Abstract

Objective: The aim of the study was to determine rates on induced abortions and to identify the perceived and actual reasons for terminating an unplanned pregnancy, health care providers sought, methods used and post-abortion complications.

Setting: Three squatter settlements of Karachi, Pakistan

Subjects: Interviews were conducted on 1,214 ever-married women in the reproductive age group (15-49) with a reproductive history of at least one pregnancy, irrespective of outcome.

Methods: A cross-sectional survey from June - August 1997 was conducted in three selected squatter settlements of Karachi.

Results: The abortion rate for the past year was 25.5 per 1,000 women of reproductive age group. The post-abortion complication rate reported was 68.5% (61/89), of which fever and heavy vaginal bleeding was the most commonly reported complication (54.1%).

Conclusion: The results indicate that women are aware of the high mortality and morbidity risk resulting from seeking an unsafe abortion but nevertheless opt for this approach to attain their goal of small family size rather than for a modern method of contraception. Furthermore, healthcare providers, irrespective of legality issues, provide such services due to demand. We suggest that family physicians and other relevant health care providers be trained for post-abortion care including post-abortion family planning counseling with an emphasis on emergency contraceptives (JPMA 51 :275;2001).

Introduction

Maternal morbidity and mortality due to complications of unsafe abortions constitute a major public health concern in many countries. It is estimated that of the approximately 150,000 unwanted pregnancies that are terminated each day by induced abortion, about one-third are performed under unsafe conditions. The risk of death is 25 - 250 times greater for a woman who undergoes an unsafe abortion in a developing country as compared to a woman in a developed country. The ultimate sequela of opting for an unsafe abortion is death, though severe morbidity and long-term chronic complications contribute significantly to quality of life. The category of abortion provider and the methods utilized for abortion are important determinants of the severity of the morbidity and thereby contribute to the higher rates of mortality. Frequently reported clandestine methods include insertion of various objects into the uterus, dilatation and curettage, drinking harmful concoctions, overdose of over-the-counter medicines among others; generally performed by traditional birth attendants (TBAs), physicians, nurses/rn idwives or self-induced with common hospital admission diagnosis of sepsis and hemorrhage.

In countries, like Pakistan, where abortion is illegal and unmet need for family planning is high, resorting to a clandestine abortion to terminate an unwanted/unplanned pregnancy is the most likely recourse that couples resort to as a method of choice to achieve their desired family size. The profile of a Pakistani woman opting or admitted for complications of abortion is married, multiparous (average four children) and in their thirties as reported from community and hospital based studies. Furthermore, perceived reasons for opting to terminate an unwanted/unplanned pregnancy are reported...
to be poverty, unwillingness of male partners to use contraceptives among others. However, community based studies to investigate rationale for opting to terminate an unwanted/undesired pregnancy clandestinely and post-abortion complications has not, to the best of our knowledge, been investigated in Pakistan.

This paper therefore presents rates on induced abortions from three squatter settlements of Karachi and describes perceived and actual reasons for terminating an unplanned pregnancy, health care providers sought, methods used and post-abortion complications.

Material and Methods

We conducted a cross-sectional survey from June-August 1997 to assess the frequency of induced abortions in three selected squatter settlements of Karachi and to compare the perceptions and actual experiences of women regarding reasons and health consequences when opting for an induced abortion. The Department of Community Health Sciences, The Aga Khan University (CHS/AKU) had operational Primary Health Care (PHC) programs in six of the squatter settlements of Karachi for the past 12 years (1984 - 1996). This study was conducted in three of these field sites. We purposely selected these field sites due to familiarity of the residents with the staff from CHS/AKU so as to facilitate the conduct of the survey.

Data was collected on a structured questionnaire developed following focus group discussions among women living in these squatter settlements. Interviews were conducted on ever-married women in the reproductive age group (15-49) with a reproductive history of at least one pregnancy, irrespective of outcome. We had a complete list of households for the catchment population of these study areas. Twelve hundred and eighteen households were selected randomly from this sampling frame. If more than one married woman who fulfilled our inclusion criteria was identified in a household, the respondent was randomly selected from amongst the list of eligible women in that household. The questionnaire was organized in two modules. The first module was conducted on all respondents and elicited information on socio-demographic factors, and perceptions of a range of induced abortion determinants. These included reasons for unplanned pregnancy, reasons for opting for an induced abortion; providers sought and methods used; and associated morbidity. Following this, interviewees were specifically asked if they had ever opted for an induced abortion and, in the second module, similar questions were posed in relation to the most recent induced abortion in greater detail.

The interviewers for the structured questionnaires were women who were currently national health workers of the respective squatter settlements but had previously worked as community health workers when these sites were under the aegis of the CHS/AKU field sites. Interviews were conducted at the homes of the women in privacy, after verbally obtaining informed consent.

