

Effectiveness of Planned Teaching Programme on Knowledge Regarding Prevention of Substance Abuse among Students of Class IX of Green Park Sikshasadan High School, Kolkata, West Bengal, India

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Abstract: Pre experimental study based on one group pretest posttest design was undertaken to evaluate the effectiveness of planned teaching program on knowledge regarding prevention of substance abuse among class IX students of Green Park Siksha Sadan high school, Kamalgazi, Kolkata, and West Bengal before and after the teaching program. The conceptual framework adapted was based on System model. Experimental group had 80 students who received teaching program and were selected by probability simple random sampling. Validated structured questionnaire was used to collect data. The result revealed that in experimental group mean knowledge score of the students increase from 30.025 to 35.775 [$t=18.80$ (df 79 = 1.99), $p < 0.05$]. Hence it was evident that the teaching was effective on prevention of substance abuse among classes IX students. Based on the study findings, the recommendation were made for a study on a large sample and different setting.

Keywords: Adolescents, knowledge level, planned teaching program, prevention of substance abuse.

1. Introduction

Today's children are tomorrow's citizens, it is necessary for us to prevent adolescents to become prone to substance abuse. An adolescent is a period when lots of changes take place in body and mind. They start using harmful and illegal substances at a younger age. Drinking, smoking, drug use by adolescents affects general health, physical growth, emotional development and school performance [1, 2, and 3]. According to UN report, 1 million heroin addicts are registered in India and unofficially there is as many as 5 million. Cannabis, heroin, and Indian produced drugs are the most frequently abused drugs in India.4,5 The International Narcotic Control Board reported that in India person addicted to opiates are shifting their drug of choice from opium to heroin [6,7,8]

2. Background

It has been reported that substance use in 2008-09, 51% of

high school seniors and 59% young adults have admitted using illicit substance including about 45% of each have used cannabinoids - example marijuana, almost 15 % have taken amphetamine, 2.5 % of world population confirms cannabis use expand with cocaine and 0.2% consuming opiates . Francis JL Mullen K 2006 [6]

Substance addiction in India (UN Report 2006). Nearly 4 million registered drug addicts are in South Asia, 1.25 lakhs are in India. Distribution- alcohol 42%, opium 20%, heroin, cannabis 6.25% and others 1.8%. The mean age of onset of various substance abusers was during youth between 21-23 yrs. Prevalence of current tobacco use 2000-08 between the age of 13-15 yrs in India, boys 19% and girls 8.3% (WHO 2009) [8]. Government survey to reveal extend of drug abuse, July 4, 2014: New Delhi after a gap 14 yrs since it last checked the trend of drug abuse in the country, the countries now all set to conduct advanced survey on the extent, trends pattern of drug abuse among citizens. In order to access the extent and nature of addiction in country the Government conducted an advanced pilot survey in 2 states of Punjab and Manipur. The submission was made by center in front of Delhi High Court while filing an affidavit and stated that efforts are underway by National Sample Survey Organization in coordination with ministry to start the survey [7].

3. Objectives of the Study

- To assess the knowledge of class IX students on prevention of substance abuse.
- To find out the effectiveness of planned teaching on prevention of substance abuse in terms of knowledge.

1) Pilot study

Sample of 15 students by simple random sampling was taken from the institution and were explained the purpose of study .Confidentiality was maintained. Data was collected by close

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ended questions from students.

Table 1
Schematic representation of research design

| Population, Sample, Sampling technique | Day -1 pretest | Day 2-7 Intervention | Day -8 Post test |
|---|--|--|------------------|
| Population: students of Green Park Siksha Sadan High School | Tool 1 Demographic proforma | Implementation of planned teaching program | Tool 2 |
| Sample: 80 students Sampling technique: Simple random sampling | Tool 2 Structured questionnaire on prevention of substance abuse | | |

Table 2
Data collection tools and technique

| Variable | Data collection tool | Technique |
|--|--------------------------|-------------|
| Demographic data of participants | Structured questionnaire | Questioning |
| Knowledge on prevention of substance abuse | Structured questionnaire | Questioning |

2) Data collection procedure

The investigators collected data as follows:

- Formal administrator permission was taken from the head of the institution.
- Prepared questionnaire validation.
- Information to students about date of pretest and planned teaching program.

