

Effect of Health Education on Grass Root Level Health Workers regarding Medical Termination of Pregnancy Act (MTP Act)

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Abstract :

Introduction: Despite being legally available in India since 1971, barriers to safe and legal abortion remain and unsafe and illegal abortion continues to be the problem. For proper knowledge of legal abortion medical, paramedical and grass root level health workers must have proper knowledge about the MTP Act.

Objective: To Assess the knowledge of grass root level health workers regarding MTP Act and to measure the improvement in knowledge after health Education. **Method:** An interventional study was carried out at Sahaj trust, Baroda. 30 workers who attended a workshop on 9th July, 2015 were administered a pre and post test questionnaire. All workers were from different Non Governmental Organizations (NGOs) from all over Gujarat and all were working in maternal and child health services. After completion of their pre test, all 30 participants were given an interactive talk on MTP Act by experts. All participants were asked to answer a similar questionnaire after giving health talk and the difference in the knowledge between pre and post was calculated by applying a paired t-test. **Analysis:** Analysis was done using MedCalc software. Means and SD of pre and post intervention scores were calculated and paired t-test was applied. **Results:** Mean \pm SD of pre-intervention questionnaire score was 10.30 ± 2.88 and Mean \pm SD of post-intervention scores was 14.30 ± 2.95 (Total score was 20). Analysis of these data on applying paired t-test showed that there was significant improvement in the knowledge of health care workers after educating them on MTP Act. ($p < 0.0001$) **Conclusion:** Health Education of Grass root level health workers resulted in improvement of their knowledge about MTP Act. **Implication:** It is necessary to empower grass root health workers by giving them health education on MTP Act and improving their knowledge on regular interval.

Key words: Grass root level Health Workers, Health Education, Medical Termination of Pregnancy Act

Introduction:

Abortion in India is legal only up to twenty weeks of pregnancy under specific conditions and situations. Recently, the Supreme court permitted a rape survivor to terminate her pregnancy at 24 weeks, which beyond the permissible 20 weeks limit prescribed under the medical termination of pregnancy act, 1971.^[1] An adult woman requires no other persons consent, except her own.^[2] In many parts of India, daughters are not preferred and hence sex-selective abortion is commonly practiced, resulting in an unnatural male to female population

sex ratio due to millions of developing girls selectively being targeted for termination before birth.^[3] The Indian Penal Code, enacted in 1860 and written in accordance with contemporaneous British law, declared induced abortion illegal. Induced abortion was defined as purposely "causing miscarriage."^[4] The penalty for abortion practitioners was either three years in prison or fine or both; for the woman availing an abortion, the penalty was either seven years in prison or a fine or both.^[4] The only exception was when abortion was induced in order to save the life of woman.^[4]

The prevalence of illegal abortion, combined with the idea that abortion could be a mode of population control, caused the Government to reconsider the law.^[4] In 1964, the central Family Planning Board of the Government of India met and formed a committee to examine the subject of abortion from the medical, legal, social and moral standpoints.^[4] The committee submitted its report in December 1966. This report suggested that the penal code was too restrictive and recommended that exemption under which abortion was permissible be increased and liberalized. Many of the report's suggestions included in the subsequent Medical Termination of Pregnancy (MTP) Act^[4] The Indian abortion laws falls under the medical termination of pregnancy (MTP) Act, which was enacted by the Indian parliament in the year 1971 with the intention of reducing the incidence of illegal abortion and consequent maternal mortality and morbidity.^[5]

The MTP Act came into effect from 1st April 1972 and was amended in the years 1975 and 2002. Pregnancies not exceeding 12 weeks may be terminated based on a single opinion formed in good faith. In case of pregnancies exceeding 12 weeks but less than 20 weeks, termination needs opinion of two doctors.^[6] Medical termination of pregnancy act of India clearly states the conditions under which a pregnancy can be ended or aborted, the persons who are qualified to conduct the abortion and the place of implementation.^[7] Some of these qualification are as follows: Women whose physical and or mental health were endangered by the pregnancy,^[4] women facing the birth of potentially handicapped or malformed child,^[4] rape, Pregnancies in unmarried girls under the age of eighteen with the consent of a guardian,^[4] Pregnancies in lunatics with the consent of guardian and pregnancies that are a result of failure in sterilization.^[4] Ipas, India reported in 2013 that unsafe abortion killed one woman for every two hours in India (approximately 4000 deaths a year),^[8] according to estimates and calculations correlating data on maternal mortality ratio and sample registration system data.. A lancet paper in 2007 said there were 6.4 millions abortions, of which 3.6

million or 56 % were unsafe. According to 2011 census, institutionalized abortion varied among Indian States from 32% in Chhattisgarh to 73.9% in Assam. However, over 40 years after the implementation of a liberal MTP Act, unsafe abortions continue to outnumber safe and legal abortion in India. In the absence of safe legal options, women opt for backroom procedures which can be fatal. The proposed amendments to the MTP act are aimed at increasing the availability of safe and legal abortion services. This was vital, as morbidity from unsafe abortion continues to remain high.

