

Safe Abortion Services in Nepal: Initial Years of Availability and Utilization

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Abstract

Introduction: Following the liberalization of the very strict Nepalese abortion law in 2002, the first services for safe induced abortion were introduced in 2004 at the nation's largest women's hospital. This paper examines the client profile, the context of demand for services, affordability and satisfaction with services.

Data and Methods: Data for the analysis came from a survey of women who presented themselves at the hospital for induced abortion services and subsequently received the services.

Results: Based on a survey of 672 clients, the median age was 26, and most women were married with an average of two living children. The majority reported being impregnated by the husband. Nearly three out of five gave their primary reason for termination as already having the number of children desired; another 42% cited finances. About two-thirds made the decision to abort jointly with the male partner. Most were satisfied with the services received and expenses incurred. About two-fifths reported having used a modern contraceptive method at the time the unwanted pregnancy occurred, while 22.6% reported practising either the safe-period or withdrawal methods.

Conclusion: The clinic has provided affordable, quality abortion services to women in need. Findings also suggest that many areas need services strengthened, including the continued role of the family planning program in preventing unintended pregnancies.

Introduction

In March 2002 the national parliament of Nepal passed a bill that amended various sections of the *Muluki Ain* (national Legal Code) of 1963, effectively liberalizing the very strict, decades-old abortion law. In September of that year, the bill became a law. The road to reform of the abortion law was a long one, spanning over three decades (Thapa 2004). The primary rationale for the liberalization of the law was to improve maternal health and well-being. The new law permitted termination of an unwanted pregnancy on all grounds, thus making Nepal one of the 55 countries in the world where abortion “on request” is permitted (United Nations 2007).

As amended, the Legal Code grants the right to voluntary termination of pregnancy to all women, without regard to their past or present marital status, on the following grounds (but with one important exception): the right to voluntarily terminate a pregnancy of up to 12 weeks; the right to terminate a pregnancy of up to 18 weeks if the pregnancy was due to rape or incest; the right to seek abortion upon the advice of a medical practitioner at any time during a pregnancy if the pregnancy posed a danger to the woman’s life or her physical or mental health, or in cases of fetal abnormality or impairment. The important exception to the right to voluntary termination of pregnancy applies to cases where it is used for the purpose of sex selection. Amniocentesis is similarly prohibited for purposes of sex determination for abortion. Anyone found guilty of performing amniocentesis, or causing it to be performed, for such purposes is to be punished with imprisonment for three to six months. Anyone found guilty of performing or causing to be performed an abortion on the basis of sex selection is to be punished with one additional year of imprisonment. In addition to the above clauses, the law also specifies that the consent of the husband or guardian is not required if the woman seeking abortion is 16 years of age or older. For abortion-seeking women under 16, however, the “guardian” providing consent can include any adult friend or a family member.

Subsequent to the amendment of the Legal Code, the Ministry of Health took on the leadership role to develop both institutional and human capacities for providing services to those seeking abortions. It took several months for the Ministry to develop the guidelines and procedures for implementing the new law. In 2004, the government introduced abortion services at the Maternity Hospital, the nation’s largest, quasi-public women’s hospital in Kathmandu, the capital.

As of February 2005, over 61 clinics –representing both the public and private sectors – were expanded to provide the services (see Table 1). Nearly 7500 women obtained abortions during the 11 months following the introduction of the services in March 2004. Of the total, nearly 57% of the clients obtained the services from a government facility. The Maternity Hospital alone had 2874, or 68%, of the clients at the public facilities. This represented 39% of the clients of both the public and private/commercial sectors. Thus, among all the clients, two out of every five received services from the Maternity Hospital.

Table 1. Safe abortion service facilities, staff, and clients: March 2004 to February 2005, all Nepal

Facility type	Total no. of facilities	Total no. of facilities with services started	Median (average) time of establishment of services ^a	Total no. of physicians trained	Total no. of staff nurses trained	Total no. of clients
Public ^b	40	18	7.0 (6.8)	98	69	4245
Private/commercial ^c	21	18	6.5 (5.7)	32	20	3217
All	61	36	7.0 (6.3)	130	89	7462

Note. Data on clients are based on 61 facilities for which records as of February 2005 were reported to the Ministry of Health in March 2005.

^aAmong the clinics (n = 39) that had services started as of February 2005.

