services are fee-based. For example, abortion clients are charged less than \$10 for the procedure as well as all related tests and post-abortion medication. The study was conducted among young women seeking abortion at 16 clinics of Janani.

4. Data and methods

The study was undertaken among consenting young women who reported no previous pregnancies or live births. Although the study recruited its participants from 16 clinics, we acknowledge that effectively, recruitment took place from only 8 clinics, which, together accounted for as many as 91 per cent of all adolescent abortion-seekers (based in Arria, Gaya, Patna and Purnea, Bihar and Hazaribagh, Jamshedpur, Latehar and Ranchi, Jharkhand). The study involved a survey of abortion-seekers as well as in-depth interviews with some 27 survey respondents. This paper focuses on findings from the survey.

While we acknowledge that young women drawn from a facility based study are not likely to be representative of unmarried abortion seekers more generally, we did so for several reasons. First, experience has shown that the unmarried rarely disclose abortion experiences in community based studies, making a facility-based study a better option for a study of abortion among the unmarried. Related to this, given the stigma attached to pregnancy among the unmarried, unmarried abortion-seekers were more likely to be comfortable to discuss their abortion-seeking experiences in a trusted facility setting than within the home or neighbourhood of residence. Second, by locating the study in clinic settings, access to ready counselling services for those respondents who might have found either the experience of accessing abortion or narrating their abortion experience painful was available.

In respect of women's privacy and confidentiality, Janani does not obtain information on marital status from its abortion clients, but do collect information on previous pregnancies and births. Hence, all young women aged 24 or younger who had not had a previous pregnancy or a previous birth, irrespective of their marital status, were invited to participate in the survey. Interviews were conducted following the abortion procedure at a time and place indicated by the respondent and usually took place within the clinic setting prior to discharge. In the course of the interview, marital status was probed. It is well-known that in India, pre-marital sex and pregnancy among the unmarried are highly stigmatised – indeed, many unmarried young abortion-seekers attending Janani clinics report that they are married, some even wear the *mangalsutra* typically worn by the married to reconfirm that they will be perceived as married. Several measures were taken to obtain accurate reporting of marital status: interviewers were young and well-trained to

build rapport with young clients, questions relating to marital status were posed towards the middle of the questionnaire, when young women were more relaxed and rapport more likely to have been achieved. At the conclusion of the interview, moreover, all respondents (irrespective of whether they had reported themselves as unmarried) were asked to record their marital status, anonymously, on a form which they then returned to the interviewer in a sealed (but linked) envelope. If the young woman reported that she was unmarried either in the face-to-face interview or the sealed envelope, she was defined as unmarried. The sample thus comprised a total of 549 young women who identified themselves as unmarried and 246 young women who reported themselves as married. Despite our efforts, we acknowledge that some of the 246 young women who reported they were married may have actually been unmarried.

Refusal rates were negligible. In total, just less than 1 per cent (6 young women) refused to provide information.

The survey explored both the circumstances of the pregnancy that young women had just terminated as well as the abortion experience. A number of questions were posed that related to the abortion experience. Young women were asked when, in the course of the pregnancy, they recognised that they were pregnant, when the decision to seek abortion was made and when the abortion at Janani was experienced. Questions were asked to elicit the young woman's participation in the decision to seek abortion, notably whether she had participated in or had been excluded from decision-making. We also sought to explore factors considered important in making the decision on choice of facility, varying from reputation of the facility to promise of confidentiality and distance from home – through these we were able to assess how important a role confidentiality and the fear of disclosure played in determining where the abortion would occur. A number of questions were asked, moreover, about previous attempts to terminate the pregnancy and use of unsafe methods or unqualified providers – at best, a previous attempt is likely to have delayed the actual abortion, at worst, resulted in complications. Finally, questions were posed about support from the partner, family members or friends; questions probed whether the young woman had informed the partner, family member or other individuals, and whether these individuals had provided emotional support or had accompanied the young woman to the Janani facility.

5. Socio-demographic profile of unmarried and married young abortion-seekers

Table 1 describes the socio-demographic profile of unmarried and married adolescents and young women seeking abortion services at Janani facilities. We note that more than two-thirds of adolescent and young women aged 15-24 who sought abortions in these 16 clinics were unmarried.

