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Impact of Technology Based Educational Programme on Mothers' Knowledge regarding Prevention of Child Sexual Abuse

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ABSTRACT

Introduction: Child sexual abuse, also called child molestation, is a forms of child abuse in which an adult or older adolescent uses a child for sexual stimulation. Childhood Sexual Abuse (CSA) is a major concern that causes greater psycho-social impact on the children. This study aims to develop and evaluate the effectiveness of the Technology Based Educational Programme on knowledge of prevention of child sexual abuse among mothers.

Method: The study has adopted quantitative research approach and pre-experimental design (one group pre-test and post-test design). A total of 50 mothers of children with age group 5-18 years were selected by convenience sampling techniques. Data was collected in terms of socio demographic profile of the mothers, developed by investigator, self-administered knowledge questionnaire regarding prevention of child sexual abuse, developed by investigator. Pre-test was conducted by using same questionnaire, educational programme was given for 15 minutes and post-test 1(Immediate) and 2 (on 8thday after intervention conducted. Data was analyzed with descriptive and inferential statistics.

Results: In the present study, 23(46%) mothers had poor knowledge,23(46%) mothers with average knowledge and 4(8%) with good knowledge. There is no significant association between the level of knowledge scores and socio demographic variables**.**

Conclusion: The result from this study reveals that knowledge regarding prevention of child sexual abuse among mothers was inadequate. Also, the educational programme significantly improved the knowledge of mothers regarding child sexual abuse so other teaching strategies can be used to increase mother's knowledge regarding prevention of child sexual abuse

Key words: *Mothers, Child sexual abuse, Technology Based Educational Programme*

1. INTRODUCTION

During childhood the development of a child happens in different arena i.e. Physical, cognitive and social and emotional arena. Physical includes size of body, motor development, development of brain, appearance, perception capacities of individual, cognition includes attention, memory, imagination, thought processes, problem solving, academic, creativity, and everyday knowledge, and language, social and emotional domain includes self-esteem, reasoning, sexual identification, logical thinking, discernment and reflection of emotions, disposition, understanding others, interpersonal skills, and friendships.

WHO (1999) defines as CSA as it is involvement of a child in sexual activity that he or she does not fully comprehend, is unable to give informed consent to, or for which the child is not developmentally prepared and cannot give consent, or that violate the laws or social taboos of society. Child sexual abuse is evidenced by this activity between a child and an adult or another child who by age or development is in a relationship of responsibility, trust or power, the activity being intended to gratify or satisfy the needs of the other person. This may include but is not limited to the inducement or coercion of a child to engage in any unlawful sexual activity; the exploitative use of child in prostitution or other unlawful sexual practices; the exploitative use of children in pornographic performances and materials.

A number of factors that make individual children vulnerable to sexual abuse have been identified such as female sex (though in some developing countries male children constitute a large proportion of child victims), children living alone, supervised children usually in institution, adoptive children, step son or daughter, handicapped children, history of past abuse, poorness, war/armed struggle, psychological vulnerability, single parent /broken homes, social isolation (e.g. lacking an emotional support network), parent's with mental illness, alcohol or drug dependency. Child sexual abuse affects the individual, causes internal injuries and bleeding. In severe cases, damage to internal organs may occur, which can lead to death.

Mothers must look for any inappropriate behavior in other adults or older youth because children, especially young ones, are not as able to recognize these behaviors or to protect themselves. Set and respect family boundaries. Speak up when inappropriate behavior and encourage reporting sexual abuse if know or suspect, if nobody speaks up, the abuse will not stop. Parents should be made aware of the national emergency number and child help line services. Protection of Children from Sexual Offences Act (POCSO) 2012 was established in India to protect the children against offences like sexual abuse, sexual harassment and pornography.

According to UNICEF report one in ten girls below age of 20 years, about 120 million across the globe, have been sexually abused, between 30 to 80 percent of victims don't disclose experiences of childhood sexual abuse until adulthood, while many others remain silent for their entire lives. The prevalence rate for child sexual abuse was 29.8%. Rates were higher in females (37.8%) than males (21.2%). For males, average age of CSA was 9.2 years and for females it was 10.03 years. The prevalence was higher in rural communities than urban. Most common type of sexual abuse reported was hugging and kissing. 1.1% of subjects experienced complete sexual abuse. Higher rate of all types of sexual abuse found in the age group of 10-15 years. Most of the offenders were male and mainly from outside the home (95.5%) & only 4.5% were a family member. 23.9% of the subjects sexually abused as child disclosed the assault. In India, a child is sexually abused every 15 minutes. In India (2016), 36,022 cases were recorded under POCSO Act.14 According to the National Crime Records Bureau (2013) 24,923 rape cases were reported across India in 2012. Out of these, 24,470 were committed by someone known to the victim.

