

Original Research Paper

Perception Of Medical Students On The Legal And Ethical Aspects Of Abortion In A Teaching Hospital In Northeast India

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ABSTRACT

Background: Medical students, who are future healthcare providers, should be aware of the legal and ethical aspects of abortion – an important sexual and reproductive health issue. We conducted this study to find out the perception of our students on abortion and voluntary pregnancy termination

Methodology: This was a cross-sectional observational study which included MBBS students of the 2nd professional year of the Batch of 2017. Data was collected through a structured self-administered questionnaire comprising 15 items related to the research topic and analyzed using SPSS Version 11 by descriptive and inferential statistics

Results: A total of 49 responses were retrieved. Overall, participants demonstrated good knowledge of the legal aspects and favorable attitudes towards abortion. However, only 36.7% could give the appropriate definition of abortion. The majority (98%) of respondents agreed that women must undergo mandatory counseling both before and after abortion

Conclusions: There is room for improvement in our teaching learning methods on abortion through a more practical approach and inclusion of problem-based learning to hone the analytical and attitudinal skills of the doctors of tomorrow.

Key Words: perception, medical students, abortion, legal, ethical

Introduction

Abortion is an issue with wide-ranging medical, psycho-social, legal and ethical implications. In India, voluntary termination of pregnancy is regulated by law and is allowed only if therapeutic, genetic, humanitarian, and socio-economic indications exist. About 12-18% of maternal mortality is attributed to “unsafe abortions” performed by unskilled personnel in unsanitary conditions [1]. The Medical Termination of Pregnancy (MTP) Act was passed in 1971 to provide deserving women access to safe abortion services by qualified practitioners using standard techniques in places approved by the government [2]. This legislation was amended in March 2021 to increase the gestational limit beyond 20 weeks in special categories of women on the opinion of two

physicians or a medical board on severe congenital anomalies beyond 24 weeks of pregnancy [3]. There is also provision for professional counseling and comprehensive care in order to improve the reproductive and sexual health of women in the country [4].

A study was conducted in Maharashtra, India to further explore previous findings about poor attitudes towards abortion among medical students. The authors concluded that it is important to strengthen their confidence and knowledge through improved medical education including value clarification and clinical training [5]. According to Cohen P et al, efforts should be made to make teaching on abortion practical, engaging, sensitive and inclusive [6]. The teaching methodology employed appeared to contribute towards students viewing abortion as an essential aspect of women's healthcare and also served to reduce the stigma attached to abortion due to traditions and norms in society.

The legal and ethical aspects of abortion are taught to medical students during the 4th and 5th semesters of the MBBS program in the subject of Forensic Medicine as per the old curriculum. It is important for students who are future healthcare providers to be aware of these issues so that they can deal with them confidently in practice. In this study we explored how medical students perceive abortion and related issues and whether they are aware of the legal and ethical aspects of abortion and pregnancy termination. Further, this research was a means of reflecting on our past teaching learning methodology and how it can be improved in subsequent batches of MBBS students especially in the light of Competency Based Medical Education (CBME) and the new curriculum rolled out in 2019 by erstwhile Medical Council of India (MCI) [7], now replaced by the National Medical Commission (NMC).

Methodology

This was a cross-sectional observational study conducted on 49 medical students of the 2nd professional year in the 5th semester of their MBBS course (Batch of 2017) at our institution. Purposive (selective) sampling was performed to include all students who agreed to participate and gave their free and voluntary consent for the same. Data was collected over a period of one month in January 2020 in the form of a structured self-administered questionnaire comprising 15 items related to the topic of the study. The questionnaire was divided into three parts, i.e. socio-demographic variables (age, gender, year and semester of study), knowledge of legal aspects (Items 1-9) and attitudes to abortion (Items 10-15). Responses to questions related to attitude were graded on a 1 – 5 point Likert scale, where 1 – Disagree completely, 2 – Disagree, 3 – Neutral, 4 – Agree and 5 – Agree completely. The nature and purpose of the study was explained, and written consent obtained from all participants. A sample questionnaire was pilot tested and modified accordingly. Responses received were entered in MS Excel worksheet and analyzed using SPSS Version 11 by descriptive and inferential statistics. The student's t test for independent samples was employed to determine the differences in knowledge and mean attitude scores of male and female participants in the study population.