4. Literature Review

- An experimental study was conducted Yogeshwar Puri Goswami, Dean, Gitanjali college of nursing at Udaipur district of Rajasthan, India on February in 2015 to assess the effectiveness of structured teaching program on knowledge of adolescents -91 non randomly selected 17-18yrs) for the study. Result of the study shows improvement between pre and posttest. 13.9 obtained and paired t test value-18.9425, it was highly significant at 1% level $p > 0.001$ and there was significant association between posttest knowledge scores and selected variables- age, religion, year of education ($p > 0.01$), sex, types of family ($p > 0.05$ level). 1
- A prospective study was conducted by Akondi Butchi Raju, 2013, October in Andhra Pradesh, India that smoking tobacco and inhalational abuse are more when compared to other types of abuse among street children and adolescents. Stratified random sampling was done to draw 603 sample population. Result of the study revealed that more prevalence among 11-14 yrs and drop out of school ($t = 4.64$ at $p = 0.001$) [7]

- Janet Williams, Marylau Behnke in 2008 conducted a study to identify the prevalence of alcohol use by youth and adolescents in Institute of Education, Faculty Education, Obafemi Awolwo University, Nigeria. 384 samples were randomly selected for the study purpose. Results of the study revealed that for those aged 12 yrs/ Youngers at first use, the prevalence of lifetime alcohol dependence was 40.6%, and for 21 yrs was 10.6%. Similarly prevalence of lifetime alcohol abuse was 8.3 % for those who initiated use at 12 yrs/ younger, 7.8% for those who initiated at 18 yrs, and 4.8% for those at 21 yrs.

5. Results and Discussion

1) Related to demographic data

- 72.5% students belong to 15-16 yrs of age group.
- 58.75% belong to nuclear family.
- 52.50 students' sources of family income is self-employment.
- 73.75% students are exposed to awareness of substance abuse.
- 87.5% students' are not exposed to substance use before.
- 50% students have history of substance abuse in family.

Related to knowledge score of class IX students of experimental group

- The mean posttest knowledge 35.775% of students of class IX of experimental group is higher than the mean pretest knowledge score 30.025% after planned teaching program.
- There is significant difference between mean pretest and mean posttest knowledge score as evident from paired 't' test ($t = 18.80$, $p < 0.05$), showing effectiveness of planned teaching program about prevention of substance abuse of experimental group.

2) Discussion in relation to other studies

On the basis of the study findings and the objectives of the present study, the discussion is presented in the following manner-

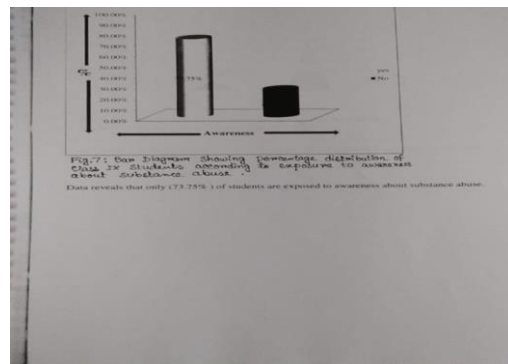


Fig. 1. Bar diagram depicting % distribution of students according to exposure to substance abuse awareness

The findings from present study reveal that mean of posttest 35.775% were found to be improved than that of mean pretest

30.025% among the class IX students. Similar observation was made by Yogeswar Puri Goswami, Dean of Gitanjali college of nursing at Udaipur district of Rajasthan, India on February 2015 to assess the effectiveness of structured teaching program on knowledge among 91 non randomly selected adolescents 17-18 yrs where results show improvement between pre and posttest 13.97.

3) Diagram depicting Tool I based on demographic data (Questions 1-6)

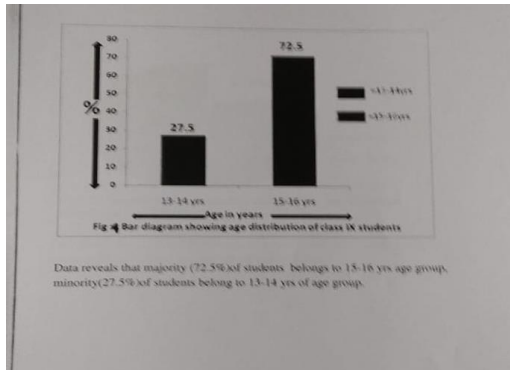
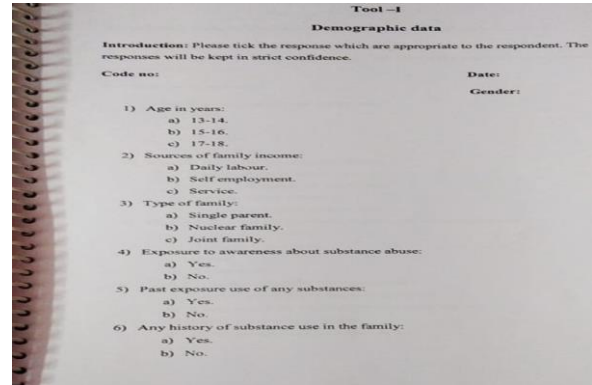


