A Study to Assess the Awareness regarding Legislation of Abortion among Doctors, Staff Nurses, Pharmacists and Women in Selected Areas of New Delhi

Rana Kamar[1], Manju Chhugani[2], Merlin Mary James[3]

[1]M.Sc. Nursing (Obstetrics and Gynaecological Nursing) Student, [3]Tutor, Rufaida College of Nursing, Jamia Hamdard, New Delhi.
[2]Dean, School of Nursing Sciences and Allied Health, Jamia Hamdard.
DOI: https://doi.org/10.24321/2455.9318.201818

Abstract

Unsafe abortions have devastating effects on women's health. Despite the liberalization of abortion services since the enactment of the Medical Termination of Pregnancy Act, 1971, the rate of unsafe abortion is high in developing countries. This has contributed to high maternal mortality rates throughout India, where rates of maternal deaths attributed to complications from unsafe abortions are as high as 8%. A descriptive survey design using purposive sampling technique was used. The sample size for the study was 400 (100 doctors, 100 staff nurses, 100 pharmacists and 100 women). The study findings revealed that out of 100 women, 27 had used self-medication, of whom 18 had complications like excessive bleeding and pain after self-medication. Most (41%) of the women were highly aware regarding legislation of abortion. There was a significant relationship between awareness regarding legislation of abortion and education of women. Majority (81%) of the doctors were highly aware regarding legislation of abortion and 19 doctors were moderately aware regarding the legislation of abortion and there was not a significant relationship between awareness and age of doctors. Majority (57%) of staff nurses was highly aware and 38% staff nurses were moderately aware, and 5% were least aware regarding the legislation of abortion. Majority (42%) of pharmacists was highly aware and 42% pharmacists were moderately aware, and 16% were least aware regarding the legislation.

Keywords: Legislation of abortion

Introduction

Unsafe abortions have devastating effects on women's health. Despite the liberalization of abortion services since the enactment of the Medical Termination of Pregnancy Act, 1971, the rate of unsafe abortion is high in developing countries. This has contributed to high maternal mortality rates throughout India, where rates of maternal deaths attributed to complications from unsafe abortions are as high as 8%.[1] The underlying causes of morbidity and mortality from unsafe abortion today are not blood loss and infection but, rather, apathy and disdain toward women. Safe abortion services should be readily available and affordable to all women. This means services should be available at primary-care level, with referral systems in place for required higher-level care. Services related to abortion should be based on the health needs and human rights of women and a thorough understanding of the service-delivery system and the broader social, cultural, political and economic context. Access to safe, legal abortion is a fundamental right of women, irrespective of where they live.[2]

Corresponding Author: Ms. Rana Kamar, Rufaida College of Nursing, Jamia Hamdard, New Delhi.
E-mail Id: rana.rais93@gmail.com
Orcid Id: https://orcid.org/0000-0003-3263-756X

27

Kamar R et al.
Int. J. Nurs. Midwif. Res. 2018; 5(2)

Unsafe abortion, "a procedure for terminating an unwanted pregnancy either by persons lacking the necessary skills or in an environment lacking the minimal medical standards, or both", is a neglected women's health issue in India and in many developing nations. Of the 6.4 million abortions performed in India in 2002 and 2003, 3.6 million (56%) were unsafe. Worldwide, approximately 42 million pregnancies each year end in abortion, with 21.6 million of these abortions taking place under unsafe conditions. Nearly all unsafe abortions (95%–97%) occur in developing countries.[2,6]

Although legal, access to safe abortion remains limited in India. Given positive experiences of task-shifting from other developing countries, there is a need to explore the feasibility of expanding the manual vacuum aspiration (MVA) provider base to include nurses in India.[4]