^bIncludes District, Zonal and Teaching hospitals.

^cIncludes clinics run by the Family Planning Association, Marie Stopes and a few private teaching hospitals.

The establishment and strengthening of the service delivery system, including training of human resources, has been gradual (Shakya et al. 2004). The guiding principle has been to make services available and accessible throughout the country in accordance with a carefully formulated strategy that aims to put into practice lessons learned from programs in other countries (e.g., India or Bangladesh) and to provide effective as well as efficient services to clients. As of February 2005, 36 of the 61 clinics that were upgraded to provide services had started offering the safe abortion option. A total of 130 physicians and 89 nurse assistants were trained to provide the services. The majority of these trained providers – 75% and 78% of the physicians and nurses, respectively – represented the public sector facilities.

Most of the previous research about women seeking a termination or attempting to terminate an unplanned, unwanted pregnancy in Nepal was undertaken before abortion was legalized. A few of these studies focused on women coming to a hospital with incomplete or abortion-related complications (Thapa et al. 1992, 2004; Tamang et al. 1999); one study examined women seeking a termination from a trained provider at a private clinic (Thapa and Padhye 2001); and another aimed to understand the situation in several rural settings in the country (Thapa et al. 1994). One of the principal findings from these previous investigations was that the desire for a small family size had emerged in urban Nepal, and the primary reason for seeking to terminate an unwanted and unplanned pregnancy was to maintain a small family. The overwhelming majority of women seeking a termination were married (in contrast to out-of-wedlock pregnancies).

Very little information existed about clients seeking to terminate an unwanted pregnancy after abortion was legalized in the country. Accordingly, not much systematic information existed on the profile of the women who were coming to the abortion clinics for services, their context for seeking termination of the pregnancy, how the services that have been put in place were being received by the women and, more importantly, whether the services being established were meeting these women's needs. Information relating to these questions is essential for strengthening the quality of services being provided.

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With increasing numbers of abortion service users turning to the Maternity Hospital, it was deemed important to understand the profile of the women who sought and obtained services during those initial years. Who is using the services? What are the context and reasons for seeking services? What are the clients' prior experiences with contraceptive use? What are their views on the cost of the services? And, finally, what are their perspectives on the quality of care and the services? These service-delivery-related questions provided motivation for undertaking a study among clients at the Maternity Hospital. It was hoped that the information would provide a basis for fine-tuning the delivery of services. This paper presents salient results from the study.

Data and Methods

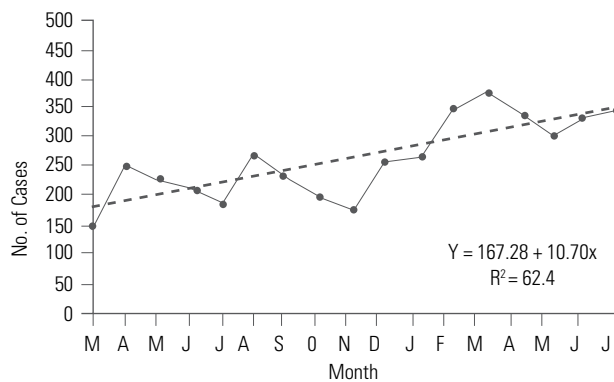
A survey was the primary data source for this analysis. The survey was conducted to examine the profile of clients who presented themselves for services at the abortion clinic in the hospital. Because the Maternity Hospital had a large share of all the clients who received abortion services and because it has been the main referral hospital in the country, we purposefully selected this hospital for the study. We also decided to undertake the survey several months after the services had been launched in order to allow the hospital to establish management and logistics and thereby minimize initial "noise" in the data collected.

Since the establishment of the services at the hospital, the main criterion for service eligibility has been women with an unwanted pregnancy under 12 weeks of gestational age. The client is treated

as an outpatient and, hence, does not need to be admitted to the hospital. For all clients 16 years of age or older, the only requirement is the woman's own consent. Once registered for the service, the client's history is taken and she undergoes physical examination (other investigations such as the hemoglobin test or grouping are not required), and she is also provided with family planning counselling prior to the procedure. In all the cases, manual vacuum aspiration (MVA) is the procedure used. Following the procedure, the client is kept in the clinic for a one-hour recovery. The client is provided with a contraceptive method if she opted for one, based on the pre-procedure counselling. The total cost for the services at the time of this study was Rs900 (12.56 US dollars) per client.