Fig. 2. Bar diagram showing age distribution of students

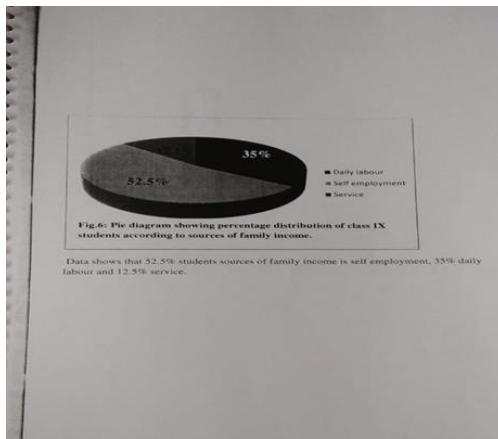


Fig. 3. Pie diagram showing % distribution of class IX students according to family income sources

4) Diagram depicting Tool 2 having questionnaires on knowledge regarding problems of substance abuse (question 1-20)

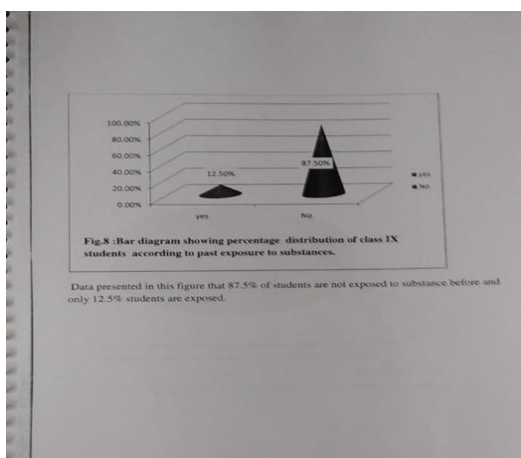
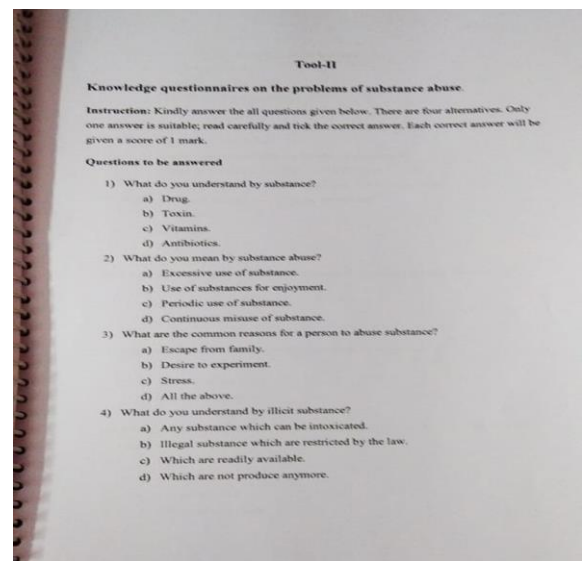
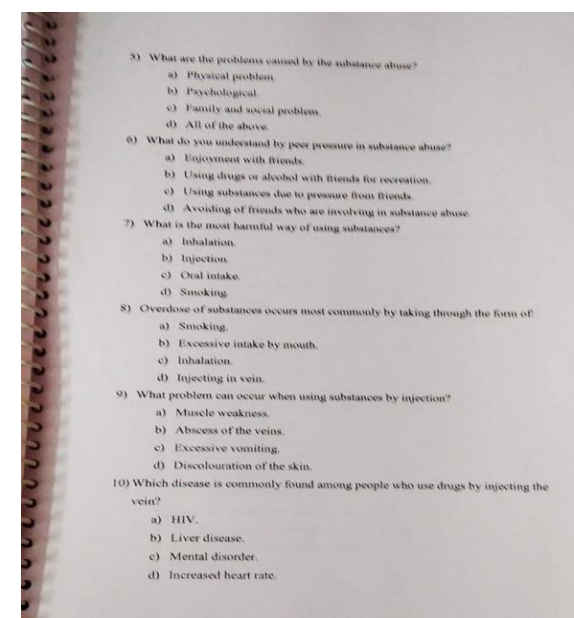
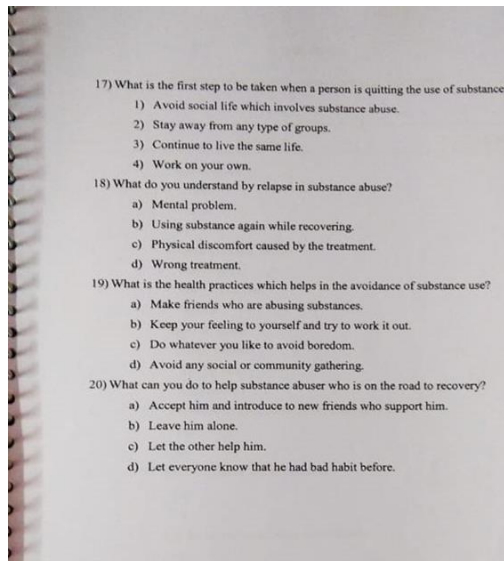
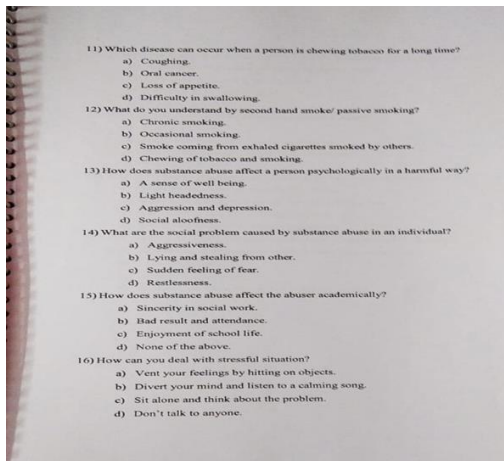