A study was conducted to assess the impact of CSA on mental health. Children who suffer from sexual abuse during childhood had significantly higher rates of psychiatric treatment. Rates were higher for mental disorders that can occur during childhood, disorders of personality, disorders, anxiety and major affective disorders. Male victims were having more chances to have had treatment than females (22.8% v.10.2%). A review article on impact of child sexual abuse showed that in at least some portion of the victim population may express, anxiety, depression, anger and hostility, aggression, and sexually inappropriate behavior. Frequently reported long-term effects include depression and self-destructive behavior, anxiety, feelings of isolation and stigma, poor self-esteem, difficulty in trusting others, a tendency toward revictimization, substance abuse, and sexual maladjustment. The kinds of abuse that appear to be most damaging are experiences involving father figures, genital contact, and force. At the age at onset, the child's reporting of the offense, parental reaction, and institutional response are also considered .

. A study was conducted to assess the knowledge of mothers regarding prevention of CSA. The result has shown that 90% of subjects had inadequate knowledge regarding child sexual abuse. Keeping this in view the researcher justified the need to improve mother's knowledge on prevention of Childhood Sexual Abuse. Hence the researcher felts the need to develop Technology Based Educational Programmeon prevention of child sexual abuse and to evaluate its effectiveness on mothers' knowledge regarding the prevention of child sexual abuse.

Statement of the Problem: A pre-experimental study to evaluate the effectiveness of Technology Based Educational Programme on knowledge regarding prevention of child sexual abuse among mothers residing in selected villages of Dist. Sirmour, Himachal Pradesh, India

Objectives of the study:

1. To assess the pre-interventional knowledge regarding prevention of child sexual abuse among mothers.
2. To determine the effectiveness of Technology Based Educational Programmeon knowledge regarding prevention of child sexual abuse among mothers.
3. To find out the association between the pre-test score of knowledge regarding prevention of child sexual abuse with the selected demographic variables of the mothers.

2. MATERIALS & METHODS

A quantitative research approach was adopted for this study to achieve the objectives of the study, which is most suitable. The aims of the study were to evaluate the effectiveness of Technology Based Educational Programme on knowledge regarding prevention of child sexual abuse among mothers, in order to achieve this objective, the researchers found that one group pre-test and post-test design would be appropriate. Hence the researchers selected the pre-experimental design-one group pre-test and post-test design. The study setting was selected villages Dimber, Nanu, Bhanog, Kheri, Machher of Distt. Sirmour, Himachal Pradesh, India. The target population were mothers of children with age groups (5-18 years) residing in villages. The accessible population were mothers of children with age group (5-18 years) residing in selected villages of District Sirmour, Himachal Pradesh, India and the study population were mothers of children with age group 5-18years in villages Bagroti, Machher, Lanabhalta, Kheri, Dimber, Naanu, Bhanog of Distt. Sirmour, Himachal Pradesh and the sample comprised of 50 mothers of children selected by convenience sampling technique who fulfilled the sampling criteria such as mothers with children between the age of 5-18 years, residing in selected villages, who were willing to participate in study and were available at the time of data collection. The data was collected by using Socio demographic sheet and Knowledge questionnaire regarding prevention of childhood sexual abuse, the reliability was Cronbach's alpha 0.74. The Technology Based Educational Programme, content includes concept of child sexual abuse, risk factors, physical and psychological impact on individual and family, recognition of child sexual abuse, prevention and legislations for child sexual abuse for 15 minutes followed by discussion for 15 minutes on prevention of child sexual abuse. The data was collected after obtaining permission from the Principal of Akal College of Nursing to conduct the study and from the selected village Pradhan's, the researcher explained the purpose and benefit of research to the participants. A written informed consent was obtained from mothers, mothers were informed that they can withdraw from the study at any point, assured the confidentiality and anonymity of the mothers throughout the study. The data was collected following sequence, at first the baseline data was collected from the mothers by using Socio-demographic data sheet and self-administered knowledge questionnaire on prevention of Child Sexual Abuse. Followed by the administration of Technology Based Educational Programme on prevention of CSA for 15 minutes followed by discussion for 15 minutes and finally, post interventional data was collected from the mothers immediately after the intervention and on the 8thday after the intervention. Data Analysis was done using descriptive statistics such as frequency and percentage for socio demographic variables, Mean and standard deviation for knowledge score. Inferential statistics such as Paired 't' test was used to compare pretest and posttest knowledge score to determine the effectiveness of the educational programme and Chi- square test was used to find the association between pretest knowledge score and socio-demographic variables of the mothers.