This project was approved by the Institutional Ethics Committee (IEC) on 24th September 2019.

Results

A total of 49 completed questionnaires were retrieved. The age of participants ranged from 19-25 years with a mean age of 21.4 years. In the study population, 53.1% comprised male and 46.9% female students pursuing the 5th semester of the 2nd professional year of the MBBS course. Among the respondents, 36.7% could give the appropriate definition of abortion while 67.3% knew the legal age of foetal viability. The majority of students (91.8%) were aware of the gestational limit for abortion as per the MTP Act 1971. Again, most of them (93.9%) could correctly point out the currently accepted method of medical abortion. In relation to consent, 98% of respondents answered that consent for medical termination of pregnancy can be given by the patient herself if she is mentally sound and over 18 years of age. Regarding scenarios where MTP is legally indicated, 73.5% chose the correct option, i.e., pregnancy due to contraceptive failure in a married woman. All the participants (100%) knew that the procedure can be carried out at an institution approved by the Government to perform MTP.

Table 1. Socio-demographic characteristics of participants (n=49)

Age distribution	No.	%
19 – 21 years	29	59.2%
22-25 years	20	40.8%
Gender distribution		
Male	26	53.1%
Female	23	46.9%
Course of study: MBBS		
Year of study: 2nd professional year 5th semester		

Table 2. Knowledge of legal aspects of abortion (n=49)

Item	No. of correct responses	Percentage (%) of correct responses
Definition of abortion	18	36.7
Legal age of viability	33	67.3
Legal limit for pregnancy termination	45	91.8
Consent for pregnancy termination	48	98
Scenarios where medical termination of pregnancy is indicated	36	73.5
Documentation in medical termination of pregnancy	28	57.1

In relation to opinion, 89.8% agreed that the conduct of unsafe abortions by unskilled personnel in unsanitary conditions is one of the causes of maternal mortality in our state. 44.9% concurred with the view that the foetus is a person at conception and abortion is taking a human life. Among the respondents, 89.8% answered that they would recommend MTP if the foetus is not yet viable and continuation of pregnancy is life threatening to the mother. On the other hand, 40.8% agreed and 38.7% disagreed that the doctor should be able to refuse to perform an abortion on moral grounds even if it is permitted by the law. The majority of students (98%) agreed that a woman must undergo mandatory counselling both before and after abortion to reduce stress and prevent further unwanted pregnancies.

The knowledge items (1-9) were graded by awarding one mark for each correct answer and the average knowledge score obtained by the students was 6.65 marks. Mean attitude scores calculated separately for each construct/item (10-16) are shown in Table 3 while gender differences in the knowledge and attitude scores are depicted in Table 4.

Table 3. Mean attitude scores (n=49)

Item	Mean attitude score	Standard deviation (SD)
Unsafe abortions are a cause of maternal mortality	4.2	± 0.8
Abortion is taking a human life	3.3	± 1.1
Recommendation of abortion in life threatening condition of mother	4.3	± 0.8
Refusal to perform abortion on moral ground	2.9	± 1.3
Counseling the patient before an abortion	4.8	± 0.4
Counseling the patient after an abortion	4.7	± 0.5

Discussion

Our research throws some light on the perception of medical students on the legal and ethical aspects of abortion. We found that their overall knowledge of legislation was good while attitudes to abortion were favourable for specified conditions. However, most of the students were not able

Table 4. Gender differences in knowledge and attitude scores (n=49)

