

Characteristics of women undergoing induced abortion in a Kenyan tertiary referral hospital

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Abstract

Background: Data on characteristics of women who undergo abortion is important to inform reproductive health education strategies. Such data from sub-Saharan African countries is incomplete and inconsistent.

Objective: The characteristics of women undergoing abortion at Kenyatta National Hospital, Nairobi, Kenya.

Methods: This was a prospective study. A structured questionnaire was administered to all women who had attended follow-up outpatient gynecology clinics. The questionnaire examined age, socioeconomic status, highest level of education, marital status and religion. Data obtained were analysed for frequencies and means using SPSS version 17.0 and presented in tables, pie charts and graphs.

Results: The most commonly affected age group was 20-30 years (57.8%) while the least was 34-39 years. Majority (64.3%) of the victims were unemployed. Of these, 23.5% were students. The most commonly affected were those with secondary level of education (59.3%). Unmarried women comprised 66.9%. Eighty eight percent of the victims were Christians with 47.4% being Roman Catholics. Muslims comprised only 6.8%.

Conclusion: Abortion occurs in women aged 15-40 years, peaking at 20-29 years, who are the unemployed or students. Majority are single and had attained at least secondary education. More Catholics than Protestants were affected. Most of these characteristics differ from those reported in earlier studies from the region, suggesting changing characteristics.

Key words: Abortion, Age, Socioeconomic status, Education, Kenya

Introduction

Characteristics of women undergoing induced abortion differ between geographical regions and ethnic groups (1). In sub-Saharan Africa, data is inconsistent (2), and these characteristics differ between countries (1). There is therefore a need to have country specific data. In Kenya, abortion is prevalent (3) and there is evidence that characteristics of women involved have been changing with time. Findings of older studies done in the nineties (4,5) reveal different results from those done later (6). Whereas older small studies revealed that young unmarried women were the main recipients of post-abort care (4,5) more recent studies reveal that older women were also involved, and only about 20% are younger than 20 years (6,7).

According to hospital based studies from Ethiopia (8,9), Kenya (4,5,10), Tanzania (2,11) and Nigeria (12-14), women seeking care for abortion are in school or unemployed. Although socioeconomic factors such as employment and education are commonly reported, some characteristics such as religion are hardly reported. These data are important to inform reproductive health care planning. This study therefore aimed at describing

the characteristics of women undergoing abortion at the national and regional referral hospital in Kenya.

Materials and Methods

The study was done on gynecologic clinic attendees who had undergone induced abortion between January and December 2011. Ethical approval was sought from Kenyatta National Hospital Ethics and Research Committee (KNH-ERC) for permission to conduct the study within Kenyatta National Hospital. Women were given a structured questionnaire and requested to fill it while in the clinic. It was explained to them that failure to complete the questionnaire would not deny them medical care, that the information provided would be confidential and that they did not need to write their names. The questionnaire investigated the age, employment status, marital status, highest level of education attained and religious affiliation. The questionnaire was filled as the patients waited to see the doctor and returned to the investigators. Any questionnaires that were improperly filled were excluded from the study. Only those in which all the required information was provided were included.

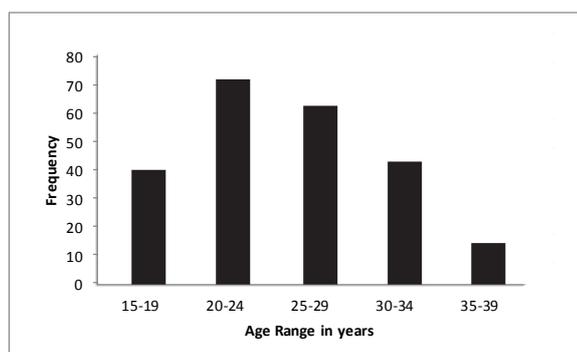
The data obtained were analyzed using statistical programme for social sciences (SPSS) version 17.0 and presented in tables, pie-charts and bar graphs.

Results

Out of the 288 women to whom the questionnaire was administered, 267 (92.7%) responded and returned it voluntarily. Twenty one (7.3%) declined to complete the questionnaire. Out of the 267 questionnaires which were returned, sixteen (5.6%) had incomplete information and were excluded. We therefore analyzed 251.