Results and the findings of the study:

Distribution of socio demographic profile of the study participants.

Table 1: Frequency and percentage distribution of mothers based on their socio-demographic variables. (N-50)

Sl.No.	Variables	Subcategories	Frequency (f)	Percentage (%)
1	Age (years)	25-31	20	40
		32-38	26	52
		39-44	4	8
2	Education status of mother	Primary School	15	30
		Secondary School	27	54

		Senior Secondary	5	10
		Graduate and above	3	6
3	No. of children	One	9	18
		Two	27	54
		Three	12	24
		≥Four	2	4
4	No. of male child	One	37	74
		Two	9	18
		Three	1	2
		≥Four	1	2
		None	2	4
5	No. female child	One	28	56
		Two	9	18
		None	13	26
6	Type of family	Nuclear	44	88
		Joint	6	12
7	Marital status	Married	49	98
		Widow	1	2
8	Occupational status of mother	Housewife	45	90
		Government	1	2
		Farmer	4	8
9	Socioeconomic status (monthly in Rs)	Upper (>30,000/-)	5	10
		Upper Middle (20,001-30,000)	7	14
		Lower Middle (10,001- 20,000)	21	42
		Upper Lower (5000-10,000/-)	15	30
		Lower (<5,000/-)	2	4
10	Support system	Primary	4	8
		Secondary	4	8
		All	42	84
11	Living arrangement of children	At Home	49	98
		With Relatives	1	2

Table 1 showsthefrequencyandpercentageofsociodemographicvariablesofmothers. Regarding age, 20 (40%) mothers belong to the age group of 25-31years, 26 (52%) to 32-38years and 4 (8%)39-44 years. With respect to education status,15 (30%)of mothershadprimaryeducation, 27(54%) of the mothers had secondary education, 5(10%) of the mothers had senior secondary education and 3(6%) of mothers has done graduation. Regarding number of children, 9(18%) had one child, 27 (54%) had two, 12 (24%)had three and 2 (4%) had four and more than four out of which majority, 37 (74%) had one male child, 9 (18%)

had two, 1(2%) had three,1(2%) had four or more than four male child respectively, regarding female child, 28(56%) had one female child, 9(18%) had two female child and 13(26%) had no female child.

Regarding the type of family, most mothers 44(88%) were living in nuclear family and 6(12%) were living in joint family. According to marital status, the majority 49(98%) were married and 1(2%) werewidows. Regarding occupational status of mothers, Majority of the mothers were housewife 45(90%), 1(2%) was government employee and 4 (8%) were farmer. With respect to socio economic status of mother's, 5(10%) belonged to upper class (>30,000/- Rs), 7(14%) lie in upper middle class(20,000-30,000/-Rs), 21(42%) lie in lower middle(10,001-20,000/- Rs), 15(30%) lie in upper lower class(5000-10,000/- Rs) and only 2(4%) lie in lower class(<5000 Rs/-).Regarding support system, most of the mothers42 (84%) were having all three-support system, 4(8%) were having primary support system and 4(8%) were having secondary support system. Regarding living arrangement of children Majorityofthechildren's49(98%) were living at home and 1(2%) living with relatives.

