Effect of Health Education on Grass root level Health Workers Regarding Pre-Conception and Pre-Natal Diagnostic Techniques Act (PCPNDT Act)

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Abstract:

Introduction: The declining sex ratio of girls and women in India is a major concern for all.For proper implementation of PCPNDT Act health workers like medical, paramedical and grass root level health workers must have proper knowledge about the act. **Objective:** To assess the knowledge of grass-root level health workers regarding PCPNDT Act and to measures the improvement in knowledge after health education. **Method :** 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 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 PCPNDT Act by expert. To prove the presumption that the health education had helped in improvement in knowledge all participants were asked to answer a similar questionnaire again. **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±SD of pre intervention questionnaire score was 17.23±3.97 and mean±SD of post intervention questionnaire score was 20.93 ± 3.29 (total score was 28). 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 PCPNDT act. (p=0.0005) **Conclusion:** Health education of the grass root level health workers resulted in improvement of their knowledge about PCPNDT act. **Implication:** It is necessary to empower grass root workers by giving them health education on PCPNDT Act and improving their knowledge on regular interval.

Key Words : Grass root level health workers, Health education, Pre-conception and Pre-natal diagnostic techniques act

Introduction:

The social, cultural and religious fibre of India is pre-dominantly patriarchal contributing extensively to the secondary status to women. The patrilineal social structure based on the foundation that the family line runs through a male makes a man a precious, another important pillar of the patriarchal structure is marriage wherein women are given a subordinate status. The dowry or groom price is so high irrespective of the class structure that generation may have to toil to repay the debts incurred during marriage. All of this has contributed to a low social status for women in society, to such an extent that even the birth of a girl child in a family is sought to be avoided. Common reason is basically that a girl is seen as liability-she will get married and leave the house, so cannot be counted for support in old age, needs to be protected much more, so makes it difficult for both parents to work (i.e. somebody needs to be at home with the girl to make sure she is safe), much higher chances of bringing disgrace to the family if something goes wrong. Denial to a girl child of her right to live is one of the heinous violation of the right to life committed by society, Gender bias and deep rooted prejudice preference of male child have led to large scale female foeticide in the last decade. The main purpose of PCPNDT Act, 1994 has been to ban the use of sex selection techniques before or after conception as well as the misuse of Pre-natal diagnostic techniques for sex selective abortion and to regulate such techniques. [1]The declining sex ratio of girls and women in India is a major concern for all. Sex ratio in India has been declining through decades since 1903.[2] The census data indicate that female ratio has been declining at an alarming rate and this would lead a serious socio-cultural problem

including violence and population imbalance leads to domestic violence, rape, sexual abuse, dowry harassment, trafficking. There is increase demand for sex determination technology and therefore this would continue to be supplied. [3]The issue of survival of girl child is a critical one, deep rooted in the society which needs systematic efforts in mobilizing the community. In order to check female foeticide. the PNDT Act 1994 was enacted and brought into operation from 1st January, 1996. PNDT Act and rules were amended and amended act / rules came into force with effect from 14th February, 2003 as PCPNDT Act. [1] The census of 2011 showed that sex ratio was 943 girls / 1000 boys and child sex ratio was 919 / 1000. [4] This decline has been interpreted as the direct result of more sex selective abortions of female foetuses. Various factors that can be attributed to the decline in sex-ratio include increase sex selective female abortion and female foeticide. One of the most important preventable factors among these is the prevention of selective female abortion. [5]However, it is important to note that in India unlike most countries of the world more girls than boys have been dying during childhood and this contributes to a decline in child sex ratio. This is because of fetal sex determination was common, if the family already had daughters , sex determination seems to be driven by a desired to have sons, with socioeconomic status and education having little effect. [6]The Act was acting since last 20 years but there is no increase in sex ratio and sex selective abortion are increased.For proper implementation of this act health worker like medical, paramedical and grass root level health workers must have proper knowledge about the act. Medical and paramedical persons have knowledge but, do you think that grass root level health workers have proper knowledge about PCPNDT ACT and conveying right message to the community. Most of the people know about the Pre-natal sex determination and it was a punishable offense, still majority of the people preferred to know the sex of unborn child which shows the need to implement the act effectively. [7]Our study was conducted at Sahaj Trust, Vadodara (Gujarat) to assess the proper knowledge of grass root level health workers.

