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To Assess the Effectiveness of Structured Teaching Programme on Knowledge regarding Prevention of Sexual Abuse among high school Girls students, Odisha

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Abstract

A pre-experimental one-group pre-test post-test study was conducted at Nigamananda High School, Choudwar, to evaluate the effectiveness of a structured teaching programme (STP) on knowledge regarding prevention of sexual abuse among female students aged 10–16 years. Sixty participants were selected by systematic random sampling. Data were collected using a semi-structured questionnaire assessing demographic variables and knowledge of sexual abuse prevention. Following the pre-test, an STP using PowerPoint slides was delivered in small groups. Post-test data showed a significant increase in knowledge scores (mean pre-test = 10.55 ± 3.13; mean post-test = 18.9 ± 4.46; $t = 15.8$, $p < 0.001$). No significant association was found between post-test knowledge and selected demographic variables. The study concludes that structured teaching is effective in improving knowledge of sexual abuse prevention among high school girls.

Keywords: Structured teaching programme, sexual abuse prevention, knowledge, adolescent girls, school health, pre-experimental design.

INTRODUCTION

Mercy.A. James, Child Sexual Abuse and Law, 2011, conducted a study that, It is a fact that millions of girls and boys worldwide are being sexually abused within homes and outside. They are abused by families and known persons. In India child marriages are also a form of child sexual abuse. There is, at present, neither a comprehensive law nor a policy to deal with child sexual abuse in India. Legal intervention is presently in the form of investigations which start with registration of offences under the Juvenile Justice (Care & Protection of Children) Act, 2000 or the Indian Penal Code. But the ordinary criminal laws are totally inadequate to protect the children, who are victims of sexual abuse. [(1)]

Vicky R Bowdens, 2010, conducted a study that, The prevention of child sexual abuse has three levels such as primary prevention secondary prevention and tertiary prevention. The primary prevention of sexual abuse begins with teaching the names, function and significance of private parts. The children should be taught to say NO when they feel uncomfortable. Secondary prevention emphasis on early detection, quick intervention and provision of a supportive environment in schools and families and the tertiary prevention should involve coordination among the police, courts, counsellors, doctors and social workers. This will helps to prevent many emotional problems and will help the child to lead normal life. [(2)]

Jane Ball, et al., 2003, conducted a study that, Violence against children can take many forms; one of the most common among that was child sexual abuse. Awareness on the problem of child sexual abuse is increasing even though the cases are being reported. Many children who are sexually abused are under the age of 12-13 years who are going to schools. The factors that increase the risk for sexual abuse are absence of natural father or having a stepfather, being female, mother's employment outside the home, poor relationship with parents, parental substance abuse and isolation. In most of the cases the abusers often threaten to harm or kill the child or other family members if the child discloses the abuse. [(3)]

A study was conducted by Matthew J Breeding, et.al., 2011, to find out the risk factors associated with sexual violence towards girls. The objective of the study was to explore the risk factors for sexual violence in childhood. The sample size was 1244 girls of the age group between the 12-20 years. The association between childhood sexual violence and several potential demographic and social risk factors was explored through vicariate and multivariate logistic regression. The results shows the respondents who had been close to their biological mother as children, those who had not been close to her had higher odds of having experienced sexual violence [$t=1.89$ ($p<0.05$)]; those who had no relationship with mothers at all [$t=1.93$ ($p<0.05$)]. [(4)]

A 2010 study by Chhayya Prasada in Choudwar assessed schoolgirls' knowledge of child sexual abuse and sought to break the silence surrounding the issue. Among 2,211 respondents, 42% experienced some form of sexual abuse—48% of boys and 39% of girls. Abuse was more common in upper and middle classes than in lower classes ($p<0.05$) and occurred in both joint and nuclear families. Most perpetrators were known to the child, while strangers were a minority. Stranger-related incidents were mainly public harassment and exhibitionism ($p<0.05$). The study highlighted that abuse was often a pre-planned exploitation of trust. [(5)]

Janna Lesser (2000) conducted a longitudinal study on 95 adolescent mothers to examine the link between childhood abuse and chronic depression. Among participants, 56% reported physical abuse, 23% sexual abuse, and 17% both. Many experienced chronic depression requiring treatment during pregnancy and postpartum. Depressive symptoms were significantly higher in abused mothers than in non-abused peers ($t = –2.58$, $p = 0.01$), increasing the risk of impaired mother–child relationships. [(6)]