Effectiveness of Technology Based Educational Programme on knowledge regarding prevention of child sexual abuse among mothers

Table 2 illustrates the frequency and percentage distribution of pre-test, post-test 1 and post- test 2. In pre-test there were 23(46%) mothers with poor knowledge, 23(46%) mothers with average knowledge and only 4(8%) mothers had good knowledge regarding prevention of child sexual abuse whereas in post-test 1 there were no one had poor knowledge, 7(14%) had average knowledge, majority 43(86%)had good knowledge and in post-test 2, 19 (38%) had average knowledge, 31(62%) had good knowledge. It revealed that educational programme was effective to increase the level of knowledge regarding child sexual abuse among mothers. The same has been depicted in figure 1.

Table 2: Frequency and percentage distribution of pre-test, post-test 1and post-test2scoreon level of knowledge among mothers (N=50)

Knowledge Score	Pre-test f (%)	Post-test-1f (%)	Post-test-2f (%)
Poor	23(46%)	0(0%)	0(0%)
Average	23(46%)	7(14%)	19(38%)
Good	4(8%)	43(86%)	31(62%)

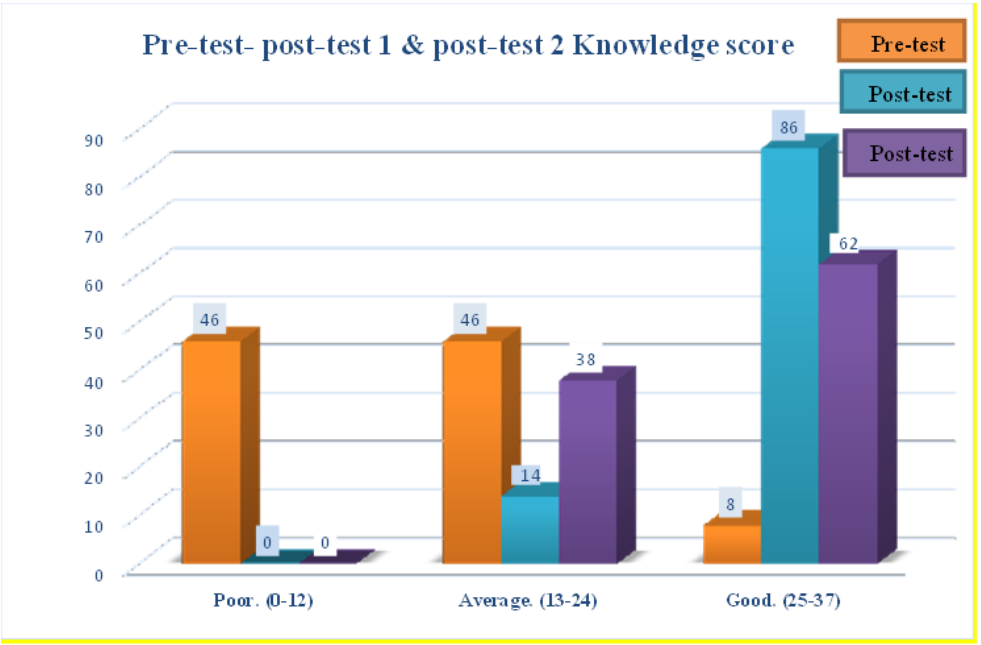

Figure 1 Bar diagram depicting the Frequency and percentage distribution of pre-test, post-test 1 and post-test 2 score on knowledge among mothers

Table 3: Mean & SD of Pre-test and Post-test 1 score on level of knowledge of mothers regarding child sexual abuse(N-50)

Test	Mean±S.D.	Mean%	Mean Diff.	t- test	p value
Pre-test	14.02±5.31	37.90	14.96	19.248	<0.001**
Post-test 1	28.98±3.120	78.30			

* * Highly Significant

Table 3 shows the Mean & SD of Pre and Post-test 1 score on level of knowledge of mothers in which Mean & SD of Pre-test is 14.02±5.31 and Post-test 1 is 28.98±3.120 (t- value is 19.248, p<0.001). It was revealed that there was a significant increase in the level of knowledge among mothers regarding prevention of child sexual abuse after giving educational programme.

Table 4: Mean & SD of Pre and Post-test 2 score on level of knowledge of mothers regarding child sexual abuse (N-50)

Test	Mean±S.D.	Mean%	Mean Diff.	t- Test	p value
Pre-test	14.02±5.31	37.90	11.200	12.827	<0.001**
Post-test 2	25.22±3.253	68.20			

** Highly Significant

Table 4 shows Mean & SD of Pre and Post-test 2 score on level of knowledge of mothers in which Mean & SD of Pre-test is 14.02±5.31 and Post-test 2 is 25.22±3.253(t- value 12.827, p<0.001**). It revealed that there is increase in level of knowledge among mothers regarding prevention of child sexual abuse after giving educational programme.