Women are also responsible for unsafe abortions due to lack of knowledge regarding safe abortion services. In a study of knowledge, attitude and practice of medical abortions in women at a tertiary center, out of 210 women, 191 women took the Mifepristone/Misoprostol regimen of medical abortion and only 19 women had undergone abortion using other medicines. Out of the 191 women, only 23 women (12.01%) had heard about this regimen from doctors and 87 women (45.55%) had gained information from the media, mainly the internet and television. Out of the 19 women who had heard that abortion can be obtained by using other medicines, 16 women (84.21%) had heard about it from relatives, 1 (5.26%) from media, and 2 (10.53%) from others (friends).[3] Out of the 210 women undergoing abortion, 68 women (32.38%) had an abortion due to unplanned pregnancy while 80 (38.1%) of them had pregnancy due to failure of contraception. While 78 women (37.14%) received medicine through relatives mainly husband and 42.38% by pharmacists, 21 (10%) took the medicines by themselves; only 22 women (10.48%) were prescribed medicine for abortion by a doctor. Main complication after taking medicine for abortion was excessive bleeding mentioned by 126 women (60%), incomplete abortion by 80 women (38.1%), continued pregnancy by 39 women (18.57%), pain by 57 women (27.14%) and frequency of visits (increased frequency of visits to the hospital) by 35 women (16.67%). The main reason for not going to the doctor or hospital directly for getting termination of pregnancy was fear 107 (50.95%), social factor 77 (36.67%), and no information about medical abortion facility at the government hospital, as mentioned by 26 women (12.38%).[7]

Pharmacists are important providers of information and referrals for women seeking abortion; however, their awareness is limited. A study was conducted in Nairobi, Mombasa and Kisumu in which 235 pharmacists were interviewed. The majority (87.5%) of pharmacy workers had heard of Misoprostol but only 39.2% had heard of Mifepristone. They found that pharmacy workers had limited awareness of correct medical abortion regimens, side effects and complications and the legal status of abortion drugs. 49.8% of pharmacy workers reported providing abortion information to clients and 4.3% reported providing abortion methods. 75.2% of pharmacists referred mystery clients to another provider, though 64.2% of pharmacists advised mystery clients to continue with their pregnancy. Pharmacy workers reported that they were experiencing demand for abortion services from clients.[5,8]

However, unsafe abortion contributes significantly to maternal mortality and morbidity and unsafe abortion takes place due to the lack of awareness regarding legislation related to abortion among healthcare providers such as doctors, staff nurses and pharmacists and women. Awareness regarding legislations related to abortion among providers can save women's lives and improve reproductive health as well as reduce deaths due to complication of abortion and we can bring down the ratio of unsafe abortion to safe abortion in India which is 10:1.

Hence, the researcher felt the need to assess the extent of awareness among doctors, staff nurses, pharmacists and mothers in regard to abortion

Objectives of the Study

- To identify the number of women who have undergone abortion and assess the outcome of abortion
- To assess the awareness regarding legislations of abortion among doctors, staff nurses, pharmacists and women in selected areas of Delhi
- To determine relationship between awareness regarding legislation of abortion and education of the women
- To determine the relationship between awareness regarding legislation of abortion and age of the doctors, staff nurses and pharmacists

Materials and Methods

The research approach used in this study was quantitative non-experimental descriptive survey research approach, which was considered best to assess the awareness regarding legislation of abortion among doctors, staff nurses, pharmacists and women. The study was conducted on doctors and nurses working in Hakeem Abdul Hameed Centenary Hospital (HAHC) and women, who have undergone abortion and came to gynaecologist OPD in Hakeem Abdul Hameed Centenary Hospital and pharmacists having their shops in Tughlakabad. The sample size for the study was 400 (100, doctors, 100 staff nurses, 100 pharmacists and 100 women).

The sampling technique used in the present study was quota

Kamar R et al.
Int. J. Nurs. Midwif. Res. 2018; 5(2)

28

(non-probability) sampling technique. Formal administrative permission was obtained to conduct the study. Data was collected from 12th October 2017 to 5th November 2017. The investigator explained about the nature of the study and informed consent was taken. Subjects were assured about the confidentiality of their responses. A structured interview schedule was used to identify the number of women who had undergone abortion and its outcome, and to assess the awareness regarding legislation of abortion among women. A structured questionnaire was used to assess the awareness regarding legislation of abortion among doctors, staff nurses and pharmacists, and data was analyzed using SPSS IBM Version 20.