Fig. 4. Bar diagram showing % distribution of class IX students according to past exposure to substances





- Past exposure to any substance
 - Family history of substance abuse among students
- 2) Section B: 20 questions based on
- Deals with substance
 - Deals with substance abuse
 - Common reasons to substance abuse
 - Deals with illicit substance
 - Problem caused by substance abuse
 - Peer pressure in substance abuse
 - Harmful ways of using substances
 - Route of taking substance causing overdose
 - Problems of substance used by injection
 - Disease caused due to long time tobacco chewing
 - Passive smoking
 - Psychological harm
 - Social problem
 - Academic problem
 - Stressful situation handling
 - 1st step to be taken when a person quits substance use
 - Relapse in substance use
 - Health practices to avoid substance use
 - Deals with helping substance abuser who is on the road to recovery.

The questionnaires other correspondents a marker of alternative replies from which subject must choose the one that must likely match and appropriate. The questionnaires were distributed to students and they answered it.

5) Diagram for criteria checklist of demographic proforma

Criteria Checklist For Demographic Proforma

The expert is requested to go through the criteria checklist for evaluation of the demographic proforma. In the criteria checklist there are three main responses column and a remark column. Kindly tick () in the appropriate responses column and remark it in the remark column.

| Criteria Tool sample characteristics | Agree | Partially agree | Disagree | % | Remarks |
|--------------------------------------|-------|-----------------|----------|---|---------|
| 1. | | | | | |
| 2. | | | | | |
| 3. | | | | | |
| 4. | | | | | |
| 5. | | | | | |
| 6. | | | | | |
| 7. | | | | | |
| 8. | | | | | |
| 9. | | | | | |
| 10. | | | | | |
| 11. | | | | | |
| 12. | | | | | |
| 13. | | | | | |
| 14. | | | | | |

Signature of the expert:

6. Tool Description

1) Section A: 6 items based on-

- Age,
- Family income sources
- Family type
- Exposure to awareness about substance abuse