Table 5: Domain wise Mean & Standard Deviation (SD) of Pre-test and Post-test 1&2 score on level of knowledge among mothers regarding prevention of child sexual abuse (N-50)

Sl.No.	Domains	Test	Mean±S.D.	Ftest	p value
1.	Overview of child sexual abuse	Pre-test	2.04±1.45	116.29	<0.001**
		Post-test1	5.32±0.999		
		Post-test2	4.54±0.93		
2.	Impact of physical health	Pre-test	2.28±1.21	41.35	<0.001**
		Post-test1	3.98±0.892		
		Post-test2	3.42±1.01		
3.	Impact on psychological health	Pre-test	1.24±1.07	62.98	<0.001**
		Post-test1	3.36±0.898		

		Post-test2	2.52±1.03		
4.	Impact on family	Pre-test	0.40±0.495	8.87	<0.001**
		Post-test1	0.76±0.43		
		Post-test2	0.48±0.50		
5.	Long term effects of child sexual abuse	Pre-test	1.58±1.21	24.99	<0.001**
		Post-test1	2.78±0.790		
		Post-test2	2.60±0.99		
6.	Recognition of child sexual abuse	Pre-test	1.48±1.199	31.78	<0.001**
		Post-test1	3.20±0.92		
		Post-test2	2.62±0.97		
7.	Prevention of child sexual abuse	Pre-test	3.04±1.48	56.85	<0.001**
		Post-test1	5.82±1.13		
		Post-test2	5.02±1.28		
8.	Legislations for child sexual abuse	Pre-test	1.96±1.10	42.59	<0.001**
		Post-test1	3.76±1.09		
		Post-test2	4.02±1.40		

**Highly Significant

Table 5depicts the domain wise Mean & SD of Pre-test and Post-test 1&2 score on level of knowledge of mothers regarding prevention of child sexual abuse. In Domain 1 (Overview of child sexual abuse) the Mean ± S.D. of pre-test was 2.04±1.45, post-test1was 5.32±0.99andpost-test2was4.54±0.93(F-116.290, p<0.001). Domain 2 (Impact on physical health) the Mean ± S.D. of pre-test was 2.28±1.21, post- test 1 was 3.98±0.892 and post-test 2 was 3.42±1.01(F -41.35, p<0.001). Domain 3 (Impact on psychological health) the Mean ± S.D. of pre-test was 1.24±1.07, post-test 1 was 3.36±0.898 and post-test 2 was 2.52±1.03(F -62.98, p<0.001) Domain 4(Impact on family) the Mean ± S.D. of pre-test was 0.40±0.495, post-test 1 was 0.76±0.43 and post- test 2 was 0.48±0.50(F -8.87, p<0.001).

Domain 5 (Long term effects of child sexual abuse) the Mean ± S.D. of pre-test was 1.58±1.21, post-test 1 was 2.78±0.79 and post-test 2 was 2.60±0.99 (F- 24.99, p<0.001). Domain 6 (Recognition of child sexual abuse) the Mean ± S.D. of pre-test was 1.48±1.199, post-test 1 was 3.20±0.92 and post-test 2 was 2.62±0.97(F -31.78, p<0.001).Domain 7 (Prevention of child sexual abuse) the Mean ± S.D. of pre-test was 3.04±1.48, post-test 1 was 5.82±1.137 and post-test 2 is 5.02±1.28 (F-56.85, p<0.001).Domain 8 (Legislations for child sexual abuse) the Mean ± S.D. of pre-test was 1.96±1.10, post-test 1 was 3.77±1.08 and post-test 2 was 4.02±1.40 (F -42.59, p< 0.001).

It was revealed thatin the domain wise there was a significant increase in level of knowledge among mothers regarding the prevention of child sexual abuse. In this study the stated hypothesis was there will be significant difference between the pre-test and the post-test scores on the level of knowledge regarding prevention of child sexual abuse among mothers at p<0.05 level of significance. The result of the study revealed that there was significant gain and retention in level of knowledge regarding prevention of child sexual abuse among mothers. Hence, the stated hypothesis was accepted.