Eligible respondents for the survey were defined as those who presented themselves at the hospital for induced abortion services and received the services. The objective of the survey was to understand the profile of the women who sought and received these services, including their preferences and perceptions regarding services. The survey was implemented over two months – June 1 through July 31, 2005. The two-months duration was considered adequate for collecting information from 650 to 700 respondents. As shown in Figure 1 below, the volume of cases in the survey period was neither too high nor too low; it fell within the average range.

Figure 1. Monthly number of induced abortions performed at the Maternity Hospital, March 2004 to July 2005 (N = 4481)



Note. The letters on the X-axis refer to month, starting in March 2004 and ending in July 2005. The services started on March 18, 2004. The trend (dotted) line is based on a linear regression. Monthly average = 264 (SD = 68.4).
Data source: Maternity Hospital.

The study protocol was reviewed and approved by the Nepal Health Research Council, the local Institutional Review Board. Four nurses conducted the interviews under the supervision of a senior member of staff; all were given training on the survey contents and the techniques of interviewing with the sensitivity required for clients seeking abortion counselling and services. Many of the questions in the survey instruments were partially open-ended and some were fully open-ended. Responses to these questions were coded later.

A written informed consent was read to each potential respondent, and a verbal consent from each was sought before the interview began. Only a few women refused to participate in an interview. The interview was conducted with the client only, and information pertaining to families or husbands was obtained from the clients themselves. The interview took place either preceding or following the abortion, depending on convenience and time availability. In the case of interviews that took place before the procedure, questions regarding satisfaction with services and immediate complications, if any, were recorded after the procedure was completed. In the paper, descriptive statistics are presented. Multivariate analysis was considered, but not applied.

Results

During the survey period, a total of 680 women who came to the Maternity Hospital seeking induced abortion services were provided with the services. This implied an average of about 14 cases per day, excluding public and other holidays when the clinic remained closed. Of the 680 women, 672 consented to be interviewed. The data in this analysis is, therefore, based on these 672 women.

As shown in Table 2, the overwhelming majority (87.2%) of the women came from within the Kathmandu Valley and the remaining (12.8%) were from outside. Among those from the valley, 40% had travelled less than 5 km. Only a few ($n = 15$, or 2.2%) came alone; about three-fourths were accompanied by their husband (among the married), and either a friend or family member accompanied the rest.

Table 2. Background characteristics of women who sought and received abortion services at the Maternity Hospital, 2005

Characteristic	Percent	N
Distance travelled (km.)		
<5	33.9	228
5-10	45.4	305
11-14	7.9	53
15 or more (outside the capital valley)	12.8	86
Total (N)	100.0	672
Person accompanying the woman (multiple response)		
None	2.2	15
Accompanied by a friend	7.4	50
Accompanied by husband	76.3	513
Accompanied by other family members	15.8	106
Total (N)	-	672
Age group		
16-19	5.8	39
20-24	29.9	201
25-29	34.4	231
30-34	19.2	129
35-46	10.7	72
Mean \pm SD	26.9 \pm 5.5	
Median	26.0	
Total (N)	100.0	672

Table 2. Continued.

Education		
Illiterate	28.4	191
Up to primary (Grades 1–5)	9.8	66
Some secondary (Grades 6–10)	43.9	295
College or higher	17.9	120
Total (N)	100.0	672
Profession		
Housewife/not working	70.5	474
Service (government/private)	9.2	62
Business	7.6	51
Farming/manual work/daily wage	7.3	49
Student/not working	5.4	36
Total (N)	100.0	672

SD = standard deviation.

Approximately two-thirds (64.3%) of respondents were in the 20 to 29 age range. Respondents' ages ranged from 16 through 46 years, with a median age of 26. A little over one quarter (28.4%) of respondents could not read or write, and 43.9% had some secondary level schooling (corresponding to Grades 6–10). Over 70% of respondents reported not working outside the home. A little over 5% were students, while the others were office employees (9.2%), or engaged in business (7.6%) or farming or manual work (7.3%).

Nearly one in ten respondents reported themselves as the primary source of income for their livelihoods. For over 80% of respondents, the husband/partner was the primary source of income. About three-fourths (76%) reported living with their respective spouse/partner; the others were either living with friends or relatives, or with their in-laws (not shown on the table).