Santa Barbara (2004) conducted an intervention for 56 students with developmental and learning disabilities to improve recognition and avoidance of sexually abusive situations. The program emphasized identifying exploitive relationships, assertiveness, and taking action, using a video with 12 stories and role-playing. Knowledge and practice scores improved markedly and parents recommended enhancing skills training, finding the program highly effective in helping children protect themselves. [(7)]

Hazzard A. et al. (2003) implemented the Feeling Yes, Feeling No video program in Uttar Pradesh to help 272 high school girls (14–18 years) recognize inappropriate touch and seek help. Pre-test results showed 76.4% had inadequate

knowledge, which dropped to 0% after the intervention. The post-test improvement was highly significant ($t = 24.714$, $p < 0.05$), proving the video-based program effectively increased awareness of child sexual abuse. [8]

Kingslyraj S. (2012) evaluated a structured teaching programme on child sexual abuse prevention among 50 rural Bijapur mothers. Before teaching, 76% had inadequate and 20% moderately adequate knowledge. Higher knowledge was noted in middle-class and graduate mothers compared to lower-class or illiterate mothers ($p < 0.05$). The study concluded that most mothers lacked adequate awareness, but structured education effectively improved their knowledge. [9]

Girish S. (2011) studied 50 anganwadi workers in Karnataka to evaluate a structured teaching programme on child abuse. Pre-test results showed 53.3% had moderately adequate knowledge and 46.7% had inadequate knowledge. After the programme, 70% achieved adequate knowledge and none remained inadequate. The improvement was significant ($t = 3.36$, $p < 0.05$), confirming the programme's effectiveness. [10]

Shankarling S.R. (2006) conducted a quasi-experimental study in Maharashtra to test a structured teaching programme on child abuse among primary and middle school teachers. Using a knowledge checklist, results showed a 68.96% knowledge increase in primary teachers and 72.6% in middle school teachers, confirming the programme's effectiveness. [11]

Karuna B. (2011) conducted a comparative study in Bhopal with 100 parents (50 urban, 50 rural) to assess a structured teaching programme and booklet on child sexual abuse. The mean knowledge gain was 47.43, and 80% of parents achieved adequate knowledge, showing both methods were effective for educating parents and spreading health information. [12]

METHODOLOGY

Study Design

This study adopted a Pre-experimental, one-group pre-test post-test design.

Study Setting

Nigamananda High School, Choudwar, Odisha, India.

Population

High school girl's students the age group between 10- 16 years in the selected setting.

Sampling Method

In this study systematic random sampling technique is used.

Study duration

Four weeks (05.08.2013 – 30.08.2013), including pre-test, intervention, and post-test.

Sample size

A total of 60 students were included in this study. The sample size was determined using Yamane's formula.
According to Yamene's formula

$n = N/ (1+ N e^2)$

Here n= Sample size, N = Population size, e = Percentage of error i.e. 0.05

Inclusion and exclusion criteria

Inclusion criteria included female students aged 10–16 years, enrolled in the selected school, Present and willing to participate during data collection.

Students unwilling to participate, Students absent at the time of data collection were excluded.

Description of the tools

Data were collected using three tools:

Tool-1: Self-structured socio-demographic questionnaire (age, class, residence, menarche status, parental education/occupation).

Tool-2: Semi-structured questionnaire (27 multiple-choice items) on knowledge of sexual abuse prevention—definition, incidence, forms, causes, effects, and preventive measures.

Tool- 3: Structured teaching programme (PowerPoint) covering definition, types, signs and symptoms, risk factors, reporting channels, and self-protection strategies.

Tool validation

Content validity: Reviewed by 5 experts (1 medical professionalism, 4 nursing professionalism). Reliability tested using test-retest method; correlation coefficient (r = 0.9), indicating high reliability. Pre-testing (tryout) done in hospital for clarity, ambiguity, and timing.

Study variables

Demographic variables: Age, class, residence, menarche status, parental education, occupation.

Independent variables: Structured teaching programme

Dependent variables: Knowledge of sexual abuse prevention (measured by questionnaire scores).

Data collection procedure

Pre-test: Semi-structured questionnaire administered to all 60 participants (30 min).

Intervention: STP delivered in four small groups over three consecutive days (20 min each). The female children were divided into four groups and were educated regarding prevention of sexual abuse by using powerpoint slides presentation. Each day 4 group which contains 5 female students was been taught by the investigator for three consecutive days. Duration of each session was around 20 minutes.
Post-test: Same questionnaire administered on days 18 and 25 after intervention.

Ethical considerations

Approval obtained from School principal. Written informed consent from participants. Assurance of confidentiality and right to withdraw. Permission obtained from the school principal.