In terms of accessibility of safe abortion services in the public health system where a MTP is available, only 73% districts hospital in major states had this facility. In Bihar, it was only 35% districts hospital and Uttar Pradesh 48.5%, the lowest in the country.^[8] Though the availability of safe and legal abortion services in hospitals most of the woman opt illegal abortion services and there is fatal outcome. Our study was conducted at Sahaj Trust, Vadodara (Gujarat) to assess the proper knowledge of grass root level health workers regarding MTP Act.

Objectives:

- To assess the knowledge of grass root level health workers regarding MTP Act
- To measure the improvement in knowledge after education

Method:

The study was approved by Scientific and Institutional Ethics Committee for Human Research, Medical College and SSG Hospital, Baroda. Interventional study was conducted at Sahaj trust, Vadodara. Workshop was done on maternal and child health on 9th July, 2015. Sahaj trust contacted about 100 NGOs related to maternal and child health from all over Gujarat. These NGOs were requested to send their workers whoever active in maternal and child health to the Sahaj trust facility in Vadodara. On the Day of workshop, 9th July, 2015, 30 grass root workers working in maternal and child health were come and they were segregated and involved in the study. Out of these 30 Grass root level health workers 22 were females and only 8 were male health workers. To

evaluate their knowledge regarding MTP Act they were introduced to a pre-tested semi structured questionnaire after taking their oral consent. There were total 10 questions. Each question carried 2 marks. After completion of their test, all 30 participants were shown a video of 10-15 minutes. The video contained the information regarding unsafe abortion, problems which are created after unsafe abortion, sex ratio and information regarding MTP Act, after completion of the video they were given an interactive talk in which the topics covered were; what is unsafe abortion? What are the common complication after unsafe abortion? What is the legal provision under MTP Act? And discuss about current sex ratio and in which condition we can terminated pregnancy? To prove the presumption that the education had helped in improvement in knowledge, all participants were asked to answer a similar questionnaire again. Analysis was done using MedCalc software. Means and SD of Pre and Post intervention scores were calculated first. Then a paired t-test was applied on

these data to see if the improvement in knowledge is significant or not.

Results:

In our study out of these 30 participants 22 were female and 8 were male. Age of the participant ranged between 21 to 45. Majority of the participants were between 30 to 40 years of age group. Mean age of the study participants was around 33.13 year (SD=6.16). Most of the participants were educated up to graduation (18) followed by 12th(9) and 10th(3) standard. 50 % participants had income between Rs 5000 to Rs 10000.

Table 1 shows the socio-demographic profile of the participants. Results of Pre-intervention questionnaire showed that grass root workers could score only 10.30 (mean) marks out of maximum of 20 marks. They were given 2 marks for correct answer and Zero for wrong answer. Before health education 76.6% of participants couldn't answer when the pregnancy can be terminated under MTP Act and only

Table.1 Socio Demographic Factors (N=30)

Variable/Factor		Number (%)
Age (Mean ± SD) in years		33.13 ± 6.61
Sex	Female	22 (73.33%)
	Male	8 (26.66%)
Age group in years	21-25	4 (13.33%)
	26-30	8 (26.66%)
	31-35	9 (30%)
	36-40	3 (10%)
	41-45	6 (20%)
Education	Secondary School Certificate (SSC)	3 (10%)
	Higher Secondary Certificate (HSC)	9 (30%)
	Graduate	18 (60%)
Monthly Income (in ₹.)	<3000	5 (16.66%)
	≥3000	4 (13.33%)
	≥5000	15 (50%)
	≥10000	6 (20%)

Table 2: Knowledge of the participants regarding legal termination of pregnancy

Sr. No	Question	KNOW		DON'T KNOW	
		Pre Workshop N (%)	Post Workshop N (%)	Pre Workshop N (%)	Post Workshop N (%)
1.	When pregnancy can be terminated?	07(23.33)	18(60)	23(76.66)	12(40)
2.	Who can terminate pregnancy?	28(93.33)	30(100)	02(6.66)	00(0)
3.	Where pregnancy can be terminated?	29(96.66)	30(100)	01(3.33)	00(0)
4.	Is it necessary to take permission for termination of pregnancy from husband, mother in law or any other family member?	17(56.66)	24(80)	13(43.33)	06(20)
5.	If mentally ill woman come for termination of pregnancy than who will give permission	15(50)	21(70)	15(50)	09(30)
6.	If woman is pregnant due to rape than, Is she get permission?	06(20)	23(76.66)	24(80)	07(23.33)