Age distribution: The mean age was 25.7 years with range of 15-39 years. The most frequently affected age group was 20-24 years. Over 16% of the patients were below 20 years old while over 25% were aged 30 years and above. No individuals aged over 40 years were found. Over 57% of the victims were aged between 20 and 29 years (Figure 1).

Figure 1: Age distribution of women involved in abortion



Socio economic status: The socioeconomic categories were unemployed, students, formal employment, casual labourers and self-employment. Majority of the clients were unemployed (103; 40.7%). Of these, 27 were housewives (Table 1). Among the students, level of education comprised secondary (35; 59.3%), primary (10; 16.9%), tertiary college (9; 15.3%) and university (5; 8.5%).

Table 1: Socioeconomic categories of women involved in abortion

Socioeconomic categories	Occurrence (%)
Students	23
Unemployed	41
Formal employment	17
Casual laborers	10
Self-employment	9

Marital status: Over 50% of the women affected were single. Married women comprised 33.1% while others were separated (9.6%) or divorced (2.7%) (Table 2).

Table 2: Marital status of women involved in abortion

Status	Frequency (%)
Single	137 (54.6)
Married	83 (33.1)
Separated	14 (9.6)
Divorced	07 (2.7)
Total	251 (100)

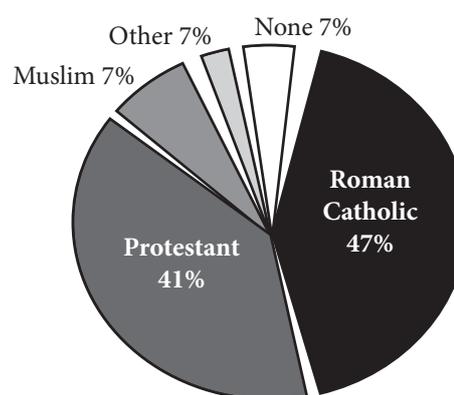
Highest level of education: Majority of the women had attained secondary level of education and above, with 19.1% of them having attained tertiary college, and 5.6% university education. Over 30% of them had attained only primary education (Table 3).

Table 3: Highest level of education of women involved in abortion

Level	Frequency (%)
None	03 (1.2)
Primary	83 (33.1)
Secondary	103 (41.0)
Tertiary college	48 (19.1)
University	14 (5.6)
Total	251 (100)

Religious affiliation: The vast majority of the women were Christians belonging to the main sects namely Roman Catholics (47.4%) and Protestants (40.6%). Muslims comprised (6.8%). The most significant observation was that over 95% of them had a religious affiliation (Figure 2).

Figure 2: Religious affiliation of women involved in abortion



Contraceptive awareness and use: Vast majority (82.1%) of the women were aware of, and at one time had used contraception. The single ones comprised condoms, pills and natural methods. Forty-seven used multiple methods. At the time of conception which lead to the index abortion majority of the women (226; 90%) were not using any contraceptive method.

Discussion

Age distribution: The highest proportions of abortions occur among women aged 20 – 29 years (1,15). Observations of the current study are concordant in that 57.8% of the women were within this age group. This may suggest that the factors which contribute to abortion in this age group are common to most populations. WHO estimates that at least 33% and upto 70% of women seeking abortion are under 20 years (16,17).

Table 4: Prior history of contraceptive use among women involved in abortion

Mode of contraception	Frequency (%)
No contraception	45 (19.9)
Condoms	41 (16.3)
Pills	41 (16.3)
Natural	32 (12.7)
Injections	29 (11.6)
Implants	16 (6.4)
Combinations	47 (18.7)
Total	251 (100)

Table 5: Percentage distribution of abortion cases by age

Reference	Country	Percentage distribution of abortion cases by age					
		<20	20-24	25-29	30-34	35-39	>39
Rehan <i>et al.</i> , 2001 (20)	Pakistan	3.3	11.7	21.7	26.7	36.6	-
Senbeto <i>et al.</i> , 2005 (18)	Ethiopia	8.2	16.0	23.0	17.3	15.8	19.7
Erfani, 2010 (19)	Iran	0	13.2	18.4	36.8	31.6	-
Fasubaa <i>et al.</i> , 2003 (21)	Nigeria	47.7	30.8	10.5	3.7	3.7	3.6
Jones <i>et al.</i> , 2002 (22)	USA	19.3	33.0	23.1	13.5	8.1	3.1
Likwa and Whitaker, 1996 (23)	Zambia	26.0	25.0	26.0	15.0	6.0	-
Bankole <i>et al.</i> , 1999 (1)	Australia	16.1	28.4	21.9	17.4	11.7	-
Lema <i>et al.</i> , 1996 (4)	Kenya	24.3	28.7	13.0	34.0	-	-
Current study	Kenya	16.7	31.9	25.9	18.7	6.8	-