Construct/Item		Gender		Student's t test	
		Male	Female	t value	p value
Unsafe abortions are a cause of maternal mortality	Mean SD*	4.2 0.9	4.1 0.8	0.416	.678
Abortion is taking a human life	Mean SD	3.3 1.2	3.4 1.1	0.057	.954
Recommendation of abortion in life threatening condition of mother	Mean SD	4.2 0.7	4.3 0.9	-0.645	.521
Refusal to perform abortion on moral ground	Mean SD	2.7 1.4	3.1 1.3	-0.925	.359
Counseling the patient before an abortion	Mean SD	4.7 0.5	4.8 0.4	-0.862	.393
Counseling the patient after an abortion	Mean SD	4.6 0.5	4.7 0.4	-1.01	.317
Knowledge score	Mean SD	6.6 1.1	6.7 1.1	-0.506	.614

Statistical significance at $p < 0.05$

*SD=Standard Deviation

to appropriately define the term “abortion” as “termination of pregnancy before the period of viability” which concurs with a study by Kumar R et al where only 46.77% of medical students could elicit the correct definition [8]. The majority agreed that unsafe abortions are a cause of maternal mortality in our state which is comparable with the findings of Palo LB et al [9] where 97.3% of participants agreed that unsafe abortions are a serious health problem in India. A similar study conducted in South Africa (2012) [10] found that respondents were less knowledgeable about which types of medical providers could legally perform termination of pregnancy which corresponds with our observations. The research findings of a descriptive cross-sectional study done in Brazil (2021) [11] showed that almost all students (98.3%) knew legal abortion does not require husband's consent. This is comparable to our results where 98% of medical students correctly responded that consent for medical termination of pregnancy (MTP) can be given by the patient (woman) herself if she is mentally sound and over 18 years of age. In a recent study from Jordan (2021) [12], 91.5% of participants agreed that abortion is permissible if pregnancy is a threat to a mother's life. The findings concur with the present study but differ from that done in Papua New Guinea [13] where only 52% of respondents agreed that abortion could be allowed when pregnancy is threatening a mother's life. Additionally, the Jordanian study demonstrated that 53% of students were of the view that abortion must be considered murder as compared to 44.9% in our sample who thought abortion is taking a human life. Thus, we see socio-cultural shades in attitudes to abortion across the globe although medical socialisation plays an important role in developing a tolerant attitude to safe and accessible abortion care when genuinely required. Finally, we did not find any statistically significant gender differences in knowledge and attitudes towards abortion as was the case in previous research done by Kolodziejczyk I et al¹³ and Tey N et al. [14]. A survey on first to fourth year medical students at the Johns Hopkins University School of Medicine, USA (1983-1990) demonstrated that attitudes correlated most strongly with personal beliefs about when a fetus was considered a human life and less so with students' genders [15].

Our study had its limitations in that its sample size was small (n=49) with only a single batch of MBBS students from a single institution taken into consideration. Moreover, these students were from the 2017 batch exposed to the traditional curriculum which had more emphasis on theory and less of practice. Secondly, our study instrument only tested basic knowledge and not its application in realistic case scenarios. Fróes NMF and his colleagues in Brazil [11] also commented that in general, students know about legal aspects but do not know when and how to apply it. It is hoped that with the introduction of the new Competency Based Medical Education (CBME) program in 2019, things will change for the better. This curriculum proposes a more practical approach through problem-based learning, case scenarios, objective assessment of clinical skills and a module on attitude, ethics, and communication. There is scope for further research on

students exposed to the CBME curriculum in the coming years to determine its effectiveness in bringing out full-fledged Indian Medical Graduates fulfilling the roles of clinician, leader, professional, lifelong learner and communicator.

Conclusions

We conclude that our students had good overall knowledge of the legal aspects and favorable attitudes towards abortion in specified circumstances. There is room for improvement in subsequent batches through a problem-oriented approach to learning with focus on enhancement of analytical and attitudinal skills for the doctors of tomorrow.

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