Objectives:

To assess the knowledge of grass root level health workers regarding PCPNDT

To measure the improvement in knowledge after education

Method:

Current 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 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 PCPNDT Act they were introduced to a pre-tested semi structured questionnaire after taking their oral consent. There were 14 questions. Each question carries 2 marks. After completion of their test, all 30 participants were shown a video of 10-15 minutes, video contain the information regarding sex ratio, common problems society faced after declining sex ratio, information regarding PCPNDT Act, after completion of the video they were given an interactive talk in which the topics covered were:why do we need the act, discuss about current sex ratio, what is the drawback of decreasing sex ratio, impact of sex determination technique and sex selective abortion on decreasing sex ratio, about pre-natal diagnostic technique and in which condition we can use it,what is the procedure for registration, legal initiative, process of registration, renewal of registration, prohibition of act on place and persons by expert from health institution. To prove presumption that the educationhad helped in improvement in knowledge, all participants were asked to answer a similar questionnaire again. Analysis was done by 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 the knowledge is significant or not.

Results:

All the participants in our study knew that sex ratio in our country is low. Out of these 30 participants 22 were female and 8 were male. Age of the participant ranged between 21 to 45 years. 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=6.61). Most of the participant were educated up to graduate (18) followed by 12th(9) and 10th(3) standard.50 % participants had income between Rs5000 to Rs. 10000.

Table 1: Socio-demographic Factors (N=30)

Variable / Factor		No. of Participants
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	Passed 10th Standard	(10 %) 3
	Passed 12th Standard	(30 %) 9
	Graduate	18 (60 %)
Monthly Income of Family (INR)	<3000	5 (16.66 %)
	≥ 3000	4 (13.33 %)
	≥ 5000	15 (50 %)
	≥ 10000	6 (20 %)

Table 1 shows the socio-demographic profile of the participants. Results of pre-intervention questionnaire showed that grass root workers could score only 17.23 (mean) marks out of maximum of 28 marks. Before health education 86 % of the participants knew that sex determination was illegal after health education this response was increase to 93 %. Among the participants 70 % had difficulty in answering question regarding punishment (n=21 couldn't answer) and 43 % of the participants had difficulty in question regarding who can actually lodge complaint (13 couldn't answer) and after health education, these responses improve to 93 % of them knew punishment and 60 % knew where to lodge complaints against sex determination. 66 % of the participants knew that they couldn't advertise for the sex determination and after health education this response increase to 70 %. After the intervention in form of health education, the answer revealed an increase in basic knowledge of PCPNDT Act, which can be due to the intervention (health education). Significant differences were seen between before and after the health education.

Table 2 shows the knowledge of the participants before and after intervention. Mean ± SD of Pre-intervention questionnaire score was 17.23 ± 3.97 and Mean ± SD of Post-intervention questionnaire score was 20.93 ± 3.29. Analysis of these data on applying paired t-test showed that there is a significant improvement in the knowledge of health care workers after health educating them on PCPNDT Act (p=0.0005).

Discussion:

This study revealed that mean knowledge score regarding PCPNDT Act among grass root level health workers was 17.23 and there was significant increase to 20.93 after health education (p=0.0005). 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 level health workers. All of the participants know that sex ratio in our country is very low. As to basic medical knowledge 86.6 % of the workers knew before intervention that sex determination was an illegal act and this knowledge increase to 93.3 % after health education. Before intervention 80 % of the workers knew that sex determination was a punishable offence, this rate increase to 93.33 % after health education. But in our study only 30 % of the participants knew that what

Table 2: Knowledge of Health Workers before and after intervention

Question	Response	Pre-test Participants (Percentage)	Post-test Participants (Percentage)
1.Do you think that sex determination is legal?	Know Don't Know	26 (86.66) 4 (13.33)	28 (93.33) 2 (6.66)
2.Who is responsible for girl or boy child?	Father Don't Know	19 (63.33) 11 (36.66)	19 (63.33) 11 (36.66)
3. Do you know that sex determination is punishable?	Know Don't Know	24 (80) 6 (20)	28 (93.33) 2 (6.66)
4.Can we sex advertise for determination?	Yes No	10 (33.33) 20 (66.66)	9 (30) 21 (70)
5.What are the punishment for sex determination?	Imprisonment /Fine Don't Know	9 (30) 21 (70)	28 (93.33) 2 (6.66)
6.Who have right to complaint against sex determination	Anyone Don't Know	17 (56.66) 13 (43.33)	18 (60) 12 (40)

was the punishment for violation of act and after intervention this knowledge was increase to 93.33 %. Whereas in studies conducted at Hussan and Mumbai only half of the participants knew that prenatal sex determination was a punishable offence. [8-10] In our study majority of the participants knew that ultrasonography is the technique used for sex determination. This observation was similar to that reported in a study conducted in Mumbai, Maharashtra. [8] In our study 66.66 % of the participants had knowledge about that they couldn't advertise for sex determination, after health education this knowledge increased to 70 %. Nearly half (56.6%) participants had not knowledge about who have right to complaint against sex determination, after health education their knowledge increased to 60 %.

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

Recommendation: Grass root people are in direct contact with community and if they don't have proper knowledge; how can they convey right message to the community? So, 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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