The case definition was “all attempt to terminate a pregnancy by any means, other than for medical reasons, irrespective of outcome”. Hence, unsuccessful attempts resulting later on in live births, miscarriages after 28 weeks of gestation, or stillbirths were also considered as cases (induced abortion). Index abortion refers to the most recent induced abortion irrespective of the number of abortions sought by women during their reproductive life.

Results

We completed interviews on 1,214 households (99.6 % of our estimated sample size). Ninety seven percent of the women were in marital union at the time of the interview, average duration of marriage was 14 (± 8) years. The mean age of the respondent was 32 (± 7.7) years; the spouse was generally older by 4 years (mean age 36.8 (± 9) years). Sixty percent of the respondents did not receive any education as compared to 30 percent of their spouses and only 16 percent were gainfully employed
either as housemaids or janitresses.
Out of 1,214 women interviewed, 100 (8.2 %) reported ever seeking an abortion to terminate an unwanted or unplanned pregnancy during their reproductive history. Thirty-one women reported seeking two or more abortions in their reproductive life while the maximum number of induced abortions reported by a woman was five. In the past year, 31 women reported seeking an induced abortion.

The total abortion rate was estimated to be 0.87 abortions while the abortion rate for the past year was 25.5 per 1,000 women of reproductive age group.

A comparison of the perceptions on a range of abortion-related issues among women who never sought an abortion (1,114 women) with women who opted for terminating an unwanted/unplanned pregnancy (100 women) is shown in Table 1. Women who never opted for an induced abortion reported “unemployment of husbands” (29.5 %) or “poverty” (20.7 %) as their major perceived reasons for terminating a pregnancy. However, women who had ever opted for an induced abortion mentioned “short spacing” (45.0 %), “too many children” (15.0 %) or “ill health of mother” (13.0 %) as their most important reasons for terminating their index pregnancy Table 1.

We probed into the social support networks that women, contemplating an induced abortion, consider. Amongst women who never had an induced abortion, the vast majority (90.0 %) perceived their

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Perceived N = 1,114</th>
<th>Actual n = 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many children</td>
<td>15.7</td>
<td>15.0</td>
</tr>
<tr>
<td>Short spacing</td>
<td>9.7</td>
<td>45.0</td>
</tr>
<tr>
<td>Ill health of mother</td>
<td>6.2</td>
<td>13.0</td>
</tr>
<tr>
<td>Spousal unemployment</td>
<td>29.5</td>
<td>5.0</td>
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<tr>
<td>Poverty</td>
<td>20.7</td>
<td>3.0</td>
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<tr>
<td>Grown up children</td>
<td>3.9</td>
<td>9.0</td>
</tr>
<tr>
<td>Working women</td>
<td>1.3</td>
<td>2.0</td>
</tr>
<tr>
<td>Husband addicted to recreational drugs</td>
<td>0.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Conflicts with in-laws/husband</td>
<td>1.6</td>
<td>2.0</td>
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<tr>
<td>Extramarital pregnancy</td>
<td>1.0</td>
<td>0</td>
</tr>
<tr>
<td>Helplessness</td>
<td>0.6</td>
<td>0</td>
</tr>
<tr>
<td>Method failure</td>
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<td>2.0</td>
</tr>
<tr>
<td>Others</td>
<td>0.4</td>
<td>3.0(^1)</td>
</tr>
<tr>
<td>Don’t know</td>
<td>8.4</td>
<td>0</td>
</tr>
</tbody>
</table>

1. Three women mentioned difficult birthing process, too many girls and weak youngest child.
husbands as the first person they would discuss when considering opting for an induced abortion, though only one percent thought that a woman could make an independent decision. Responses from the 100 women who did seek an induced abortion revealed that spousal influence was not universally necessary. Sixteen women made an independent decision without consulting anyone though 76% discussed this option first with their husbands. There were no statistically significant differences regarding education or employment status among the 76 women who sought advice first from husbands and those (16 women) who took their own decision.

Women perceived that doctors were the most commonly sought provider (55.3%), though nurses (20.5%), TBAs (6.8%) and self-induction (0.6%) were other providers women resorted to. Women (89/100) who successfully had their unwanted pregnancy terminated reported doctors (46.0%), nurses (40.4%), self termination (8.0%) and TBAs (5.6%) as their service providers. Dilatation and curettage (61.8%), intravaginal placement of allopathic medicines (11.2%), intravaginal placement of “stickc” (7.9%) and drips and injections (7.9%) were the most successful methods reported by these 89 women. Mortality (34.4%), generalized weakness (20.2%) and heavy vaginal bleeding (18.3%) were the perceived post-abortion complications by women who never experienced an induced abortion though 12.9% of these women were unaware of any post-abortion complications. Among women (89/100) who were successful in their clandestine termination of pregnancy, heavy vaginal bleeding (60.0%), and high-grade fever (51.7%) were the most common post-abortion complications experienced. Table 2.