23.3% participants had given correct answer and after health education correct response was increase to 60% and 40% had given incorrect response. Most of the participants in our study knew that who can perform medical termination of pregnancy, 93.3% participants gave correct response and this response increase to 100% after health education. Most of the participants knew where pregnancy should be terminated. Response was correct in 96.6% of the participants before health education and it was increased up to 100% after health education. 43.3% of participants didn't know that there must be registration of the place for abortion. And if there is no registration than what is the legal punishment. 50% participants gave only one correct answer and 6.6% gave both answers correct. After Health education, correct response was increased. Before health education, 56.6% participants knew that for termination of pregnancy, the permission of only pregnant woman is required; there is no need to take permission from husband, mother in law or any other person and this response was increased up to 80% after health education. 50% of participants had no knowledge that if mentally ill pregnant female

came for termination of pregnancy than who can give permission for termination of pregnancy. After health education, correct response was increased to 70%. Most of the participants in our study had no knowledge about the legal provision of the Medical Termination of Pregnancy Act. 6.6% participants couldn't answer the question regarding if mother comes with 13 weeks of pregnancy and after ultrasonography if we knew that baby is suffering from some serious health disease, than can we terminate pregnancy according MTP Act 1971 and Second part of the question was, if pregnancy was more than 12 weeks than opinion of how many doctor needed 46.6% participants gave only one correct answer about if after ultrasonography we knew that baby is suffering from some serious health disease than we can terminate the pregnancy and 46.6% participants gave both correct answer and both correct response was increased to 70% after health education. 80% of the participants had no knowledge that if pregnancy is due to rape than, can pregnancy be terminated legally. And after health education 76.6% participants gave the correct answer. Significant differences were seen between before and after the

health education. Table 2 shows the knowledge of the participants before and after intervention.

Mean \pm SD of Pre-intervention questionnaire score was 10.30 ± 2.88 and Mean \pm SD of Post-intervention questionnaire score was 14.30 ± 2.95 . Analysis of these data on applying paired t-test showed that there is a significant improvement in the knowledge of health care workers after educating them on MTP Act ($p < 0.0001$).

Discussion:

This study revealed that mean knowledge score regarding MTP Act among grass root level health workers was 10.30 and there was significant increase to 14.30 after health education ($p < 0.0001$). Main source of spreading knowledge among lay people and illiterate people are grass root level health workers. In rural India for most of the people source of information were grass root health workers. Most of the participants were lacking the proper knowledge regarding MTP Act, this was contrast to the study conducted in Maharashtra and similar to the study conducted in Gujarat.^[9] Despite 30 years of liberal legislation, the majority of women in India still lack access to safe abortion care. Proposed amendments to the MTP Act to prevent sex-selective abortions would have been unethical and violated confidentiality and were not taken forward. Continuing problems include poor regulation of both public and private sector services, a physician only policy that excludes mid-level providers and low registration of rural compared to urban clinics. Poor awareness of the law, unnecessary spousal consent requirements, contraceptive targets linked to abortion, and informal and high fees also serve as barriers.^[10] One study conducted in Rajasthan showed that there is greater role of community health workers in making safe abortion information and services accessible to women so it is necessary that community health workers have proper knowledge about the legal provision of MTP Act.^[11] Abortion has been legal in India since 1971 and the availability of safe abortion services has increased. However, service availability has not led to a significant

reduction in unsafe abortion. Study conducted in Jharkhand and Bihar showed that poor women have limited exposure to mass media. Instead they relied on community health workers, family and friends for health information.^[12] 93.3% of the participants in our study knew that who can terminated pregnancy correct. And response was increased to 100% after intervention. 23.3% participants knew that when women had terminated pregnancy. And correct response was increase after intervention. 96.6% of the participants knew that where pregnancy should be terminated. And correct response was increase to 100% after intervention. 56.6% of participants knew that for termination of pregnancy only pregnant woman is giving permission, there is no need to take permission from other family member and this response was increase to 80% after intervention. 50% of the participants had no knowledge that if mentally ill pregnant woman came for termination of pregnancy than who can give permission for termination of pregnancy. After intervention correct response was increase to 70%.

Conclusion:

Health education of the grass root level health workers result in improving their knowledge about MTP Act.

Recommendation:

Grass root level health workers are in direct contact with community and if they don't have proper knowledge; how can they convey right message to the community. Most of the illegal abortion occur in villages and there are not proper health facility and people are illiterate so fatal outcome due to illegal abortion are more common in villages. These people are worked at that level so they must have proper knowledge and convey right message to the people. And it is necessary to empower grass root level health workers by giving them health education and improving their knowledge on regular interval.

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Declaration:

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Conflict of Interest: Nil

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