The unmarried tended to be younger than the married: while 51 per cent of the unmarried were adolescents (15-19) and one in six were less than 18 years old, just 34 per cent and 5 per cent of the married were adolescent and aged less than 18, respectively. Abortion seekers were generally well-educated, having completed at least 10 years of education. However, unmarried abortion seekers were less educated, on average, than the married: one-quarter of the unmarried, compared to 16 per cent of the married, had less than 8 years of education. At the time of interview, 21 per cent of both groups indicated that they had worked for either cash or kind in the last year. Finally, the majority came from urban areas (80 per cent), either the city or town in which the facility was located, or a neighbouring town. Findings of a state level study of youth highlight that young abortion-seekers visiting Janani clinics were broadly similar to urban young women – and quite different from all young women -- residing in these states in terms of socio-economic characteristics. For example, the state level study observed that 10-15 per cent of urban

young women (and 27-30 per cent of all young women) were engaged in paid work and 40 per cent of urban young women (and fewer, 13-16 per cent of all young women) had completed at least 10 years of education (IIPS and Population Council, 2009a, 2009b, forthcoming).

Pathways to induced abortion among unmarried young women-Are the married more vulnerable than the married?

Table 1: Socio-demographic profile of unmarried and married young abortion-seekers

Socio-economic profile	All	Unmarried	Married
	N=795	N=549	N=246
Marital status			
Unmarried (%)	69.1	--	--
Age (%)			
15-17	13.3	17.3	4.5
18-19	32.5	33.7	29.7
20-21	28.6	27.0	32.1
22-24	25.7	22.0	33.7
Median age	20	19	20
Educational attainment			
Years of school completed (%)			
None/1-4	14.6	16.2	11.0
5-7	7.8	9.1	4.9
8-10	26.5	26.8	26.0
11+	51.1	47.9	58.1
Mean years of education	9.7	9.4	10.5
Work status			
Working for cash/kind in last 12 months (%)	20.9	20.9	20.7
Rural-urban residence			
Urban (%)	79.5	78.3	82.1

6. The nature of sexual relations resulting in unintended pregnancy

Partners of these young women varied. The partner was overwhelmingly the husband (97 per cent) among the married and the boyfriend or fiancé (77 per cent) among the unmarried. Other partners included a family member (9 per cent and 2 per cent of the unmarried and married, respectively), or a neighbour, acquaintance, colleague, teacher or employer (14 per cent and 1 per cent, respectively).

For most young abortion-seekers, sexual relations that resulted in the unintended pregnancy were consensual. As expected, however, relations were far more likely to have been forced among the unmarried than the married: Indeed, 18 per cent of the unmarried abortion-seekers reported that the pregnancy had resulted from a forced sexual encounter, compared to significantly fewer, 2 per cent, of the married.

Reasons for undergoing abortion also varied. Among the unmarried, the leading reason was that they were unmarried (92 per cent), that the pregnancy had resulted from a forced encounter (11 per cent) and that they wished to continue their education (13 per cent). Among the married, the leading reason was that they were too young or that the pregnancy had resulted too soon after marriage (51 per cent), perhaps reflecting concerns about a pre-marital pregnancy. Large proportions (37 per cent) also reported economic reasons (could not afford a child at that

time or needed to work), desire to complete their education (33 per cent), and that the partner or family did not want a child at that time (22 per cent).

Table 2 The nature of sexual relations resulting in unintended pregnancy

Socio-economic profile	All	Unmarried	Married
	N=795	N=549	N=246
Person with whom relations were experienced (%)			
Boyfriend/fiancé/husband	82.9	76.5	97.2
Family member	6.9	9.1	2.0
Neighbour	4.2	5.8	0.4
Acquaintance, including from outside neighbourhood/village of residence	3.8	5.5	0.0
Colleague	1.0	1.5	0.0
Teacher/employer	1.3	1.6	0.4
Nature of sexual relations			
Non-consensual (%)***	12.7	17.5	2.0
Reasons for abortion			
Unmarried*	--	91.8	NA
Pregnancy from forced sex	--	10.9	1.2
Wanted to continue studying	--	13.1	32.5
Too soon after marriage, too young	--	--	50.8
Partner, family did not want	--	--	22.4
Economic reasons	--	--	37.0

*includes those reporting “did not want to raise a child alone”

7. Abortion pathways: indicators of abortion-related vulnerability

Table 3 lists indicators of abortion-related vulnerability available in our data-set and highlights that the unmarried were far more vulnerable in almost all of these respects than the married.