The model used for the present study was Ronald Anderson's Health Service Utilization Model. The Ronald Anderson Model was originally developed in 1968 at the University of Chicago.

Categories of Women's Awareness Score and the Range of Score

Categories	Least Aware	Moderately Aware	Highly Aware
Range of score	0–3	4–6	7–9

Each correct answer was awarded a score of 1 mark and for wrong answer 0.

Categories of Doctors, Staff Nurses and Pharmacists Awareness Score and the Range of Score

Categories	Least Aware	Moderately Aware	Highly Aware
Range of score	0–6	6–12	13–19

Each correct answer was awarded a score of 1 mark and for wrong answer 0.

Results

The results are discussed in the following section.

Section A: Findings Related to the Women

Part 1: Description of Demographic Characteristics of Women

Out of 100 women, more than half, who have undergone abortion, i.e., 51 (51%) were in the age group of 19–25 years. Most of the women, who had undergone abortion, i.e., 40 (40%) were graduates and postgraduates. Majority of the women, who had undergone abortion, i.e., 90 (90%) were housewives. Out of all women, who had undergone abortion, i.e., 62 (62%) belonged to joint families. Most of the women, who had undergone abortion, i.e., 43 (43%) were in the monthly income category of above Rs. 20,000.

Part 2: Findings Related to the Information regarding History of Abortion in Women

Out of 100 women, most of the women, who had undergone abortion, i.e., 45 (45%) had undergone abortion before 6 months. Out of all women, who had undergone abortion, i.e., 42 (42%) had spontaneous abortion. More than half number of the women, who had undergone abortion, i.e., 58 (58%) underwent abortion between 7 and 12 weeks of gestation. Out of all women, only 27 (27%) had taken self-medication. Out of 27 (100%) women, who had taken self-medication, 18 (66.7%) bought medications directly from the pharmacists and for 9 (33.3%), their husbands brought the medicines. Out of all women (100), who had undergone abortion, i.e., 49 (49%) had heard about Medical Termination of Pregnancy Act 1971. Out of these 49 (100%) women, 44.8% had received information regarding MTP Act from their families and friends.

Part 3: Findings Related to the Prevalence of Complications among Women Who Had Taken Self-Medication

Out of 27 (100%), only 12 (44.4%) of women had excessive bleeding. Only 6 (22.2%) of women had pain in abdomen. All the 18 women who had developed complication had taken treatment and received medication for the complication. Twelve women had controlled bleeding, three women had controlled pain and continued the treatment.

Part 4: Findings Showing Frequency-Percentage, Mean, Median, Standard Deviation and Range of Obtained Score by Women

Table 1. Frequency and Percentage Distribution, Mean, Median, Standard Deviation and Range of Obtained Score by Women

n=100

Level of Awareness	Frequency/Percentage	Range of Obtained Score	Mean±SD	Median
Least aware	27			
Moderately aware	32	0–9	5.6±1.86	6
Highly aware	41			

29

Kamar R et al.
Int. J. Nurs. Midwif. Res. 2018; 5(2)

Table 1 shows that most (41%) of the women were highly aware regarding legislation of abortion, (32%) were moderately aware and (27%) were least aware. The mean awareness score regarding legislation of abortion was 5.6, the median being 6, and standard deviation obtained was 1.86.

Part 5: Findings of Fisher's Exact Showing Relationship between Awareness Score and Education of Women

Table 2.Fisher's Exact Showing Relationship between Awareness and Education of Women

n=100

Demographic Characteristic Education	Least Aware	Moderately Aware	Highly Aware	p-value (Fisher's Exact Test)
Illiterate	8	3	1	.001**
Primary education	16	2	3	
Secondary education	1	13	11	
Higher Secondary	1	3	2	
Graduate and Postgraduate	1	11	24	

p<0.05, hence *significant at 0.05 level of significance

It is evident that there was a significant relationship between awareness score and education of women at 0.05 level of significance.