Table 3. Marital status and the childbearing profile of women who sought and received abortion services at the Maternity Hospital, 2005

Variable	Percent	N
Marital status		
Unmarried, not engaged	1.8	12
Unmarried, engaged	0.7	5
Married	96.7	650
Divorced/separated	0.7	5
Total (N)	100.0	672

Table 3. Continued.

Whether first pregnancy		
Yes	11.9	80
No	88.1	592
Total (N)	100.0	672
Average number of living children (SD)	1.97 (1.03)	592
Average number of living sons (SD)	1.06 (0.77)	592
Average number of living daughters (SD)	0.91 (0.89)	592
Among those pregnant before, no. of living children by sex		
None alive	10.2	67
One son	17.6	115
One daughter	13.4	88
One son, one daughter	11.9	78
Two sons	4.3	28
Two daughters	23.5	154
Three sons	1.1	7
Three daughters	1.5	10
Two sons, one daughter	4.7	31
Two daughters, one son	4.7	31
All other	7.0	46
Total (N)	100.0	655
Intention to have (a) another child in future		
Yes	28.9	194
No	57.4	386
Not sure	13.7	92
Total (N)	100.0	672

SD = standard deviation.

Table 3 shows respondents' marital status and childbearing profile. Only a small percentage (2.5%) were single/unmarried women, less than 1% were divorced/separated, and the overwhelming majority (96.7%) were married and living with their spouse. (Information on marital status was verified by using multiple questions such as the source of financial support, living situation and the person accompanying them to the hospital.) The majority of women had been pregnant before; the first pregnancy was being aborted for only 11.9%.

We analyzed data on the number of living children by their gender composition to see if a client's decision to seek an abortion was influenced by the gender of living children. Among those who had been pregnant before, the average number of living children was two, with slightly more boys than

girls. About 10% had no children, 17.6% had one son and nearly one-fourth (23.5%) had two living daughters and no sons. Although the average number of children was only two, the majority (57.4%) of women did not want another child. Only 28.9% did want another child in the future, and 14% were unsure about their intention.

Table 4. Circumstances resulting in an unwanted pregnancy and attitude toward it among women who sought and received abortion services at the Maternity Hospital, 2005

Variable	Percent	N
Whether sex was consensual		
Mutual consent	98.4	661
Forced	1.5	10
Not sure	0.1	1
Total (N)	100.0	672
Situation/circumstances resulting in unwanted pregnancy (multiple response)		
Did not think that I would become pregnant	35.1	236
Did not plan to have intercourse at all	4.5	30
Took a chance, knowing that pregnancy might happen	27.4	184
Family planning method used failed	40.9	275
Other	1.0	7
Total (N)	–	672
Primary reason for pregnancy termination (multiple response)		
Unmarried (social stigma)	2.5	17
Do not want any more children	56.1	377
Not now but may be in future	42.1	283
Current child too young	17.3	116
Not the right time due to other reasons	9.2	62
Rape	0.4	3
Other	7.9	53
Total (N)	–	672
What would the woman have done if abortion were still illegal		
Would have sought it through private provider	81.1	545
Would have planned to have the child	15.3	103
Unsure	3.6	24
Total (N)	100.0	672

As shown in Table 4, ten women (1.5%) reported that sex resulting in the current pregnancy had been “forced.” Of the women, 30 (4.5%) reported that they did not plan to have intercourse at all; just over one-third (35.1%) had thought that they would not become pregnant; 27.4% had taken a chance, even though they were aware of the risk of becoming pregnant; and 40.9% reported contraceptive failure, including periodic abstinence and withdrawal.

Only 2.5% ($n = 17$) of the women in the sample reported their unmarried status as the primary reason for seeking to terminate the pregnancy. For the majority (56.1%), the main reason was the desire not to have more children. About two out of five reported that they were currently unable to afford a child, although they might want to have another in the future. About 17% said that they did not want another child right away, as the current child was too young.

When clients were asked what they would have done if abortion was still illegal in the country and the services were not offered at the hospital, 81% said that they would have gone to a private doctor or nurse for the abortion. Only 15.3% would have kept the pregnancy. In response to an open-ended question about perceived consequences if they carried the pregnancy to full term and had the baby, the majority (over 73%) reported that they would not have been able to afford education, nutrition, adequate care and attention, and that another child would have been a “burden” on the woman and her family. Still others said they would not be able to complete their own education, while a few (unmarried ones) said that it would be a social disgrace to have a child before marriage (not shown in a table).