Delayed recognition of pregnancy:

Respondents were asked when they had realised, in weeks or months of pregnancy, that they were pregnant. While differences are narrow, unmarried young women were less likely than the married to recognize the pregnancy promptly. Just two-thirds of all young women recognised that they were pregnant by the second month of pregnancy (before missing the second menstrual cycle) and marital status differences were narrow (66 per cent and 61 per cent of the unmarried and married, respectively). However, 14 per cent of all young women – now significantly more unmarried than married -- did not recognize that they were pregnant until the third month of pregnancy or later. On average, the unmarried recognized the pregnancy one week later than did the married (7 versus 6 weeks). The typical reactions to this recognition were fear, anxiety and guilt, reported by 70 per cent, 80 per cent and 18 per cent, respectively, of the unmarried and 14 per cent, 44 per cent and 3 per cent of the married (not shown in tabular form).

Exclusion from and delayed decision-making:

Once the pregnancy was recognized, making the decision regarding abortion and provider or facility resulted in further delays among both groups. Respondents were asked whether they had been involved, either independently or along with the partner or any other individual in the

decision on whether and where to seek abortion, and when the decision was made, in terms of weeks or months of pregnancy. Most young women (81-83 per cent) participated in abortion-related decisions; indeed, in this respect, differences between the unmarried and the married were insignificant. We note however that we did not explore in detail the nature of the young woman's role in decision-making and that it is likely that the woman plays a passive role, more in the nature of accepting the alternative offered to her than expressing her views (Ganatra, 2000). Among the unmarried, in addition, 14 per cent reported that their parents had made the decision on their own, and 4 per cent reported that the partner had made the decision on his own. Among the married, just 5 per cent reported that their parents or parents-in-law had made the decision on their own, and 12 per cent that their husband had done so.

Respondents were asked when, in their pregnancy, the decision had been made that they should seek an abortion. Findings suggest that the decision to abort the pregnancy was taken about one week following its recognition for both groups (at 8 weeks among the unmarried and 7 weeks among the married). More than one-quarter of the unmarried, and one-fifth of the married made the decision to terminate the pregnancy in the third month of pregnancy or later.

Fear of disclosure and importance of confidentiality:

Respondents were asked about the leading factors that influenced the choice of facility or provider. While the leading factor indicated was the reputation of the facility or provider (reported by 66 per cent and 71 per cent of the unmarried and married, respectively, not shown in tabular form), unmarried young women were far more likely than the married to cite assurance of confidentiality as a leading reason (52 per cent compared to 18 per cent).

Selection of a distant facility:

In order to assess the extent to which the unmarried may have been more likely than the married to opt for a facility located far from home, as a means to ensure confidentiality, respondents were asked about the time taken to reach the Janani facility from their home. As shown in Table 2, for 18 per cent of the unmarried and significantly fewer (5 per cent) of the married, the Janani facility was located two or more hours away from their home, highlighting the priority placed by the unmarried on seeking abortion from a facility far from home, again in order to ensure that community members do not come to know about their abortion.

Previous efforts to terminate the pregnancy:

More than one-quarter of all young women in our sample had made unsuccessful attempts to terminate the pregnancy before arriving at the Janani clinic. As expected, significantly more unmarried than married young abortion-seekers had done so: 28 per cent of the unmarried compared to 18 per cent of the married had made at least one previous attempt. Previous unsuccessful efforts to end the pregnancy by and large involved oral medication. For example, many young women – 22 per cent of the unmarried and 11 per cent of the married -- had made just one previous attempt to terminate the pregnancy using oral medication obtained from a chemist. Although information on the exact medication obtained is not available, other studies in these states have noted that abortion-seekers frequently obtain the mifepristone-misoprostol combination without the required prescription, as well as a variety of Ayurvedic and other drugs (see also Ganatra et al. 2005). A small proportion (4-5 per cent) of abortion-seekers made two or more unsuccessful attempts to terminate the pregnancy before attending the Janani clinic. Efforts typically included oral medication obtained from the chemist along with treatment provided by other registered or unregistered medical practitioners, home-made concoctions and insertion of

herbs etc. Not a single woman reported a previous surgical intervention. Marital status differences were not observed.

Lack of partner support:

Respondents were asked whether they had informed the partner about the pregnancy, whether the partner provided emotional support once informed, and whether the partner had accompanied the young woman to the facility.

Marital status differences were significant. Just three in four unmarried young women felt comfortable enough to inform their partner about the pregnancy (77 per cent) compared to almost all of the married (98 per cent). Partners typically provided emotional support, however, once again, the unmarried were less likely than the married to so report (72 per cent and 96 per cent, respectively). While fewer respondents reported that the partner had accompanied them to the Janani facility on the day of abortion, once again, fewer unmarried than married young women so reported (57 per cent and 84 per cent, respectively). Finally, just over half of the unmarried (55 per cent) compared to four-fifths of the married (80 per cent), reported that the partner had both provided emotional support and had accompanied her to the facility.