Section B: Findings Related to Doctors

Part 1: Findings Related to the Demographic Characteristics of Doctors

Most (38%) of the doctors belonged to the age group of 25–30 years.

Part 2: Findings Showing Frequency-Percentage, Mean, Median, Standard Deviation and Range of Obtained Score by Doctors

Table 3.Frequency-Percentage Distribution, Mean, Median, Standard Deviation and Range of Obtained Score of Awareness of Doctors regarding Legislation of Abortion

n_1=100

Level of Awareness	Frequency/ Percentage	Range of Obtained Score	Mean±SD	Median
Least aware	0	0–19	13.98±1.92	14
Moderately aware	19			
Highly aware	81			

Table 3 shows that most (81%) of the doctors were highly aware regarding legislation of abortion and 19% were moderately aware. The mean awareness score of doctors regarding legislation of abortion was 13.98, the median being 14, and standard deviation obtained was 1.92.

Part 3: Findings of Fisher's Exact Showing Relationships between Awareness Score of Doctors with Their Age

Table 4.Fisher's Exact Showing Relationship between Awareness of Doctors regarding Legislation of Abortion and Age

n_1=100

Age	Least Aware	Moderately Aware	Highly Aware	p-value (Fisher's Exact Test)
<30	0	3	2	.6479
>30	0	29	39	

p<0.05, Not significant at 0.05 level of significance

It is evident that there was no significant relationship between awareness score and age of doctors at 0.05 level of significance.

Section C: Findings Related to Staff Nurses

Part 1: Findings Related to the Demographic Characteristics of Staff Nurses

Most (41%) of the staff nurses belonged to the age group of 25–30 years.

Kamar R et al.
Int. J. Nurs. Midwif. Res. 2018; 5(2)

30

Part 2: Findings Showing Frequency-Percentage, Mean, Median, Standard Deviation and Range of Obtained Score by Staff Nurses

Table 5.Frequency-Percentage Distribution, Mean, Median, Standard Deviation and Range of Obtained Score of Awareness of Staff Nurses regarding Legislation of Abortion

n_2=100

Level of Awareness	Frequency/ Percentage	Range of Obtained Score	Mean ±SD	Median
Least aware	5	0–19	12.64±2.84	13
Moderately aware	38			
Highly aware	57			

Table 5 shows that majority (57%) of the staff nurses was highly aware regarding legislation of abortion, 38% were moderately aware and 5% were least aware. The mean awareness score regarding legislation of abortion was 12.64, the median being 13, and standard deviation obtained was 2.84.

Part 3: Findings of Chi-Square Showing Relationships between Awareness Score of Staff Nurses with Their Age

Table 6.Chi-Square Test Showing Relationship between Awareness of Staff Nurses regarding Legislation of Abortion and Age

n_2=100

| Category Age	Least Aware	Moderately Aware	Highly Aware	p-value (Chi-square)
<30	3	20	31	.949078
>30	2	18	26	(0.104)

$X^2(2)$=5.99, Not significant at 0.05 level of significance

It is evident that there was not significant relationship between awareness score and age of staff nurses at 0.05 level of significance.

Section D: Findings related to Pharmacists

Part 1: Findings related to the Demographic Characteristics of Pharmacists

Most (45%) of the pharmacists were below 25 years.

Part 2: Findings Showing Frequency-Percentage, Mean, Median, Standard Deviation and Range of Obtained Score by Pharmacists

Table 7.Frequency-Percentage Distribution, Mean, Median, Standard Deviation and Range of Obtained Score of Awareness of Pharmacists regarding Legislation of Abortion

n_3=100

Level of Awareness	Frequency/ Percentage	Range of Obtained Score	Mean ±SD	Median
Least aware	16	0–19	11.39 ±3.21	12
Moderately aware	42			
Highly aware	42			

Table 7 shows that out of all, 42% of pharmacists were highly aware regarding legislation of abortion, 42% were moderately aware and (16%) were least aware. The mean awareness score regarding legislation of abortion was 11.39, the median being 12, and standard deviation obtained was 3.21.