Nearly half of the pregnant women had reached the decision to terminate the pregnancy within the past week and another 44% within the last one to two weeks. Very few had been contemplating the action for more than two weeks. Except for three women (0.4%), all had discussed terminating the pregnancy with another person. About one in ten said they made the decision themselves, and about one-fourth said the decision was made by the person who made them pregnant. For 64%, the decision was made jointly by the woman and her husband/partner (data not shown in a table).

In the survey, we purposely avoided asking direct questions regarding income. We felt many who would be staying in a family or with a spouse may not be able to provide accurate information. However, we inquired about costs associated with the services and price elasticity. The median cost of the travel to the hospital was the modest sum of Rs170 (\$2.39), although there were wide variations (mean = Rs456.3 \pm 745.5). The average hospital charge/fee was Rs1000 \pm 67 (\$14.00).

We also included in the survey a few questions aimed at assessing price elasticity for the services provided and received. The overwhelming majority (97%) said the service charge/fee they had to pay was about right. Only 6 (0.9%) thought it was too high, and these women thought that about one-half of what they actually paid would have been the right amount. Among the 15 (2.2%) who thought the charge/fee was too low, the majority would have been willing to pay up to Rs100 more than what they actually paid.

The majority of women (87.5%) reported that the impregnating person gave them money to pay the hospital charge/fee for the abortion, while 15.8% said they paid most of it on their own. Some reported that they also got financial help from friends or relatives. (The percentages exceed 100 due to multiple responses.)

More than half (56%) of the women had visited the Maternity Hospital before; for the remaining 44%, it was their first time at this particular hospital. As to the source of information for the availability of abortion services, slightly over half (51%) reported “friends who have utilized/obtained services” as their primary source and another 22% said they heard it on the radio or read it in the newspaper. The primary reasons (based on multiple response) for choosing this hospital for the services were “less expensive than other places” (60%), “close proximity to their home” (45%) and “known to be a safe and good place” (19%).

Three out of five women in the survey rated the services being provided “very satisfying, better than expected,” 31% ranked them “mostly satisfying” and 10% ranked them “okay, neither very good nor very bad.” With specific reference to counselling, 63% reported it “very satisfying,” 31% reported it “somewhat satisfying” and only 6% reported it “little or not satisfying at all.”

When asked what the women would have done if the abortion services were not available at this particular hospital, just over half (52%) said they would have gone to another hospital and an additional 42% said they most probably would have gone to a private doctor. The majority (56.4%) reported that before coming to the hospital they had had a pregnancy test or a PV (peripheral vascular) examination to determine that they were pregnant, and 9% suspected that they were pregnant based on their knowledge of signs and symptoms of pregnancy.

As to who made them pregnant, 97.5% reported that it was their husband, 12 (1.2%) reported their regular boyfriend and two (0.3%) reported their casual male friend. Three women (0.4%) reported a rape by army/police and a taxi driver (data not shown in a table).

If the situation had been different, 43.6% would have definitely liked to have the baby, 20.4% were unsure about it and 36% said that they would not have liked to have the baby at all.

The women were asked if they had been using any method of contraception to space or limit their pregnancies and, if so, what the method was. Some women reported having used the “safe period” (periodic abstinence), while a larger proportion of those using the safe-period method also classified themselves as not using any method. This may have been partly due to their lack of understanding of what the interviewers meant by a “modern” method, or it could also have been because they did not consider the safe period a method at all. Similarly, most women who reported using “withdrawal” as a method for preventing pregnancy did not consider it a contraceptive method like birth control pills or condoms. In tabulating the data, we classified those who reported having practised the safe period and withdrawal methods as contraception users, since these women had used both methods – however ineffectively – to space or prevent unwanted pregnancies.

About three out of five women (61.5%) reported using a method to space or prevent their unwanted pregnancy (Table 5). We asked those not using a contraceptive method to specify the main reason for non-use. Responses showed that close to half (45.9%) reported the reason as breastfeeding (duration of breastfeeding was not ascertained). This was followed by ailments and concern for side effects (20.1%), and forgetting to use a method or a delay in getting the supplies (17.4%).

Among users, the largest proportion (38.3%) constituted condom users, followed by withdrawal (24.5%), pills (18.2%) and safe period (10.7%). Other users cited other, more effective methods, including sterilization.