7. Lesson Plan of Planned Teaching Program

| Time | Specific objectives | Content | Teaching learning activities | A.V. aids | Evaluation |
|-------|---|--|------------------------------|-----------|--|
| 1 min | At the end of the topic the group will be able to | Introduction: Drug addiction or substance abuse is a worldwide social problem. Society is dealing with various problems that ruin the life of young ones. | Lecture | Poster | - |
| 1min | Define the abuse and substance | Definition of abuse: Abuse refers to "use wrongfully" or "in a harmful manner". Substance: Substance are matter that intoxicates a person or short duration that can further lead to addiction. | Lecture | - | What do you mean by abuse and substance? |
| 5min | enumerate the causes | Causes of substance abuse: *Psychological factor *Social factor *easy availability of drugs *psychiatric disorder *environmental factors | Lecture and discussion | poster | What are the common causes of substance abuse? |

| | | | | | |
|------|--|--|------------------------|--------|---|
| 5min | Explain the consequence | Consequences of substance abuse: *financial *occupational *familial *social *legal | Lecture and discussion | poster | What are the consequences of substance abuse? |
| 2min | describe the management of substance abuse | Management of substance abuse: *psychological: stressful situation can be managed by: exercise, jumping, running, walking around Other: put on some calming music, close your eyes and picturised a peaceful place etc. | Lecture and discussion | - | How we managed the substance abuse? |
| 5min | explain the prevention of substance abuse | Prevention of substance abuse: *charity begins at home" *choose friend wisely and avoid friends who indulge *exercise regularly *stress management and also financial and time management *keep energy level high *to avoid smoking substance like gam, | | | |

| | | | | | |
|------|---|---|------------------------|------------------|---|
| 3min | enlist the commonly abused substance | Commonly abused substances: Alcohol, opioids, cannabis, cocaine, amphetamine, sedatives and hypnotics, nicotine, inhalants and other stimulants Other: licit (legal) and illicit (illegal) substance | Lecture and discussion | poster | What are the commonly abused substances? |
| 5min | enumerate the sign and symptoms | Sign symptom of substance abuse: *strong desire *impaired memory *unsteady gait, tremor *physical and mental dependence *nausea and vomiting etc. | Lecture and discussion | poster | What are the sign symptoms of substance abuse? |
| 5min | describe the problem related to substance abuse | Problem related to substance abuse: *physical problem *psychological and emotional problem *behavioural and social problem *academic, financial, familial problem | Lecture and discussion | Chart and poster | What are the problem arises due to substance abuse? |

| | | | | | |
|-------|---------------------|--|---------|---|---|
| 2 min | Summarize the topic | lozenges, mouth spray/mist etc. Summarization: -definition of abuse and substances -causes -commonly abused substances -sign and symptoms -problems related to substance abuse -consequences -management and prevention | Lecture | - | - |
| 1min | - | Conclusion: Substance abuse as such is one of the leading problem of the society. If this is managed then a healthy and safe society can develop. | Lecture | - | - |

8. Implications

1) In nursing education

Improve knowledge of students and assess improvement through planned teaching program on substance abuse and generating a new evidence of implementing lecture method in

teaching process.

2) In nursing practice

Improve class IX students' knowledge on prevention of substance abuse.

3) In nursing research

To develop and refine new knowledge on the basis of previous research knowledge on substance abuse prevention. Thus the implication of this study is to generate new research results in the field of evidence based practice in the field of clinical research and contribute to the bulk of research in nursing.

9. Conclusion

Substance abuse is one of the leading problem of society. If this is managed at the grass root level or the gangs of abusers are broken then a healthy and safe society can be developed.

References

- [1] Yogeswar Puri Goswami, Jayalakshmi L. S, D. M Mathur. "A study to assess the effectiveness of structured teaching program on knowledge regarding substance abuse among adolescents at selected nursing colleges of Udaipur district, Rajasthan, India". *International Journals of Scientific and Research Publication*, vol. 5, pp. 1-4, 2015.
- [2] Srivastava, A. Paul. Adolescent's attitude and social skill affect substance use, vol. 2, 2003.
- [3] R.Sreevani, A guide to mental health and psychiatry nursing, Karnataka, India: Jaypee Brothers; 2010.
- [4] Bimla Kapoor. A guide to mental health nursing, Karnataka, India: Jaypee Brothers; 2010.
- [5] Soral Gupta, et al. Prevalence Pattern and family effects of substance use among male college students 2010.
- [6] Jerome, F. X Carroll. The substance abuse problem for drug and alcohol treatment dependency, 2008.
- [7] Akondi Butchi Raju. A study on prevalence and pattern of substance abuse among street children and adolescents in state of A.P. India, 2014.
- [8] Janet Williams, et al. Alcohol use by youth and adolescents: A problem concern. 2007- 2008.