

Comparative analysis of Knowledge, Attitudes and Perceptions about Induced Abortions among Medical and Non-medical Students of Karachi

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Abstract

Objective: To determine the knowledge, attitudes and perceptions regarding induced abortions among university students of Karachi and compare these aspects among medical and non-medical students.

Study Design: Cross sectional opinion survey

Methods: The study is a cross sectional opinion survey of medical and non-medical students from four educational institutions of Karachi using a pretested questionnaire.

Results: Of the 381 students interviewed, 201 were medical and 180 were non-medical. More medical students were aware of the correct definition of induced abortion. An encouraging finding was the awareness of our study population about the only legally acceptable circumstance for induced abortion in Pakistan, that is, if conceptus is a risk to maternal health ($p < 0.001$). More medical students cited complications that were technical like uterine perforation ($p < 0.001$), cervical trauma ($p < 0.001$), DIG ($p < 0.001$), and sepsis ($p < 0.001$). More medical students thought induced abortion to be a health issue ($p < 0.001$) as compared to non-medical students. Most of the medical students felt the need to modify Pakistan's law regarding abortion ($p = 0.008$) especially for fetal anomalies (13.9%) and rape (7%).

Conclusion: Though medical students were more knowledgeable about induced abortions as compared to the non-medical population, there is a need to improve awareness regarding induced and unsafe abortions and their consequences (JPMA 52:492;2002).

Introduction

Out of nearly 50 million abortions performed in the world each year, 30 million occur in developing countries, of which almost 90% are unsafe¹⁻³. Unsafe abortion is defined by the World Health Organization as a procedure for terminating an unwanted pregnancy either by persons lacking necessary skills or in an environment lacking the minimal medical standards⁴⁻⁶. Ninety-four percent of the developing world restricts abortion and only 40% of women in the world live in countries where it is legal⁷.

A study on first and second year medical students concerning attitudes on abortion in USA showed 58.1% supporting first trimester abortions for most circumstances and the intention to incorporate this procedure in their future practice⁸. Other studies done in adolescent and young adults separately from around the world show that though a majority were aware of induced abortion and its related complications, many (55%) said that they would still choose it even if illegal, especially in cases of rape, incest, danger to health, fetal anomalies and in terms of a woman's right to an abortion⁹⁻¹². Overall health professionals were more likely than laypersons to report opting for abortion following a diagnosis of fetal abnormality¹³. However, respondents generally disapproved abortion on an attitudinal scale and males were more likely than female respondents to support pro-abortion

decisions¹⁴.

Materials and Methods

The study population comprised medical and non-medical students from four educational institutes in Karachi. The medical students were from the Aga Khan University and Sind Medical College and non-medical students were from Indus Valley School of Art and Architecture, a private school and the University of Karachi, a state-run institution.

The sample size was determined using the software program EPI Info. The total number of students in our target populations was estimated to be approximately 3000. Using convenience sampling, we interviewed 381 students from four institutes according to the proportion of students in the respective institutes. We administered a pre-tested questionnaire to the students during a personal direct interview after getting informed consent from the participants. Interviews lasted an average of 10-20 minutes. The target population in this study may not be representative of all university students in Pakistan; the results obtained will permit only a broad view of what remains a challenging research issue. Since abortion is a very sensitive issue especially in our setting, we encountered refusals, although less than anticipated.

SPSS 10.0 was used for entering and analyzing the data. Frequency tables and proportions were obtained for the various variables. A comparative analysis for medical and non-medical students to determine the differences in their knowledge, attitudes and perceptions regarding induced abortions was also carried out. The Chi-square Test was used for comparative analysis.

Results

A total of 381 students were interviewed. Two hundred and one (52.8%) were medical students, 38 (9.9%) from AKU and 163 (42.8%) from SMC. One hundred and eighty (47.2%) were non-medical students, 41(10.8%) were from Indus Valley School of Arts and Architecture and 139 (36.5%) belonged to Karachi University. The mean age was 21.49 years for non-medical students and 22.75 years for medical students.

The responses of medical and non-medical population were compared. There was a significant difference between the two groups regarding the knowledge part of the questionnaire. Most of the medical students thought that induced abortion meant the termination of pregnancy before the age of viability ($p < 0.001$) (Table 1).

Table 1. Definitions of abortion by the students (n=381).

S. No.	Definitions by the students	Frequency				Total
		Medical		Non-medical		
		No.	%	No.	%	
1	Termination at any gestational age	57	28.36	79	43.89	136
2	Termination before age of viability	94	46.77	50	27.78	144
3	Termination after age of viability	21	10.45	19	10.56	40
4	Others	20	9.95	9	5	29
5	Don't know	9	4.48	23	12.78	32
Total		201	100	180	100	381

The medical students were of the view that induced abortions in Pakistan are legal under certain conditions ($p < 0.001$). Fewer medical students, 41.3% than the non-medical 68.3% ones thought that induced abortions are not allowed in Islam ($p < 0.001$).