Fewer than one-third of the unmarried and fewer than half of the married had confided in a family member or friend (not shown in tabular form). As shown elsewhere (Kalyanwala et al. 2008), among the unmarried, those whose partner was unsupportive were most likely to report that they had informed their mother (very few had informed their father), a female relative or a friend.

Second trimester abortion:

As many studies have shown, a considerable proportion – one-fifth --of young abortion-seekers had delayed the termination of their pregnancy until the second trimester. The unmarried were significantly more likely to have done so than the married: one-quarter of the unmarried, compared to 9 per cent of the married had delayed the abortion until beyond 12 weeks of pregnancy. The unmarried underwent abortion, on average, at 10 weeks of gestation compared to 8 weeks among the married.

Table 3: Indicators of abortion-related vulnerability among unmarried and married young women

	All (N=795)	Unmarried (N=549)	Married (N=246)
Timing of recognition of the pregnancy¹			
>1 months of pregnancy (%)	63.9	65.5	60.6
>2 months of pregnancy (%)***	13.7	17.3	5.7
Mean number of weeks***	6.5	6.9	5.5
Decision-making			
Participated in the decision (%)	81.3	80.7	82.5
Excluded from the decision (%) ²	18.7	19.3	17.5
Parents/parents-in-law made decision independently (%)***	11.3	14.2	4.9
Partner/husband made decision independently (%)***	6.7	4.2	12.2
Decision made at >2 months of pregnancy ¹ (%)*	24.9	27.4	19.5
Mean number of weeks when decision was made ¹ ***	7.8	8.1	7.0
Fear of disclosure			

Confidentiality a priority (%)***	41.3	51.9	17.5
Selected facility far from home (%)*** (>=90 minutes)	21.9	25.9	13.0
Selected facility far from home (%)*** (>=120 minutes)	13.7	17.7	4.9
Unsuccessful previous efforts to abort			
Made one previous attempt to abort (%)**	24.4	27.5	17.5
One attempted with chemist (%)***	18.5	22.0	10.6
One attempted with non-chemist (%)	5.8	5.5	6.9
Made two or more previous attempts to abort (%)	4.8	5.1	4.0
Partner support			
Informed the partner (%)***	83.6	77.4	97.6
Partner provided emotional support (%)***	79.2	72.0	95.5
Partner accompanied to the facility (%)***	64.9	56.5	83.7
Partner did both (%)***	62.3	54.5	79.7
Timing of abortion			
2 nd trimester (%)***	20.4	25.3	9.4
Mean number of weeks	9.3	10.0	8.0

* p<0.05, ** p<0.01, ***p<0.001

¹one case missing

²others (health care providers, other relatives) made the decision for 27 women, including 9 married and 18 unmarried young women.

8. Influence of marital status on abortion related vulnerability

In order to assess factors associated with indicators of abortion-related vulnerability discussed above, logistic regression analyses were performed that explored the association between marital status and each such indicator, controlling for such potential confounding factors as age, education, work status and rural-urban residence. Findings show that unmarried young women were significantly more likely than their married counterparts to have considered confidentiality a leading factor in the choice of abortion facility, opted for a distant facility, made at least one unsuccessful attempt to abort, lacked partner support and undergone a second trimester abortion at Janani. In contrast, marital status was not associated with delayed recognition of the pregnancy into the second month of pregnancy or later, or with whether or not the young woman participated in abortion-related decision-making (Table 4).

Several socio-demographic factors were also significantly associated with indicators of abortion-related vulnerability. Younger women, less educated women and rural women were significantly more likely than other women to have delayed the decision to terminate the pregnancy, to lack partner support and experience second trimester abortion, for example. At least two of these factors were associated, in addition, with young women's participation in the decision to seek abortion, the importance of confidentiality and selection of a distant facility for abortion.