Association of pre-test knowledge scores with selected socio demographic variables of mothers

Table 6 shows the association between pre-test knowledge scores with selected socio demographic variables of mothers. It revealed that there is significant association between pre-test knowledge score with selected socio demographic variables of mothers: type of family (p<0.034), support system (p<0.001), socioeconomic status (p value 0.01) and pre-test level of knowledge regarding child sexual abuse among mothers. There were significant association found between pre-test scores on level of knowledge with the selected demographic variables such as type of family (χ^2=6.769, p=0.034), socio economic status (χ^2=21.760, p=0.01) and support system (χ^2=31.813, p=0.001) of mothers.

No significant association found with following socio-demographic variables such as age of mothers (χ^2=7.109, p=0.130), education status of mothers (χ^2=4.597, p=0.596), no. of children (χ^2=2.894,p=0.822), no. of male child (χ^2=9.672,p=0.289), no. of female child (χ^2=3.836,p=0.429),marital status (χ^2=1.198,p=0.549), occupational status (χ^2=1.59, p=o.81), living arrangement of children (χ^2=1.20,p=0.549) and children staying away from home (χ^2=1.198,p=0.654). There was a significant association between pre-test scores on level of knowledge with the selected demographic variables (type of family, socio economic status and support system) of mothers at 0.05 level of significance.

In this study the stated hypothesis was that there will be significant association between pre-test scores on level of knowledge with the selected demographic variables of mothers at $p<0.05$ level of significance. The results of the study revealed that the majority of the socio demographic variables were not significant. Hence the stated hypothesis was rejected.

Table 6: Association of pre-test knowledge scores with selected socio demographic variables of mothers (N=50)

Sl. No	Variable	Subcategory	Knowledge Score			χ2	df	p value
			Good	Average	Poor			
1.	Age(years)	25-31	0	8	12	7.11	4	0.13
		32-38	3	12	11			
		39-44	1	3	0			
2.	Education status of mother	Primary School	2	6	7	4.60	6	0.60
		Secondary School	1	13	13			
		Senior Secondary	0	3	2			
		Graduate and Above	1	1	1			
3.	No. of children	One	0	5	4	2.89	6	0.82
		Two	3	10	14			
		Three	1	7	4			
		≥Four	0	1	1			
4.	No. male child	One	3	18	16	9.67	8	0.30
		Two	0	3	6			
		Three	0	1	0			
		≥Four	0	1	0			
		None	1	0	1			
5.	No. female child	One	2	13	13	3.83	4	0.43
		Two	2	3	4			
		None	0	7	6			
6.	Type of family	Nuclear	2	20	22	6.77	2	0.03*
		Joint	2	3	1			

7.	Marital status	Married	4	22	23	1.20	2	0.55
		Widow	0	1	0			
8.	Occupational status of mother	Housewife	4	20	21	1.59	4	0.81
		Government	0	1	0			
		Farmer	0	2	2			
9.	Socioeconomic status (Rs. Monthly)	Upper (>30,000)	2	3	0	21.76	8	0.01*
		Upper Middle (20,000/-30,000/-)	2	4	1			
		Lower Middle (10,001/-20,001/-)	0	8	13			
		Upper	0	6	9			
		Lower (5001-10,001/-)						
		Lower (<5,001/-)	0	2	0			
10.	Support system	Primary	0	4	0	31.8	4	0.001**
		Secondary	3	1	0			
		All	1	18	23			
11.	Living arrangement of children	At Home	4	22	23	1.20	2	0.549
		With Relatives	0	1	0			
12.	Children staying away from home	One	0	1	0	2.56	4	0.654
		Two	0	1	0			
		None	4	21	23			

* Significant; ** Highly significant

3. DISCUSSION

The findings of the study have been discussed in accordance with the objective of the study and previously reviewed literature.