Part 3: Findings of Chi-Square Showing Relationships between Awareness Score of Pharmacists and Their Age

Table 8.Chi-Square Test Showing Relationship between Awareness of Pharmacists regarding Legislation of Abortion and Age

n_3=100

Category Age	Least Aware	Moderately Aware	Highly Aware	p-value (Chi-Square)
<30	12	35	34	.76993
>30	4	7	8	(0.522)

$X^2 (2)$=5.99, Not significant at 0.05 level of significance

31

Kamar R et al.
Int. J. Nurs. Midwif. Res. 2018; 5(2)

It is evident that there was not significant relationship between awareness score and age of pharmacists at 0.05 level of significance.

Section E: Findings Related to Comparison of Awareness of Doctors, Staff Nurses and Pharmacists regarding Legislation of Abortion

Frequency percentage shows that 81 doctors, 57 staff nurses and 42 pharmacists were highly aware regarding the legislation of abortion. 42 pharmacists, 38 staff nurses and 19 doctors were moderately aware regarding the legislation of abortion. 16 staff nurses and 5 pharmacists were least aware regarding the legislation of abortion.
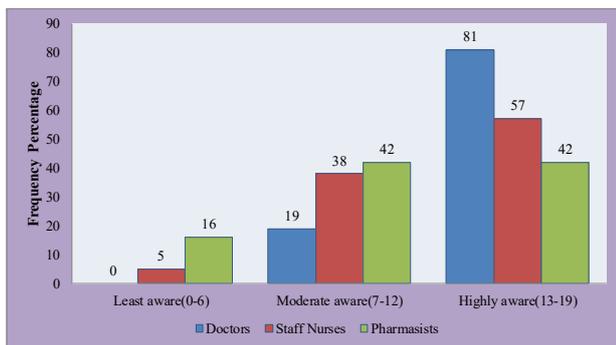
Figure 1.A Multiple Bar Diagram Showing the Comparison of Awareness of Doctors, Staff Nurses and Pharmacists regarding Legislation of Abortion

Discussion

The present study findings showed that most common cause of abortion was spontaneous abortion 42 (42%), followed by medical complications 30 (30%), unwillingness to have baby 28 (28%). 27% women had taken self-medication an 73%) had consulted with doctors and terminated pregnancy under prescribed treatment. Theses study findings are not consistent with a cross-sectional study conducted by Shrivastava[3] to assess knowledge, attitude and practice of medical abortion in women at a tertiary center in Indore (M.P.). In this study, they found that most common cause of medical abortion is failure of contraception (38.1%) followed by unplanned pregnancy (32.38%). Most women were prescribed medicine by their family members (37.14%) and chemist (42.38%). Only 10.48% women took medicine after doctor's prescription. Most patients took medicine at home (89.5%) and came to the hospital after complication arose.

The present study findings showed that majority of the doctors 95 (95%) had heard of Misoprostol and 72 (72%) Mifepristone. Only 20 (20%) of doctors were aware about the gestational limit for medical abortion. Majority (95%) of doctors were aware about the written consent required before abortion from the woman's husband or other family member. This study findings are supported by the findings of David and Lucil[4], who conducted a survey on

221 service providers including obstetrician gynecologists, and physicians holding Bachelor of Medicine and Bachelor of Surgery degrees (MBBS). The majority of providers (94.3%) limited use of the drugs to less than six weeks of pregnancy duration (Mifepristone is licensed for use up to 49 days, and scientific evidence has shown that it is effective even till 63 days). Use of Mifepristone in the higher-than-necessary 600-mg dosage was not uncommon. All providers insisted on signed consent from the woman's husband and/or other family members prior to providing a medical abortion.

