Pattern of Abortion Care in a Tertiary Level Maternity Hospital in Nepal

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ABSTRACT

Introduction: Complications from unsafe abortion are believed to account for the largest proportion of hospital admissions for gynaecological services in developing countries and not to mention the cost it imparts to the health system of a country. Therefore, it is equally important to find out the prevalence and the pattern of abortion among the women who utilize the safe abortion care services and provide a framework to target various health promotion programs including safe-motherhood and reproductive health; such that the future interventions to avoid the unintended pregnancy and unsafe abortion can be implemented accordingly.

Methods: A cross-sectional study was conducted in a tertiary care hospital in Kathmandu, Nepal. Social and demographic information of all the women seeking induced abortions from January 2011 to December 2012 were included and the result was analyzed.

Result: Abortion contributed to about 1.68% of the total patient served in the hospital that provides both obstetrical and gynecological services. Of the total 4830 patients who underwent induced abortion in this period, the mean age was 27, 92.3% were from the Kathmandu valley and more than one-third women (35.2%) were illiterate who couldn't read and write. Majorities were more than two parity and belonged to higher caste.

Conclusion: The socio-demographic profile of the abortion clients in Nepal has remained similar over the years. We need to address the accessibility and availability to the safe abortion care services along with other safe motherhood programs guaranteeing access to safe abortion and post-abortion care to all group of women and also, women education regarding contraception to avoid repeated abortions or unwanted pregnancy in the future.

Keywords: abortion; pattern; socio-demographic.

INTRODUCTION

Of the estimated 211 million pregnancies that occur each year, total 46 million end in abortion.1 Unsafe abortion has been stated to contribute to one in eight pregnancy-related deaths attributing to a worldwide estimate of 13% of all maternal mortality2 and total loss of 4.5 million disability adjusted life years considering maternal illness.1 Complications from unsafe abortion are believed to account for the largest proportion of hospital admissions for gynaecological services in developing countries and to mention the cost it imparts to the health system of country. It is said that care of patient hospitalized as a result of unsafe abortion can be more
than 2500 times the daily per capita health budget. The major cause of induced abortion has been unintended pregnancy and unmet demand of family planning. Thus, it is postulated that about 100,000 maternal deaths can be prevented each year if the unmet need for family planning with the safe motherhood programs are met accordingly. Thus, it is of priority to understand the pattern of fertility and health seeking behavior by the women.

The contribution of unsafe abortions to maternal deaths and morbidity was acknowledged by key stakeholders in Nepal in the mid-1990s, which led to the advocacy for abortion law in 2002. It was finally approved by Department of Health Services in 2009 after completing parliamentary formalities and introduced in hospitals and a few primary health centers (PHCs). But the first government abortion services officially began long before, in March 2004 at the Maternity Hospital in Kathmandu; and expanded gradually to other public and private hospitals and private clinics in the coming years. Literature suggests that there has been an increasing access to safe abortion services in Nepal preventing the burden of unsafe abortion, and remains a high priority. However few studies in the past found that only 44% and 66.5% of women were aware that abortion was legal in Nepal. It has also highlighted for the need of reorientation of abortion services including awareness of abortion legislation in Nepal given by their finding that 89% of women used unsafe substances from the uncertified sources for abortion.

This study therefore, aims to find out the prevalence and the pattern of abortion among the women who utilize the safe abortion care services at Maternity Hospital, Kathmandu. It also aims to provide a framework to target various health promotion programs including safe-motherhood and reproductive health; such that the future interventions to avoid the unintended pregnancy and unsafe abortion can be implemented accordingly.

METHODS

A cross-sectional study was conducted with a collection of data from hospital records of Paropakar Maternity hospital, Thapathali, Kathmandu, Nepal. Social and demographic information of all the women seeking induced abortions from January 2011 to December 2012 were included, while the missing files and information were excluded.

An ethical clearance was taken from the hospital. The data were analyzed using SPSS version 19 for Windows.

RESULTS

The total patients served during the year 2011 and 2012; including new cases and follow-ups was 147,470 and 140,051 respectively. There were total 4830 patients who underwent induced abortion in this period at the Maternity Hospital with total of 2591 women in 2011 and 2239 women in 2012 respectively. The socio-demographic characteristics of the study participants are given at (Table 1).