Description of the socio demographic variables of mothers

In the present study the majority of the more than half 52% of the mothers, 52% lie between the age group of 32-38 years. In another study out of 50, 18 (36%) aged between 26-30 years. Regarding education, 54% of motherscompleted secondary education, whereas in other study findings revealed that 52% of mothers completed elementary school level [25].With respect to the occupation, most (90%) of the mothers were housewife and in another study 66% mothers were house wife. Regarding the socio-economic status, 42% lie in the lower middle (>10,000 Rs) but in another study 52% were above lower economic status (Rs.3001). According to the type of family, majority of the mothers 88% belonged to nuclear family similar findings reported in another study were 68% belonged to nuclear family.

Effectiveness of Technology Based Educational Programme on knowledge regarding prevention of child sexual abuse among mothers.

In this study, in pre-test 46% mothers had poor knowledge, 46% had average knowledge and 8% had average knowledge. The Mean and standard deviation in pre-test was 14.02±5.31. In another study findings revealed that in pre-test, the majority 76% were having inadequate knowledge. Mean and standard deviation for pre-test was 12.78±3.55 . After administration of

the educational programme, in post-test 1, 14% mothers had average knowledge and 86% had good knowledge & in post-test 2, 38% had average knowledge and 62% had good knowledge. Mean and standard deviation for post-test 1, 28.98±3.120 and in post-test 2 it was 25.22±3.253. Similar findings were reported in a study, that in the post-test, 56% mothers had adequate knowledge and 44% were having moderate knowledge.

Regarding domain wise score of level of knowledge regarding prevention of CSA. In domain 1 (Overview of child sexual abuse) the Mean ± S.D. of pre-test was 2.04±1.45, post-test 1 was 5.32±0.99 and post-test 2 was 4.54±0.93(F -116.290, p< 0.001). In domain 2 (Impact on physical health) the Mean ± S.D. of pre-test was 2.28±1.21, post-test 1 was 3.98±0.892 and post-test 2 was 3.42±1.01 (F -41.35, p<0.001). In domain 3 (Impact on psychological health) the Mean ± S.D. of pre-test is 1.24±1.07, post-test 1 was 3.36±0.898 and post-test 2 was 2.52±1.03(F -62.98, p< 0.001). In domain4 (Impact on family) the Mean ± S.D. of pre-test was 0.40±0.495, post-test 1 was 0.76±0.43 and post-test 2 was 0.48±0.50 (F -8.87, p<0.001). In domain 5(Long term effects of child sexual abuse) the Mean ± S.D. of pre-test was 1.58±1.21, post-test 1 was 2.78±0.79 and post-test 2 was 2.60±0.99(F- 24.99, p<0.001) and in domain 6(Recognition of child sexual abuse) the Mean ± S.D. of pre-test was 1.48±1.199, post-test 1 was 3.20±0.92 and post-test 2 was 2.62±0.97(F -31.78, p<0.001).

In domain 7 **(**Prevention of child sexual abuse) the Mean ± S.D. of pre-test was 3.04±1.48, post-test 1 was 5.82±1.137 and post-test 2 was 5.02±1.28 (F-56.85, p<0.001). Domain 8 **(**Legislations for child sexual abuse) the Mean ± S.D. of pre-test was 1.96±1.10, post-test 1 was 3.77±1.08 and post-test 2 was 4.02±1.40 (F -42.59, p< 0.001). The study results revealed that in all the domains there was a significant increase in the level of knowledge regarding the prevention of child sexual abuse from the pretest to posttest 1 and 2. The gain and retention of knowledge among mothers help the mothers to prevent child sexual abuse among their child and they can keep the children safe. Similarly in a study bySonalika, Soumya (2019) reported that the knowledge of mothersin pre-test was inadequateamong 12% of respondents and88% of them had moderate knowledge. In the post-test majority 81% of them had adequate knowledge. In the area wise distribution, in the post-test, the highest mean percentage was 78.5 % with mean score (4.71±1.10) for area of child sexual abuse. The lowest mean percentage in posttest is 61.2% with mean score (3.06±1.13) regarding warning signs of child molestation. In another study by Suchismita P., et al (2020) identified that 54%, 34%, 12% of mothers were had average, good and poor knowledge on prevention of child sexual abuse respectively.

Association between the pre-test score on knowledge regarding the prevention of child sexual abuse with the selected socio demographic variables of the mothers.