The present study findings showed that majority 75 (75%) of nurses supported abortion in the case of rape, or incest or if the continued pregnancy would endanger a women's health. 57 (57%) of nurses were highly aware regarding legislation of abortion. This study findings are supported by the findings of Harries[9], to assess barriers to implementing South Africa's Termination of Pregnancy Act, as well as awareness of the provisions of the Termination of Pregnancy Act. To better understand the perspectives of healthcare workers, a survey among primary care nurses on duty was also conducted. In-depth interviews were conducted with nurses to further pursue issues raised in the two surveys. Support for the Act was low (11%) among nurses, and few supported abortion on request (6%). Majority of nurses (56%) supported abortion in the case of rape or incest, or if the continued pregnancy would endanger a woman's health (61 and 56%, respectively), but few supported abortion for social or economic reasons. In-depth interviews revealed nurses were poorly informed about the Termination of Pregnancy Act and felt confused in their professional responsibilities.

The present study findings showed that only 42 (42%) pharmacists were highly aware about the legislation of abortion. The majority 85 (85%) of pharmacy workers had heard of Misoprostol and Mifepristone. This study findings are supported by the findings of Reisse[5], to assess the pharmacy worker's knowledge and provision of medication for termination of pregnancy in Nairobi, Mombasa, Kisumu (Snegal). In 2013, 235 pharmacy workers interviewed about the medical abortion services they provide. The majority (87.5%) of pharmacy workers had heard of Misoprostol but only 39.2% had heard of Mifepristone. They found that pharmacy workers had limited knowledge of correct medical abortion regimens, side effects and complications and the legal status of abortion drugs. 49.8% of pharmacy workers reported providing abortion information to clients and 4.3% reported providing abortion methods.

On the basis of the study, it is recommended that a qualitative study can be done in which women and health professional can be interviewed so as to share their experiences regarding legal issues of abortion. An information booklet can be prepared regarding legislation of abortion and complication after abortion and to prevent

Kamar R et al.
Int. J. Nurs. Midwif. Res. 2018; 5(2)

32

unsafe abortion. Also a follow-up study can be conducted to evaluate the effectiveness of the information booklet in terms of retention of awareness regarding MTP. Pharmacists need accurate information on the drugs they sell as abortifacients, encouragement to promote pregnancy tests, training in encouraging women to see a provider prior to purchase, and visual and written material to hand out. Better adherence to existing regulations for all prescription drugs is important, but the best course is to increase the availability of low-cost, and safe abortion services at primary care level.

Conclusion

Medical abortion holds great potential for increasing the accessibility of women to safe abortion services in India. However, the awareness about legislation of abortion is significantly low. Women routinely seek information about abortion services from friends and relatives. However, these friends and relatives often do not know that safe abortion services are available and where to find them, so they sometimes recommend unsafe or untrained healthcare providers or home-brewed connections to end pregnancy, endangering the life of the woman. It is, therefore, of utmost importance to increase the awareness about legislation of abortion not only among doctors, staff nurses and pharmacists but also among general population. Poverty, low status of women in our society, lack of awareness about safe abortion services, lack of qualified persons in rural areas are some important causes, why women opt for unsafe and illegal abortion.

Conflict of Interest: None

References

1. http://www.popcouncil.org/research/expanding-the-provider-base-in-india--the-feasability-of-providion-of-ma-and.
2. Benerjee et al. *BMC Public Health* 2017.
3. Shrivastava N. The Study of Knowledge, Attitude and Practice of Medical Abortion in Women at a Tertiary centre.
4. The David and Lucile Packard Foundation, Expanding the Provider Base in India: The feasibility of provision of MA and MVA by non-MBBS providers.
5. Reiss K, Footman K, Akora V. Pharmacy Workers' Knowledge and Provision of Medication for Termination of Pregnancy in Kenya.
6. Benerjee et al. *BMC Public Health* 2012. http://www.biomedcentral.com/1471-2458/12/175.
7. Aggarwal KK. MTP (Amendment) Bill, 2014: A Retrograde Step by the Ministry of Health.
8. Jejeebhoy SJ, Kalyanwala S. Can Nurses perform Manual Vacuum Aspiration (MVA) as Safely and Effectively as physicians? Evidence from India.
9. Harries J. Health care providers' attitudes towards termination of pregnancy: A qualitative study in South Africa.