Table 4: Influence of socio-demographic factors on indicators of abortion-related vulnerability: Odds ratios from logistic regression analyses

	Recognised pregnancy in second month or later (two missed periods or more)	Excluded from abortion decision making	Took decision on abortion after 2nd month of pregnancy	Confidentiality important in determining facility	Selected facility more than two hours from home	Previous attempts made to terminate this pregnancy	Lack of partner support#	Second trimester abortion
Number	795	795	795	795	795	795	795	795
Socio-demographic factors								
Age of the respondent	0.936	0.864**	0.853***	0.879**	0.923	1.031	0.888**	0.878**
Years of education	0.893***	0.900***	0.890***	1.002	0.938*	0.973	0.864***	0.901**
Currently working (No=0)	0.999	0.607	0.895	0.981	1.046	1.095	0.860	1.151
Rural place of residence (Urban=0)	1.644*	1.177	2.814***	2.739***	2.152***	0.847	2.047**	3.043***
Marital status: unmarried (Married=0)	1.058	0.861	1.158	4.790***	3.571***	.776**	2.980***	2.725***
Constant	18.624***	11.810*	14.508**	2.261	0.386	0.198*	9.982**	2.638*
-2LL	966	704	751	938	570	947	865	664
R ²	0.118	0.123	.0241	0.217	0.144	0.023	0.287	0.254
N	795	795	794	795	795	795	795	795

* p<0.05, ** p<0.01, ***p<0.001

Partner did not provide emotional support and/or did not accompany respondent to the clinic

In order to explore the extent to which the combination of being unmarried and experiencing abortion-related vulnerability exacerbates the risk of second trimester abortion as compared to the married, logistic regression analyses were performed. Individual regression analyses assessed how the interaction between being unmarried and experiencing each indicator of vulnerability described in Table 4 affected whether or not the abortion was conducted in the second trimester, relative to married women (the reference category). We exclude from the analysis the timing of decision-making as it was closely correlated with the timing of abortion. Confounding factors, such as age, education, work status and rural-urban residence were controlled.

Findings, presented in Table 5, suggest that being unmarried heightened the risk of second trimester abortion irrespective of whether other indicators of vulnerability were experienced. For example, compared to married young women, even unmarried young women who participated in abortion-related decision-making, who did not consider confidentiality to be a priority, who opted for a facility relatively close to home, and who made no previous attempts to terminate the pregnancy were significantly more likely than married young women (the reference category) to undergo second trimester abortion (odds ratios ranging from of 2.18-2.99). Unmarried young women who recognised the pregnancy by the second month and those who received partner support were about as likely as married young women to undergo second trimester abortion (odds ratios of 0.80 and 1.55, respectively).

Unmarried young women who faced abortion-related vulnerabilities fared far worse. They were, for example, 3-5 times more likely than married young women to undergo second trimester abortion if they failed to recognise pregnancy by the second month (odds ratio 3.9), if they were excluded from decision making (odds ratio 4.5), if they considered confidentiality important (3.1), if they opted for a distant facility (odds ratio 4.3), if they made previous unsuccessful attempts to terminate the pregnancy (odds ratio 2.2) and if they did not obtain partner support (odds ratio 4.3), even after controlling for the effects of age, education, rural-urban residence and work status.

Findings confirm that being unmarried itself is a risk factor, but that both being unmarried and experiencing vulnerability clearly exacerbate the risk of experiencing second trimester abortion.

Table 5: Influence of being unmarried and experiencing abortion related vulnerabilities on second trimester abortion: Odds ratios from logistic regression analyses

Abortion related vulnerabilities	Odds ratio#	Confidence interval (5%)
1. Delayed recognition of pregnancy (>1 m)		
Married young women	R	
Unmarried young women, recognized early	0.802	0.783 - 0.821
Unmarried young women, delayed recognition	3.914***	3.850 - 3.979
2. Abortion-related decision making		
Married young women	R	
Unmarried young women, made decision	2.332**	2.294 - 2.371
Unmarried young women, excluded	4.521***	4.432 - 4.613
3. Confidentiality a priority		
Married young women	R	
Unmarried young women, no	2.339**	2.297 - 2.381
Unmarried young women, yes	3.100***	3.047 - 3.155
4. Selected facility far from home (>90 min)		
Married young women	R	
Unmarried young women, no	2.180**	2.144 - 2.218
Unmarried young women, yes	4.255***	4.176 - 4.336
5. Unsuccessful previous attempts made		
Married young women	R	
Unmarried young women, no	2.993***	2.943 - 3.044
Unmarried young women, yes	2.230**	2.188 - 2.274
6. Lack of partner support		
Married young women	R	
Unmarried young women, received support	1.553	1.524 - 1.582
Unmarried young women, no support	4.346***	4.271 - 4.422
N	795	

* p<0.05, ** p<0.01, ***p<0.001

Separate regression analyses were performed that included each indicator of abortion-related vulnerability as well as age, education, work status and rural-urban residence