Table 5. Past and future use of contraception among women who sought and received abortion services at the Maternity Hospital, 2005

Variable	Percent	N
Whether contraceptive was used when pregnancy occurred		
Yes	61.5	413
No	38.5	259
Total (N)	100.0	672
Among women who did not use a contraceptive method, reason for non-use		
Forgot to use/delay in obtaining the method	17.4	45
Ill-health/concern for side effects	20.1	52
Breastfeeding	45.9	119
Rape	1.2	3
Other (husband planned to be away, husband's objection, planned to be married, felt too old to be using contraceptives)	15.4	40
Total (N)	100.0	259

Table 5. Continued.

Among women who used a contraceptive method, method used		
Safe period	10.7	44
Withdrawal	24.5	101
Condom	38.3	158
Pills	18.2	75
Injectable	6.3	26
IUD (Copper T)	0.5	2
Norplant	0.2	1
Minilap	0.2	1
Vasectomy	1.2	5
Total (N)	100.0	413
Contraceptive method dispensed at the time of discharge		
Condom	4.0	27
Pills	7.4	50
Injectable	60.3	405
IUD (Copper T)	26.2	176
Not dispensed	2.1	14
Total (N)	100.0	672

IUD = intrauterine device.

Nearly all (97.5%) clients reported having received information about contraceptive methods during the pre-service counselling. At the time of discharge from the hospital, 60.3% of the women left the hospital having had the 3-monthly injectables (Depo-Provera[®]/Sangini[®]), an additional 26.2% had had an intrauterine device (Copper T) inserted, and condoms and pills were dispensed to 4.0% and 7.4% of the women, respectively. Fourteen women were not dispensed any contraceptives (Table 5).

Quality of services was assessed by asking the respondents about their experiences and perceptions and by the number and type of complications immediately following the procedure. (This study protocol did not include any follow-up; hence, we have no information on complications that might have occurred after hospital discharge.)

As part of the quality assessment, we asked about information provided by the clinic counsellor. The counsellor's primary tasks are to make sure the client is fully informed about the procedure, is in a mentally stable condition to undergo the procedure, was not forced into undergoing the procedure and is informed of contraceptive choices and options (Ministry of Health & Population 2007). As to the clients' degree of satisfaction with the counsellor, 63.2% reported that they were "very satisfied," 30.5% were "somewhat satisfied" and 6.3% ($n = 42$) reported "little or no satisfaction at all."

For overall quality of services received, 59.1% reported "very satisfied" (i.e., better than expected), 31.3% were "mostly satisfied" (certain things could have been done better) and 9.5% thought it was "okay" (neither very good nor very bad). Only a very few were "not satisfied at all" with services received. Nearly all (99.6%) expressed that based on their own experiences they would be willing to recommend the hospital to their friends for the services (not shown in a table).

Of all the clients, 14 (2.1%) cases had complications that resulted in delayed hospital discharge (data not shown in a table). Clinical records showed that six cases experienced hemorrhage, two excessive bleeding (>300 ml), two cervical injury and two shock (neurogenic). One case resulted in perforation, and one had an incomplete induced abortion that needed to be repeated. Of these various complications, hemorrhage, perforation and shock may be considered relatively more serious, and together they represented a 1.3% complications rate.

Discussion and Conclusion

At the time induced abortion services were being set up, one of the main concerns raised in the policy and program circles in Kathmandu was whether such a service would encourage premarital or unprotected sexual activity, leading some to seek induced abortion services. While this issue cannot be adequately examined with the current data, the results do show that those who sought services were overwhelmingly married women, most of whom wanted to stop having children. The profile of the women seeking abortion services is similar to that found in previous research (Thapa and Padhye 2001).