Statistical Analysis

SPSS version 21 was used for data analysis. Demographic information and baseline characteristics were summarized using descriptive statistics, including mean values, standard deviations, and frequency counts. The data will be collected and analyzed with descriptive and inferential statistical techniques. The demographic variables will be analyzed by using frequency and percentage. The frequency tables will be formulated for all significant information. Descriptive statistics (frequency, percentage, mean, SD) for demographic data and knowledge scores. Inferential statistics: paired 't' test to compare pre-test and post-test scores, Chi-square to test association with demographic variables .

Theoretical framework

The study is grounded in Wiedenbach's Helping Art of Clinical Nursing Theory (1964), which emphasizes purposeful nursing action directed toward meeting a patient's need for help.

1. Identifying the Need for Help – Recognizing the gap in knowledge about prevention of sexual abuse among high school female students.

2. Ministering the Needed Help – Delivering a structured teaching programme (prescription) considering agent (nurse investigator), recipient (female students), and goal (prevention of sexual abuse).

3. Validating the Help – Evaluating knowledge gain through post-test assessment to ensure the need was met.

Theory/Model Description

Wiedenbach's theory views nursing as a helping art where the nurse's role is to identify a need, provide appropriate intervention, and confirm its effectiveness.

Agent: Nurse investigator.

Recipient: Female students (10–16 years).

Goal: Improved knowledge and self-protective behaviours against sexual abuse.

Means/Activities: Structured PowerPoint teaching on definition, forms, signs, symptoms, prevention, and reporting of sexual abuse.

Framework Location: Nigamananda High School, Choudwar.

RESULTS

Table-1: Frequency and percentage distribution of female students according to their biological variables.

N= 60

Sl. No	Biological variables	Frequency (f)	Percentage (%)
1	Age (in years)		
	a)10-12	-	-
	b)12-14	41	68.3
	c)14-16	19	31.6
2	Class of studying		
	a) 6th standard	-	-
	b) 7th standard	-	-
	c) 8th standard	21	35
	d) 9th standard	26	43.3
	e) 10th standard	13	21.6
3	Attained menarche		
	a) Yes	52	86.6
	b) No	08	13.3
4	Religion		
	a) Hindu	58	96.6
	b) Muslim	02	3.3
	c) Christian	00	0
5	Type of family		
	a) Nuclear	15	25
	b) Joint	24	40
	c) Extended	21	35

6	Residence		
	a) Urban	31	51.6
	b) Rural	29	48.3
7	Education of parents father		
	a) Graduate	13	21.6
	b) Pre degree	24	40
	c) High school	23	38.3
	d) Middle school	-	-
	e) Elementary school	-	-
	f) Illiterate	-	-
8	Education of parents mother		
	a) Graduate	-	-
	b) Pre degree	28	46.6
	c) High school	31	51.6
	d) Middle school	1	1.6
	e) Elementary school	-	-
	f) Illiterate	-	-
9	Occupation of parents- father		
	a) unemployed	-	-
	b) daily worker	28	46.6
	c) Private Employee	31	51.6
	d) Government Employee	1	1.6
	e) Business	-	-
10	Occupation of parents - mother		
	a) unemployed	13	21.6
	b) daily worker	24	40
	c) Private Employee	23	38.3
	d) Government Employee	-	-
	e) Business	-	-
11	Staying with		
	a) Parents	53	88.3
	b) Grand parents	7	11.6
	c) Any other relatives	-	-
12	Hours spend by female children with their parents or grandparents		
	a) Less than 3 hours	28	46.6
	b) More than 3 hours	32	53.3
	c) No time	-	-
13	Communication of female children with their parents or grand parents		
	a) Friendly	36	60
	b) Unfriendly	24	40
14	Mode of transport to the school		

	a) Walking	49	81.6
	b) Local bus	-	-
	c) Autorickshaw	-	-
	d) Own vehicle	11	18.3
	e) School bus	-	-
15	Any previous information regarding prevention of sexual abuse		
	a) Yes	28	46.6
	b) No	32	53.3
16	If yes, source of information		
	a) Health professionals	-	-
	b) Family members	8	13.3
	c) Electronic media (television or internet)	20	33.3
	d) Newspaper or magazines	-	-
	e) Friends	-	-

The above table-1 revealed that age, class of studying, residence, education of parents father and mother, staying with, hour spend by female children with their parents or grandparents, communication of their parents, mode of transport to the school, any previous information regarding parents of sexual abuse, if yes, source of information.

Table- 2: Frequency and percentage distribution of female students according to pre-test score of knowledge regarding prevention of sexual abuse.