9. Limitations

We acknowledge several limitations of this study. First, we had opted for a facility-based study because community-based studies in India have failed to provide reliable information on abortion-seeking among the unmarried, but recognise the limitations of a facility-based approach. Findings cannot be generalized to all young abortion-seekers. Indeed, educational attainment and work status suggest that young abortion-seekers were clearly better educated and less likely to be economically active than young women in these states more generally. Second, the design does not shed light on abortion-related complications and morbidity. Third, the study excludes young women who may have successfully aborted by taking the mifepristone-misoprostol combination

obtained from a chemist shop, or who may have obtained abortion from an untrained provider or, indeed, may have been unsuccessful in terminating the unintended pregnancy and had to carry it to term. Fourth, we recognise that notwithstanding our highly skilled interviewers who were able to build rapport easily with respondents, and despite the opportunity to report marital status anonymously, some unmarried young women may have concealed their marital status, resulting in somewhat blurring real distinctions between the married and the unmarried. Fifth, because for many, the interview was conducted shortly after the surgical procedure, the number of questions posed was limited and details of such important processes as decision-making, experiences of earlier efforts to abort the pregnancy and measures taken to avoid disclosure could not be included in the survey, but were, rather, addressed in in-depth interviews. Finally, we caution readers that our study focuses on young women who have no previous births and therefore findings are not representative of abortion-seekers more generally.

10. Discussion

The objective of this paper was to describe and compare the experiences of unmarried and married adolescents and young women (aged 15-24) who sought to terminate their first pregnancy at established clinics and to better understand their vulnerabilities and the pathways to abortion that they followed. While admittedly the sample is not representative of all young abortion seekers, findings highlight that the large majority of young women who seek to terminate their first pregnancy are indeed unmarried.

Findings also underscore that although married young women are vulnerable in many respects, unmarried adolescents and young women who experience unintended pregnancy are considerably more vulnerable than the married. For one, partnership characteristics were very different, with the unmarried far more likely to report non-consensual sexual relations than the married and reporting their unmarried status as the key reason for abortion compared to economic reasons, concerns about pregnancy soon after marriage or at a young age, and partner or family insistence.

Second, pathways were also very different. After adjustment for a range of socio-demographic confounders, findings have confirmed that the abortion-seeking pathways of the unmarried were fraught with many more obstacles than were those of the married. Compared to the married, the unmarried were more likely to fail to recognise the pregnancy promptly, to fear disclosure and consider confidentiality paramount in the decision on choice of provider and facility and make unsuccessful previous attempts to terminate the pregnancy.

Third, findings suggest that delayed abortion – clearly the most potentially life-threatening abortion-related vulnerability – is significantly more likely to be experienced by the unmarried than the married, even after holding socio-demographic factors constant. The worst off group were those unmarried young women who also experienced other dimensions of vulnerability – whether delayed recognition of pregnancy, lack of partner support, exclusion from decision making, concerns about confidentiality and choice of distant facilities or unsuccessful previous attempts to terminate the pregnancy.

In conclusion, this study confirms that unintended pregnancy among unmarried young women is not unknown in Bihar and Jharkhand, and that unmarried young abortion-seekers are far more vulnerable than married young abortion-seekers. They are more likely to face obstacles in exercising their right to, and in securing, safe and timely abortions. Obstacles faced by the unmarried require attention at the individual, partner, family, and health system and policy levels. At the individual level, findings highlight the need to provide young women, and the unmarried

in particular, sound reproductive health education and access to contraception so that they can protect themselves from unintended pregnancies. In addition, the unmarried must be made aware about signs of pregnancy, the importance of early recognition and their legal right to obtain abortion services. At the partner level, it is important that young men are sensitised about gender role attitudes, ensuring safe sex and the importance of supporting their partner in case of unintended pregnancy. At family level, it is important that programmes encourage a more open and supportive relationship between parents and daughters, including if unintended pregnancy is experienced. At health system level, youth-centered programmes and services are needed that are sensitive to issues of pre-marital sex, including sexual coercion, unintended pregnancy and the need for abortion among the young. Providers must be trained to understand the provisions of the law with regard to the rights of the unmarried to secure abortion and about women's right to obtain abortion confidentially; efforts must also be made to ensure that providers do not stigmatise the unmarried, that they maintain their confidentiality and that they provide them sensitive counselling and non-judgemental services. At policy level, findings highlight the need to recognise unmarried young women as a highly vulnerable group and ensure the realisation of their right to obtain safe abortion services including safe second trimester abortion services.

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