We computed a post-abortion complication rate among the 89 women who reported a successful
termination. We classified fever only, heavy vaginal bleeding only or fever and heavy vaginal bleeding as a perceived post-abortion complication irrespective of the type of provider or number of attempts. For example, if a woman reported only fever following an unsuccessful attempt by a TBA then she would be classified as fever only whereas if a woman reported fever and heavy vaginal bleeding then she would be classified as fever and heavy vaginal bleeding. Interestingly, none of the 89 women reported additional post-abortion complications other than what they had initially reported despite changing abortion providers and methods.
The post-abortion complication rate reported by these 89 women was 68.5% (61/89), of which fever and heavy vaginal bleeding was the most commonly reported complication (54.1%), though fever only (13/61) and heavy vaginal bleeding only (15/61) were also mentioned. Nineteen women reported visiting a hospital for medical assistance for their perceived complication, seventeen of who were admitted for more than 24 hours. Seven received blood transfusion.

Discussion
The total abortion rate, the abortion rate (past year) and the post-abortion complications reported indicate that induced abortions are a significant reproductive health problem in these urban squatter settlements of Karachi, Pakistan. An abortion rate of 25.5 per 1,000 ever-married women (15-49 years) in the past year, albeit similar in comparison to countries where abortion is legal, we feel is an underestimation. Due to the taboos and sensitivity associated with reporting an induced abortion probably the "true" induced abortion rate will be significantly higher in this population. Reports from countries where abortion is legal or illegal, such as Russia and Latin America respectively, indicate that abortion are sought generally as a measure of fertility control. Our results also substantiate these findings. For example, the profile of a woman who sought an abortion to terminate her pregnancy is young (32.6 + 7.7 years), multiparous (average parity 4.6 + 2.4), average age of youngest child at time of seeking the index abortion is 30+24 months. Furthermore, the rationale expressed by women seeking an abortion was short birth spacing (45.0%) and too many children (15.0%) though 2.0% reported method failure Table 2. In addition, it is interesting to point out that the perception of women who never opted for induced abortions though different (29.5 % spousal unemployment and 21.0% poverty) suggests that limiting family size was the underlying mediating rationale as unemployment and poverty directly influence quality of life when families are large. The high unmet need of 37.0% (13.0% for spacing and 24.0% for limiting family size) reported in the most recent fertility survey conducted in Pakistan (1996-97) suggests, that couples may opt for opportunities other than modern methods of contraception to control their fertility so as to achieve their desires family size. Our results indicate that seeking an unsafe abortion may be the most likely and feasible option. The diversity of health care providers sought and methods used, reported by women seeking abortion in our study is similar to those reported in the international literature. However self-termination by introduction of objects was reported by only a negligible number of women in our study as well as in a previous study reported by Fikree et al though such methods are frequently reported in studies from African countries. We suggest further exploration on this subject before we conclude that self-instrumentation is rarely used as a method for termination of pregnancy in our society. The clinical causes of maternal mortality and severe morbidity consequent to induced abortion in countries such as Pakistan and some countries in Latin America where abortion is illegal, include sepsis, hemorrhage and visceral trauma. We report a staggeringly high post-abortion complication rate of 68.5% from this community-based survey. We cannot report on the quality of health care provided or costs incurred for reported post-abortion complications, as we did not collect information
on referrals to local health care providers or expenditures for hospital admissions. In addition, the post-abortion complications reported are the perceptions of these of these 61 women and has not been validated. Consequently, we do not know what the "actual" post-abortion complication rate is. In any case, the high rate of both post-abortion complications reported (68.5%) and hospital admissions for more than 24 hours (27.9%) highlight the grim reality of the heavy toll on the women's current and future health status and quality of life in addition to the drain on private and public health expenditures consequent to opting for a clandestine abortion to fulfill the couple's unmet need for family planning. What is interesting to point out here is the fact that women are aware of the high mortality and morbidity risk resulting from seeking an unsafe abortion [Table 2] but nevertheless opt for this approach to attain their goal of small family size rather than opting for a modern method of contraception. Our study did not probe into the women or couple's rationale for these choices and hence we suggest that future studies investigate this.

In summary our results highlight the magnitude of the induced abortion rate and consequent morbidity in squatter settlements of Karachi. Our women are well aware of the methods and providers of abortion, and despite the knowledge of severe post-abortion complications tend to address their unmet need for family planning by opting for induced abortion rather than for a modern method of contraception. Furthermore, our results indicate that healthcare providers, irrespective of legality issues, provide such services due to the demand.

As restrictive laws have failed to control clandestine abortions in these communities and abiding with prevailing cultural and religious norms, we suggest greater emphasis on method choice, availability and appropriate counseling of modern family planning methods including emergency contraception for couples seeking to limit family size. We further suggest that family physicians and other relevant healthcare providers be trained for post-abortion care including post-abortion family planning counseling.

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