Of them majority of women between 25 to 29 years, followed by 20-24 received the abortion care. The mean age was 27. Among them, 92.3% were from the Kathmandu valley, and rest outside from the valley (Table 1).

| Table 1. Percentage distribution of variables in the sample (N = 4830). |
|----------------|------------------|------------------|------------------|------------------|
| Age                | N (%)              | Age                | N (%)              | Age                | N (%)              |
| 10 to 14            | 14 (0.29)            | 15 to 19            | 229 (4.74)           | 20 to 24            | 1263 (26.15)         |
| 15 to 19            | 1490 (30.85)          | 25 to 29            | 1081 (22.38)          | 30 to 34            | 539 (11.16)           |
| 20 to 24            | 229 (4.74)            | 35 to 39            | 188 (3.89)            | 40 to 44            | 3.89 (0.043)          |
| 25 to 29            | 1081 (22.38)          | 45 to 49            | 21 (0.43)             | 50 and more         | 5 (0.10)              |

Parity N (%)

<table>
<thead>
<tr>
<th>Parity</th>
<th>N (%)</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>576 (11.9)</td>
</tr>
<tr>
<td>1</td>
<td>1423 (29.5)</td>
</tr>
<tr>
<td>2</td>
<td>1958 (40.5)</td>
</tr>
<tr>
<td>3+</td>
<td>873 (18.1)</td>
</tr>
</tbody>
</table>

Education level N (%)

<table>
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<tr>
<th>Education level</th>
<th>N (%)</th>
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</thead>
<tbody>
<tr>
<td>Illiterate</td>
<td>1699 (35.2)</td>
</tr>
<tr>
<td>Literate (can read and write)</td>
<td>177 (3.6)</td>
</tr>
<tr>
<td>Primary</td>
<td>337 (7.0)</td>
</tr>
<tr>
<td>Secondary</td>
<td>980 (20.3)</td>
</tr>
<tr>
<td>SLC,CMA,ANM</td>
<td>557 (11.5)</td>
</tr>
<tr>
<td>Higher Education</td>
<td>1080 (22.4)</td>
</tr>
</tbody>
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Ethnicity N (%)

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<tr>
<th>Ethnicity</th>
<th>N (%)</th>
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Dalit 245 (5.1)
Disadvantaged Janajaati 1507 (31.2)
Disadvantaged non-dalit (Terai caste) 10 (0.2)
Religious minorities 789 (16.3)
Relatively advantage Janajati 2259 (46.8)
Upper caste group 17 (0.3)
Others

<table>
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<tr>
<th>Residence</th>
<th>N (%)</th>
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<tbody>
<tr>
<td>Kathmandu Valley</td>
<td>4457 (92.3)</td>
</tr>
<tr>
<td>Outside valley</td>
<td>373 (7.7)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Choice of Contraception after CAC</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condoms</td>
<td>434 (9)</td>
</tr>
<tr>
<td>Pills</td>
<td>1011 (20.9)</td>
</tr>
<tr>
<td>Depoprovera</td>
<td>1238 (26.6)</td>
</tr>
<tr>
<td>Female sterilization</td>
<td>302 (6.3)</td>
</tr>
<tr>
<td>Male sterilization</td>
<td>18 (0.4)</td>
</tr>
<tr>
<td>IUCD</td>
<td>407 (8.8)</td>
</tr>
<tr>
<td>Implant</td>
<td>343 (7.1)</td>
</tr>
<tr>
<td>Not decided</td>
<td>1032 (21.3)</td>
</tr>
</tbody>
</table>

There were more women belonging to higher caste (Table 1) indicating the majority of women were from Kathmandu and nearby areas. Also majority were more than two parity. More than one-third women (35.2%) were illiterate who couldn't read and write and only about one-third women actually completed SLC and higher. So education seems to be one of the strong determinants in the cause of unintended pregnancy. Also women of higher caste seem to opt for the abortion more readily compared to the janajatis and other ethnic groups.

Trend of Abortion
Abortion contributed to about 1.68 % of the total patient served in the hospital that provides both obstetrical and gynecological services.

The number of women undergoing abortion was similar in both years; however bimodal peak has been seen in 2011 during the March and August, whilst in 2012, the peak was seen during the March (Figure 1).

Almost 96.6% of women underwent CAC (Comprehensive Abortion Care) during the first trimester and 3.4% in the second trimester. Among them majority of the women did not have any complications but incomplete abortion, bleeding and uterine perforation were found respectively in 62 (1.3%), 17 (0.4%) and 11 (0.2%) of females. Repeat CAC was done in 925 (19.2%) of those who had complication of incomplete abortion and bleeding. Total 1238 (26.6%) chose Deprovera as the choice of contraception after abortion and 1011 (20.9%) opted for pills while IUCD, condoms and implants were less preferred choice of contraception. Six percent women who completed family went for sterilization while there was very less number of male sterilizations. Also 1033 (21.3%) females could not decide their choice of contraception (Table 1).