Another policy concern was whether introduction of induced abortion services would adversely affect the practice of contraception. The data analyzed here show that two fifths (39.9%) of women reported they had been using a modern method of contraception, and just over one fifth (21.6%) of women reported practising the safe-period (periodic abstinence) or withdrawal methods. Clearly, 61.5% of women intended to avoid pregnancy by using a modern method of contraception or by practising other pregnancy-avoidance methods; however, the method failed to protect them against pregnancy. This could be due to three reasons. First, a pregnancy may have occurred before the woman underwent sterilization or started to use a spacing method. Second, some women may have resorted to a method in the hope that it would help abort the unwanted pregnancy. Third, the method used may genuinely have failed. That the safe-period and withdrawal methods are considerably less effective than other methods is well known (WHO/RHR and CCP 2007). Further, it is not clear from the data if those who reported practising periodic abstinence were doing so in full knowledge of their spouse or on their own. It is possible that some women attempted to avoid pregnancy without full co-operation from their husband/partner. Similarly, the real-life effectiveness of the pill or condoms is also known to be much lower than their clinical effectiveness. In regards to highly effective methods such as vasectomy, data from Nepal and elsewhere have found that the actual failure rates are much higher than the reported standard failure rate (Nazerali et al. 2003; Sokal and Labrecque 2009). At the same time it should be emphasized that those seeking induced abortions due to contraceptive failures most probably represent extreme cases. The first two possible scenarios underscore the need to pay special attention at the time of counselling. The percentage of women using contraception could reach nearly 70% if we included those who had been users of contraception, but were not in compliance.

The data also make it unequivocally clear that the preference for smaller family size (about two children) is now the norm.

Among the non-users of contraception, the single most common reason for an unwanted pregnancy, which affected 45.9% of women, was breastfeeding of their current child. These data point to the need for effective mass media campaigns to inform women of the potential for pregnancy during breastfeeding and to advise them of safe contraceptive methods. That both the prevalence of breastfeeding is high and the duration is relatively long (MoH, New ERA and ORC Macro 2002) also reinforces the need to make this a priority item for communication and behaviour change. The other important reasons for not using contraception were concern for side effects and noncompli-

ance or delay in obtaining the method. The former underscores the need for strengthening counseling and education through family planning programs.

The data also make it unequivocally clear that the preference for smaller family size (about two children) is now the norm among the clients, most of whom reside in the capital Kathmandu. This is also consistent with previous research (Thapa and Padhye 2001). Many clients perceived additional children to be a burden on their living conditions, probably because the majority of women reported living in nuclear families. This is most probably a different situation from the recent past, when a joint household used to be the norm, even in urban areas. It is also worth noting that the gender of the child is most probably less influential in the urban setting, as evidenced by the finding that the number of children living was more important than their sex.

The data on the clients' intention to have a (or another) child in the future, contraceptive practice at the time of the unwanted pregnancy, or future intention to use contraceptives clearly indicate the need for a stronger and larger role for a quality family planning program. The program would also need to focus on convincing users of less effective methods (principally, withdrawal and periodic abstinence) to use more effective methods.

These challenges aside, the data from the 672 women who sought and received induced abortion services at the Maternity Hospital suggest that the newly introduced program has provided quality services at an affordable price and in a generally satisfactory manner to women, many of whom could have turned to more expensive or less-qualified providers. If the experiences of other countries are evidence (WHO 2004), the safe abortion program has most likely averted some deaths resulting from unsafe abortion practices and has reduced the cost compared with services from the private sector. At the same time, while some women (usually a small percentage) in special circumstances will certainly need induced abortion services, a large number do not need to resort to abortion if effective contraceptives are utilized.

The findings suggest that the family planning program will need to pay greater attention to breastfeeding women (so that unwanted pregnancies among them can be avoided) and especially to those who reported using withdrawal, periodic abstinence, condoms or pills. Hence, the family planning program must play a dual role – first, it must try to motivate new users (such as by educating breastfeeding women), and second, it must try to convince the users of less-effective birth control methods to switch to more effective ones. Unless the family planning program becomes more effective, as more women become aware of the availability of induced abortion services, and as preference for smaller family size becomes more widespread, the demand for services is likely to gradually increase. To this end, the Maternity Hospital is poised to continue playing a critical role in meeting the increasing demand for both training providers and service delivery in helping individuals achieve their fertility goal by terminating an unwanted pregnancy.

The data presented here provide the basis for comparative analysis among the clients at the same clinic in the future. The tools and methodology developed in the course of the study can also be applied to other clinics in the country where such services are being established and provided.

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cations of the results both for the safe abortion and the family planning programs were discussed in detail. Subsequently, some modifications – both immediate and medium term – in service delivery were made. The authors also thank Emily Read and two anonymous reviewers for their helpful comments on an earlier draft. The authors alone are, however, responsible for the interpretation of data and the views expressed in this paper.

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