N =60

Sl no.	Knowledge	f	%
1.	Adequate knowledge	-	-
2.	Moderately adequate knowledge	12	20
3.	Inadequate knowledge	48	80

The data presented in table-2 revealed that the pretest, most female students 48 (80%) had inadequate knowledge on the prevention of sexual abuse, 12 (20%) had moderately adequate knowledge, and none had adequate knowledge. This indicates a clear need to improve their awareness and understanding of sexual abuse prevention.

Table- 3: Distribution of female students according to post test score of knowledge regarding prevention of sexual abuse.

N =60

Sl No.	Knowledge	f	%
1.	Adequate knowledge	26	43.3
2.	Moderately adequate knowledge	34	56.7
3.	Inadequate knowledge	-	-

Table- 3 shows that in the post-test, 26 (43.3%) female children had adequate knowledge and 34 (56.7%) had moderately adequate knowledge, with none having inadequate knowledge about the prevention of sexual abuse. This indicates that the structured teaching programme effectively improved the students' knowledge.

Table- 4: Mean, Standard deviation, Mean difference and Difference in mean of pre test and post test knowledge score of female students regarding prevention of sexual abuse.

N =60

Sl. no	Ares of Knowledge	Max Score	Pre test			Post test			Difference in mean %
			Mean	SD	Mean %	Mean	SD	Mean %	
1.	Introduction about sexual abuse	5	2.48	0.67	49.7	3.8	1.11	76	26.3
2.	Forms and incidence of sexual abuse	5	1.52	1.18	30.3	3.17	1.27	63.4	33.1
3.	Causes of sexual abuse	2	0.67	0.59	33.35	1.15	0.63	57.5	24.15
4.	Effects of sexual abuse	3	0.87	0.77	28.9	2.02	0.87	67.3	38.4
5.	Prevention of sexual abuse	12	5.1	1.75	42.5	8.77	1.74	73.08	30.58

The post-test showed the highest mean score in the area of "Introduction about sexual abuse," with 3.8 ± 1.11 (76%) compared to the pre-test score of 2.48 ± 0.67, reflecting a 26.3% gain. The lowest improvement was in "Causes of sexual abuse," where the post-test mean was 1.15 ± 0.63 (57.5%) and the mean difference 24.15%. The greatest percentage change occurred in "Effects of sexual abuse," rising from 28.9% in the pre-test to 67.3% in the post-test, a 38.4% increase. Overall, the mean score improved from 10.55 ± 3.13 (39.07%) to 18.9 ± 4.46 (70%), showing an overall gain of 30.93%.

Table- 5: Effectiveness of structured teaching programme on knowledge of the female students regarding prevention of sexual abuse among in the selected school.

N= 60

Sl. No	Knowledge	Maximum score	Mean	SD	't' value
1	Pre test	27	10.55	3.13	15.8*
2	Post test		18.9	4.46	

The table shows a highly significant difference between pre- and post-test knowledge scores on the prevention of sexual abuse among female students. This confirms that the improvement is real, supports the hypothesis (H1), and demonstrates the effectiveness of the structured teaching programme.

Table- 6: Association between the post test knowledge score among female students and their selected demographic variables.

N= 60

Sl.no	Demographic variables	Df	Chi-square value	Table value
1.	Age	2	0.68	5.84
2.	Attained menarche	1	1.31	3.84
3.	Class of studying	4	5.99	9.49
4.	Staying with	1	0.03	3.84
5.	Hours spend spent by the female students with parents or grandparents	1	1.42	3.84
6.	Mode of transport to the school	3	1.38	7.82
8.	Any previous information regarding prevention of sexual abuse	1	2.34	3.84
9.	If yes, source of information	1	3.20	3.84
10.	Education of mother	4	4.09	4.49
11.	Occupation of mother	4	3.03	4.49
12.	Residence	1	0.10	3.84
13.	Type of family	1	1.42	3.84

***significant at p≤0.05 level**

There is no significant association between the knowledge regarding prevention of sexual abuse among female students and with their selected demographic variables. Hence it can be interpreted that the differences in mean score of the post test related to the demographic variables were not true difference and only by chance the research hypothesis H_2 is rejected ($P \geq 0.05$ level).