It was found that there was a significant association found between the pre-test score on level of knowledge among mothers regarding the prevention of child sexual abuse with support system (χ^2=31.813, p<0.01), socio-economic status (χ^2=21.760, p<0.01) and type of family (χ^2=6.769, P<0.01). In another study, the finding revealed that a significant association found between the father's education status and family income.[25]The socio demographic variables such as age, education, no. of children, no. of male child, no. of female child, type of family, marital status, socio economic status, support system, living arrangement of children, children staying away from home do not have significant association between pre-test scores on knowledge with the selected demographic variables of mothers.

4. CONCLUSION

The result from this study revealed that knowledge regarding prevention of child sexual abuse among mothers were inadequate. Also, the Technology Based Educational Programme significantly improved the knowledge of mothers regarding child sexual abuse. Hence, it is recommended to incorporate the technology in the health education programme to create awareness among mother's, which has a better outcome in the prevention, and identification of child sexual abuse.

Conflict of interest

The authors declare no conflict of interests.

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REFERENCES

[1] Browne, A., & Finkelhor, D. (1986). Impact of child sexual abuse: A review of the research. *Psychological Bulletin, 99*(1), 66–77.

[2] Government of India. (n.d.). *Protection of Children from Sexual Offences Act*. http://vikaspedia.in/education/policies-and-schemes/protection-of-children-from-sexual-offences-act

[3] Khaled, E., Sayed, A. H., & Hamed, A. F. (2012). Prevalence and pattern of child sexual abuse reported by cross-sectional study among the university students, Sohag University, Egypt. *Egyptian Journal of Forensic*

Sciences, 2(3), 89–94.

[4] Pal, S. (2016). A retrospective study of sexual assaults in southern range of Himachal Pradesh. *International Journal of Health Sciences & Research, 6*, 342–351.

[5] Rahimi Khalifeh Kandi, Z., Ebadi Fard Azar, F., Khalajabadi Farahani, F., Azadi, N., & Mansourian, M. (2022). Significance of knowledge in children on self-protection of sexual abuse: A systematic review. *Iranian Journal of Public Health, 51*(8), 1755–1765.

[6] Sadock, B. J., & Sadock, V. A. (2014). *Synopsis of psychiatry: Behavioral sciences/clinical psychiatry* (10th ed., pp. 876–878). Lippincott Williams & Wilkins.

[7] Sharma, R. (2012). *Essentials of pediatric nursing* (2nd ed.). Jaypee Brothers Medical Publishers.

[8] Sonalika, & Soumya. (2019). Effectiveness of structured teaching program on knowledge regarding child sexual abuse among mothers in Jaypore, Khurda District, Odisha. *International Journal of Nursing Research, 5*(1), 5–9.

[9] Suchismita, P., Krishna, S., Tapati, G., Sahoo, A., & Panigrahi, J. (2020). Knowledge and attitude of mothers towards the prevention of child sexual abuse. *European Journal of Molecular & Clinical Medicine, 7*(11), 5089–5095.

[10] Sirmour Police Headquarters. (n.d.). Report from Nahan SP office, Himachal Pradesh.

[11] Singh, M. M., Kaur, S. S. P., & Nair, N. S. (2014). An epidemiological overview of child sexual abuse. *Journal of Family Medicine & Primary Care, 3*(4), 430–435.

[12] Spataro, J., Paul, E. M., Mullen, P. E., & Burgess, P. M. (2018). Impact of child sexual abuse on mental health: Perspective study in males and females. *The British Journal of Psychiatry, 184*(5), 416–421.

[13] Sydney, M., Kumar, C. N., & Math, B. S. (2015). Child sexual abuse: Issues & concerns. *Indian Journal of Medical Research, 142*(1), 1–3.

[14] Trickett, P. K., McBride-Chang, C., & Putnam, F. W. (1994). The classroom performance and behavior of sexually abused females. *Development and Psychopathology, 6*(1), 183–194.

[15] UNICEF. (2014, September 6). *UNICEF report*. https://www.rt.com/news/185600-girls-sexually-abused-10/

[16] Vyas, J. N., & Ghimire, S. R. (Eds.). (n.d.). *Textbook of postgraduate psychiatry* (3rd ed., Vol. 2, pp. 899–993).

[17] World Health Organization. (1999). *Report of the consultation on child abuse prevention (WHO/HSC/PVI/99.1)*.WorldHealthOrganization.http://www.who.int/mip2001/files/2017/childabuse.pdf