An interesting finding is that 16.7% of the women were below 20 years. This is comparable to 16.1% in Australia (1), 16% in Kenya (6), lower than most other reports but higher than 8.2% in an Ethiopian (18) and 3.3% in Pakistani studies. In an Iranian study it was zero (19). This figures suggests that occurrence of abortion among adolescents varies between countries and perhaps with time, and availability and accessibility of contraceptive services (Table 5).

Observations of the current study reveal, concordant with recent reports, that less than 20% cases were under 20 years, with over 25% being over 30 years. These differences may be due to different study sites, sample size, and availability of and access to contraceptive services. They nonetheless imply that interventions should target both adolescents and older women. Even with apparent reduction in the number of

adolescents, this proportion is significant because this age group is more likely to delay abortion, resort to unskilled persons to perform it, use dangerous methods and present late when complications arise. Adolescents are also more likely to experience complications (24). Closer attention should therefore be paid to this age group.

Socioeconomic status: Observations of the current study reveal that over 40% of the women were unemployed. This is in sharp contrast with the Chinese study where only 6.6% were housewives, with only 17.1% being in informal employment (25). In Spain, induced abortions appear to rise most among women in poor socioeconomic positions (15). Observations of the current study are concordant with most studies in that majority of the women are unemployed (2,4). A remarkable finding of the present study is that 23.5% of the victims are students. This is consistent with earlier

onset of sexual activity (26). These findings suggest that reproductive health education, including contraceptive use should include high school students as well.

Marital status: Majority (54.6%) of those affected are single, but married women constitute more than one third. Married women obtain a higher proportion of abortion in developing countries than in developed countries. In sub-Saharan Africa, a small proportion of abortions occur among married women (1). Observations of the current study are at variance to these prevailing figures. There is wide variation in the distribution of abortion in relation with marital status. In Kenya, a study of admissions in five Kenyan hospitals in 1996-1997 showed that 71% of the women were married (7). The current study reveals only 33% were married. In China, 11.4% were single while 88.6% were married (25). In the United States, most abortion patients are not married: 67.3% were never married, 15.6% were separated, divorced or widowed, and 17.0% were married (22). In Indiana, 72.7% were not married, 13.2% were married (27). These findings suggest population differences in the relationship between marital status and abortion, which may be related to socioeconomic status. Such differences imply that interventions should be specific to each population.

Highest level of education: About 83% of the women had attained secondary level education and above. This is concordant with previous studies which demonstrated that 52% had secondary education and more, 40% had primary education and only 8% had no formal education (4). In Italy, studies suggest that the impact of education on abortion may depend on the age. For example, among the 15-19 year olds, especially those who were married, abortion rate was highest for the most educated group. On the other hand among married women aged 20-39 years, the rate declined as level of education increased. For those aged >40 years, abortion increased with level of education (28). In China, only 0.7% had a college education, 38% had graduated from high school, 42.8% had middle school education, 9.0% primary school and 9.5% had no formal education (25). In Spain those with primary education or less had higher rates of induced abortion (15). The variations suggest that other factors contribute to complicate the picture.

Religious affiliations: A US study showed that Protestant women make up a larger proportion of those having abortions than Catholic women (1). Observations of the current study reveal, at variance with these literature reports, that more Roman Catholic women are involved in abortion compared to Protestants. This difference may be related to the larger number of Roman Catholics in the population. In Dar es salam, Tanzania,

the majority (72.4%) of adolescent girls were Muslims (2). The figures imply that reproductive health education should cover all girls without discrimination on religious grounds.

Conclusion

Abortion occurs in women aged 15-40 years, peaking at 20-29 years, who are the unemployed or students. Majority are single and had attained at least secondary education. More Catholics than Protestants were affected. Most of these characteristics differ from those reported in earlier studies from the region.

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