DISCUSSION

The present study was supported by a survey conducted by Kulesh Thapa, (2006) to assess the knowledge attitude and practice regarding child abuse among the school children between 11-18 years in Nepal. Primary and secondary data was collected through interview schedule more than 1041 children participated in the study. The overall response pattern shows that the children 265 (54%) had only a moderate level of awareness about child abuse. [13]

The present study was supported by Williams, K.J (2007) who conducted a study to assess the effectiveness of school based teaching programmes to improve the knowledge regarding sexual abuse and self protective behaviors among school children. 50 trails was measured by using the knowledge based questionnaire, vignette-based knowledge and disclosure of abuse. The pre test knowledge score was poor among the school children 18(36.32%) but after the teaching programme the level of knowledge 34(78.12%) increased and which is highly significant (t=12.56). The school based teaching programme was a painful experience for the children. [14]

The present study was supported by Christine, M. (2003) who conducted a survey to assess the emotional status of Sexually Abused students and their mothers in Darjeeling with the objective to associate the knowledge and demographic variables. 44 mothers with their children participated in the study. The study reveals that there was no relationships were found between ethnicity, social status, gender of the child or age of the child and knowledge regarding child sexual abuse. [15]

IMPLICATIONS OF THE STUDY:

Community-based education can markedly improve mothers' awareness of HFMD**.**

LIMITATION:

Conducted in a single school with a small sample (n = 60). No control group for comparison. Limited to female students aged 10–16 years and to a four-week period.

CONCLUSION:

The pre-experimental study demonstrated that a structured teaching programme significantly improved knowledge regarding prevention of sexual abuse among high school female students ($t = 15.8$, $p < 0.001$). The intervention validated Wiedenbach's theory: identifying the knowledge deficit, delivering targeted education, and confirming effectiveness through measurable knowledge gain.

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Conflicts of interest

There are no conflicts of interest for the writers.

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Ethics Approval

Approval obtained from School principal. Written informed consent from participants. Assurance of confidentiality and right to withdraw. Permission obtained from the school principal.

DATA AVAILIBILITY

The data is available and can be accessed with a reasonable request.

ABBREVIATIONS

STP: Structured Teaching Programme, SD: Standard Deviation, df: Degrees of Freedom, χ^2: Chi-Square

REFERENCE

1. Evans R, editor. Abuse and Violence Towards Young Children: Perspectives on Research and Policy. Routledge; 2017 Oct 2.
2. McKibbin G, Humphreys C. Future directions in child sexual abuse prevention: An Australian perspective. Child abuse & neglect. 2020 Jul 1;105:104422.
3. DeKeseredy W, Donnermeyer JF, Schwartz MD, Tunnell KD, Hall M. Thinking critically about rural gender relations: Toward a rural masculinity crisis/male peer support model of separation/divorce sexual assault. Critical Criminology. 2007 Dec;15(4):295-311.
4. Tharp AT, DeGue S, Valle LA, Brookmeyer KA, Massetti GM, Matjasko JL. A systematic qualitative review of risk and protective factors for sexual violence perpetration. Trauma, Violence, & Abuse. 2013 Apr;14(2):133-67.
5. Edgardh K, Ormstad K. Prevalence and characteristics of sexual abuse in a national sample of Swedish seventeen-year-old boys and girls. Acta paediatrica. 2000 Mar;89(3):310-9.
6. Lesser J, Koniak-Griffin D. The impact of physical or sexual abuse on chronic depression in adolescent mothers. Journal of Pediatric Nursing. 2000 Dec 1;15(6):378-87.
7. Johnston M. Teaching sexual abuse prevention skills to two children with intellectual disabilities through game play.
8. Njuguna FW, Kombo K. Naom Kemuma Ondicho.
9. KV P, Singh A, Ks A, Girish Kumar J, Kumar P, Raj KI. Effect of Direct Benefit Transfer (DBT) policy on fertilizer sales in India.
10. Bharathi TN. *A Critical Study on Management Practices of Third Sector Organisations (TSOs) in Karnataka* (Doctoral dissertation, University of Agricultural Sciences, GKVK, Bangalore).
11. Rahmanifar MS, Karimib L. Evaluation of shelf life of commercial Li/SO2 battery by electrochemical impedance spectroscopy.
12. Karuna B. *A Comparative Study to Assess the Knowledge of Rural and Urban Mothers Regarding Child Abuse in Selected Areas of Kolar with a View to Develop an Information Booklet* (Master's thesis, Rajiv Gandhi University of Health Sciences (India)).
13. Devkota MD. Utilization of rural maternity delivery services in six districts of Nepal: A qualitative study. 2006.
14. Zwi KJ, Woolfenden SR, Wheeler DM, O'brien TA, Tait P, Williams KW. Cochrane review: School-based education programmes for the prevention of child sexual abuse. Evidence-Based Child Health: A Cochrane Review Journal. 2008 Sep;3(3):603-34.
15. Biswas P, Das Chatterjee N. Are the Daughters Safe Anywhere? A Quantitative Analysis of Rape Crisis in West Bengal, India. Journal of Human Rights and Social Work. 2025 Jun 12:1-21.