DISCUSSION
According to WHO an estimated 40-50 million abortions occur annually across the globe. This corresponds to approximately 125,000 abortions per day. The risk of dying from an unsafe abortion is around 350 per 100 000 while 68,000 women die yearly due to unsafe abortion.7

Every year the number of abortion done in Nepal is also increasing.8 There are more than 245 approved sites providing safe abortion services to women across the country.8 However, the proper reporting of cases and monitoring of these centers has always been a challenge.

The burden of abortion care in Maternity Hospital has not increased due to the provision of CAC facilities in various districts and rural areas. Of the estimated 1 lakhs of abortion each year done in the country,9 there has been about annual average of 2400 abortion in Maternity Hospital. This is the clear indication of the outreach of the CAC service outside the Maternity hospital which is the largest public sector abortion service provider. The safe abortion service has been provided by many public hospitals and health centres, Marie Stopes International, Family Planning Association and other NGO. The expansion of safe abortion care across Nepal is one of several strategies that helped Nepal nearly halve its maternal mortality ratio in the last decade, reducing the number of women who die from pregnancy-related complications from 539 to 281 per 100,000 live births in 2006 and further 281 to 229 per 100,000 live births in 2009 (based one eight districts
findings.10 Every year the number of women served
increased from 2004 to 2011 with total of almost 5
lakhs Nepalese women served in this period.6 The overall
post-abortion complication has been low and efforts of
the government and involved stakeholders have been
appreciable.

Despite increase in the number of women receiving
safe abortion care,4 the socio-demographic profile
of the abortion clients in Nepal has remained similar
over the years, which has been evidenced in other
past studies as well.6,11-13 More women are seeking for
safe abortion which is a positive awareness of service
availability preventing the burden of unsafe abortion and
significantly reducing the burden of patients flow to the
capital and major cities. But as the study shows, very
less proportion of women from disadvantaged group
utilized the abortion services. This lower utilization of
such services might be contributed to the access barrier
to the safe abortion services, as WHO determined
access barrier as lack of information, cost crises, social
exclusion and lack of social support grounded in social
determinants of health. Thus, there is still unmet need
to be fulfilled to reach out the underprivileged groups
and minorities group. Hence, continuous education,
re-enforcement and reorientation of health system
addressing the needs of the socially disadvantaged
group is of paramount importance to decrease the
burden of unsafe abortion, decrease maternal mortality
and morbidity and thereby ensure better family planning
to prevent the global epidemic of unwanted pregnancy.

Present study also indirectly supports there is
increased utilization of abortion care. Our study from
the largest abortion clinic is just a glimpse; there are
many abortion clinics that provide safe abortion care
out of Kathmandu valley. Also, many abortions go
unnoticed and unrecorded in many private clinics.
Thus the limitation of our study is that if has data from
only one institution, and doesn’t address the causal
association of the demographic parameters and the
safe abortion care services utilization explained by the
fallacy of the cross sectional study design. Beside this

we cannot actually confer the pattern and the data
to infer the actual abortion rate. Therefore, we would
like to highlight the importance of the further studies
with longitudinal study design which can establish
the association between the various demographic
parameters and the CAC service utilization in the
country, such that intervention can be implicated
to address the access barrier to CAC utilization. The
provision of the CAC services throughout the country,
but we still see lag in reducing the maternal mortality
rate, thus, we focus to reorient the research towards
the women perceptions about this issue with help of
qualitative study design. Also, given by the complexity
of the pregnancy, unwanted pregnancy, reproductive
health, abortion and unsafe abortion, maternal and child
health care, it is necessary to understand the perceived
meaning and perception related to such issues in order
to recognize the need and act accordingly in terms of
services and education.

CONCLUSION

With this article, we would like to forward that inclusion
of mother and child health care in all policies should
be a priority to achieve the Millennium declaration and
overall improve the maternal and child health state of
the country. Safe abortion care and motherhood does
matter and goes beyond how a country defines what
is legal and what is not. At the moment, we need to
address the accessibility and availability to the safe
abortion care services along with other safe motherhood
programs guaranteeing access to abortion and post-
abortion care. Thus, creating and strengthening healthy
health policies to decrease the widening gap in life
expectancy of women among the women across the
globe attributing to various social determinants of
health is need for the present scenario to ensure the
equity of maternal health. Women education regarding
contraception is a key to ensure effectiveness of family
planning services and avoid repeated abortions or
unwanted pregnancy in the future.

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