The medical students perceived that induced abortions are associated with complications ($p < 0.001$) (Table 2).

Table 2. Comparison of post-abortion complications mentioned by male and female students and medical and non-medical students.

S.No.	Factors	Identified by students	
		Medical %	Non-medical %
1	Weakness	0.5	9.6
2	Chronic pain	5.1	8.2
3	Psychiatric problems	15.2	17.1
4	Uterine perforation	25.8	6.2
5	Cervical trauma	21.2	2.7
6	Bleeding/ hemorrhage	63.1	24.0
7	Infection/sepsis	74.7	30.8
8	Embolism	20.2	0.7
9	DIC	18.2	0.7
10	Loss of fertility	40.9	43.8
11	Death	44.9	45.2

Both medical students and non-medical students mentioned at least one complication. More medical students mentioned complications that were technical like uterine perforation ($p<0.001$), cervical trauma ($p<0.001$), embolism ($p<0.001$), Disseminated Intravascular Coagulation (DIC) ($p<0.001$), bleeding ($p<0.001$). Chronic pain ($p=0.235$), psychiatric problems ($p=0.623$), loss of fertility ($p=0.587$) and death ($p=0.962$) were mentioned equally by both groups (Table 2).

Both populations of students agreed that induced abortion is not a form of family planning ($p=0.076$) (Table 3).

Table 3. Abortion perceived as a form of family planning.

		Medical		Non-Mdeical		Total	
		No.	%	No.	%	No.	%
Abortion perceived as a form of family planning	Yes	42	20.9	55	30.6	97	25.5
	No	155	77.1	120	66.7	275	72.2
	DK	4	2.0	5	2.8	9	2.4
Total		201	100	180	100	381	100

DK = Dont know

The non-medical students thought that the rate of abortion was higher among the unmarried females ($p=0.001$) while the medical students equally chose married females (46.8%) and unmarried females (48.3%). Most of the medical students thought that induced abortion was a health issue in Pakistan ($p0.001$) as compared to the non-medical students. However, both student populations considered it to be an ethical issue ($p=0.262$). Both medical and non-medical students thought that the fetus had same rights as an individual ($p0.112$).

There was a significant difference of opinion between the two populations when asked about who does most of the illegal abortions ($p=0.000$). More medical students chose Dai's (60.7%) while the non-medical population thought that apart from the dais (34.4%), doctors (31.1%) were also performing illegal abortions. There was a considerable difference ($p0.001$) between the two populations in their opinion about women who have undergone an illegal abortion. More medical students said they would like to know the cause of abortion (50.7%) before making an opinion of the woman as compared to the non-medical students. There was no difference of opinion ($p=0.290$) regarding the decision-maker of a female's reproductive health. The most common response was husband (60.4%). Most of the medical students thought that there was a need to modify the Pakistani law regarding abortions ($p=0.008$). The two most common conditions for which they felt this need were fetal anomalies (13.9%) and rape (7%). There was no significant difference between the two populations in the factors mentioned, leading to induced abortions. The only factor that was significantly ($p=0.031$) mentioned by the medical students was insufficient spacing (30.8%). More non-medical students (31.6%) than medical students (21%) perceived abortion as a form of family planning (Table 3).

Discussion

This study concerning knowledge, attitude and perceptions regarding abortions among university students revealed some interesting results. Since induced abortion is an important health, social and ethical issue, we wanted to assess the level of knowledge of the university students about abortions. As expected the medical students were more knowledgeable about induced abortions as compared to the non-medical population particularly in terms of definition and complications. But among the medical students there was significant disparity in the level of knowledge. More than half of them (53.2%) did not know the actual definition of induced abortions. An unexpected finding was that as many as 21% of the medical students considered induced abortion to be a form of family planning, mostly because it is

a reliable method. This finding indicates the need for improving education about family planning and emphasizing that abortion is not a substitute for contraception.

Majority (63%) of the students in our study thought that abortion is an ethical issue in Pakistan, while only 52.5% considered it to be a health issue as well. The important revelation was that of all the students who thought that induced abortion was not a health issue; almost 40% of them were medical students. The fact that 60,000 to 100,000⁷ women die every year as a result of post abortion complications makes it an important health problem and not just an ethical issue that should be avoided. The most common factor leading to induced abortion, according to the students, was extra and premarital affairs (67%) followed by rape (44%). This perception associates induced abortion to illegitimacy and thus makes students perceive it to be more of an ethical rather than a health issue. These results show that only a misleading view of induced abortion is being projected in our society. Even the current medical curriculum is not adequately focused on the detrimental impact of induced abortions on women's health. Hence, induced abortion has become an unheeded part of female reproductive health.

Since unsafe abortion is a major threat to the health and life of women, research to understand and better address the determinants and consequences of induced abortion including its effect on subsequent fertility, reproductive and maternal health and contraceptive practice should be promoted, along with research on treatment of complications of abortion and post-abortion care¹⁵.

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