

**TEACHERS' AWARENESS OF DANGERS POSED BY INHALANTS TO HEALTH:
IMPLICATIONS FOR CHILD DEVELOPMENT**

BY

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Abstract

The study investigated teachers' awareness of the products called inhalants and the dangers they pose to health. The design of the study was descriptive survey. The area of the study was Anambra State. Two research questions and two hypotheses guided the study. All the primary school teachers in Anambra State constituted the population. Simple random sampling technique was used to select 1050 (145 males and 905 females) teachers. A thirty item researchers-developed instrument was used to collect data for the study. Reliability values of 0.79 and 0.81 using Cronbach Alpha were established. Mean values were used to analyse the research questions while t-test statistics was used to test the hypotheses. Result of the study revealed that teachers' awareness of the products called inhalants and the dangers they pose to health is not encouraging. The implication of the study was highlighted. The researchers amongst others recommended that government should mount awareness campaigns on what inhalants are and the dangers they pose to health.

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Introduction

Inhalants are gases or volatile liquids (many of which are used as solvents) which when inhaled produce intoxication similar to the effect of alcohol (Obot, 1999). Most inhalants are central nervous system depressants but some are grouped under stimulants or hallucinogens. There are four categories of inhalants-organic solvents, aerosol sprays, anaesthetics and volatile nitrites. Products under organic solvents category are glue (e.g. for carpentry, shoe making and vulcanisation), petrol and kerosene, typewriter correction fluid, nail polish remover, cleaning fluid, lacquer thinners and shoe polish. Aerosol spray has products such as hair spray, deodorant and spray paint. Anaesthetics has products such as ether, nitrous oxide (laughing gas) and chloroform. Volatile nitrite has products such as Amyl and butyl nitrites (Poppers) (Obot, 1999). Many of these products are of everyday use in homes and at work places. These products are cheap and not illegal to obtain. Products containing solvents and sprays (e.g. shoe polish, nail remover) are purchased by adolescents for legitimate uses. Access to them is therefore not a problem for potential abusers. But contact with some of these products by children in the home

can be reduced if parents keep them out of reach of children.

Inhalants are generally abused by children and adolescents before they initiate other drug habits like alcohol drinking and smoking. Inhalants are abused in several ways, the most popular of which are sniffing, smoking, 'huffing' and bagging. Huffing involves soaking a piece of cloth with the substance and inhaling through the mouth while bagging is inhaling with the nose from a plastic bag in which glue or any other product has been emptied (Sharps, 1992).

All these products are harmful to health but abusers indulge in them because of the pleasure they derive without being conscious of their action or effect on the central nervous system. Studies conducted in some past years revealed that inhalants especially volatile organic solvents have become a popular past time of many children and adolescents in Nigeria (International Council on Alcohol and Addictions 1999, Obot, 1993, Nweke 2009, Odejide, Ogunleye and Meletoyitan 1993). In a recent survey by the National Drugs Law Enforcement Agency in Kano, 1626 of 2439 school children investigated reported that they abuse organic

solvents. Most of them experimented with these drugs before the age of 10 (Odejide et al, 1993). In another study in Jos metropolis, 1872 of 2,500 children between 9 to 13 years age range revealed that 10.6% of them had in the past inhaled glue and 13.4% abused petrol to get high, 4% abused spray paint while 7.8% had abused shoe polish (Obot, 1993b). These drugs are readily available and have the potential of easy accessibility for increased incidence of use which is very high (Obot, 1993). It is therefore the responsibility of teachers to enlighten their pupils on the dangers of inhalant abuse can cause to the abuser. If teachers fail in carrying out this duty, it will pose a serious threat to the wholesome development of children. Their education, social life and other aspects of development would be affected.

Purpose of the Study

The study seeks to find out specifically teachers' awareness of products called inhalants and their knowledge of the dangers these products can pose to health.

Research question

1. To what extent are teachers aware of products of abuse called inhalants?

2. What is the extent of knowledge of teachers on the dangers inhalants can pose to health?

Hypotheses

1. There is no significant difference between the responses of male and female teachers on their awareness of products of abuse called inhalants.
2. There is no significant difference between the responses of male and female teachers on their knowledge of the dangers these inhalants can pose to health.

Methods

The design of this study was descriptive survey. The area of the study was Anambra State. All the teachers numbering about 3754 in primary schools in the area of the study constituted the population. Random sampling technique was used to select 2 schools from each local government bringing the total number of schools used in the study to 42. Anambra State has a total of 21 local government areas. Using random sampling technique, the researchers selected 25 teachers from each school. There is dearth of male teachers in teaching in the area of study therefore in each selected school; all the male teachers are selected. Their number is

then added to a randomized number of female teachers which brings the total number to 25 teachers in each selected school. The total number of respondents was 1050 (145 males and 905 females). The instrument used for the study titled inhalants and Dangers to Health was developed by the researchers. The first 15 items dwelt on awareness of products called inhalants while the last 15 items dwelt on extent of knowledge of dangers posed by inhalants to health. The instrument was structured on 4 point Likert type scale of Strongly Agree (4

points), Agree (3 points), Disagree (2 points), and Strongly Disagree (1 point). The personal data section elicited information such as name of school, local government and sex. The instrument was validated by experts in guidance and counselling and Health education. Reliability values of 0.79 and 0.81 using Cronbach Alpha were calculated. Mean values of 2.50 and above were accepted for research question analysis and t-test statistics used for testing the hypotheses. The researchers used 5 assistants for data collection.

Results

The results are presented in the order of the research questions.

Research question 1

Table I: Male and female teachers' responses on their awareness of the products called inhalants.

S/NO	Items	Male X	Decision	Female X	Decision
	The products called inhalants are:				
1	Shoe polish	2.31	Rejected	2.41	Rejected
2	Glue	2.42	Rejected	2.33	Rejected
3	Nail polish	2.61	Accepted	2.17	Rejected
4	Petrol	2.56	Accepted	2.26	Rejected
5	Kerosene	2.21	Rejected	2.44	Rejected
6	Cleaning fluid	2.31	Rejected	2.40	Rejected
7	Lacquer thinners				

	(used by painters)	2.52	Accepted	2.36	Rejected
8	Hair sprays	2.41	Rejected	2.34	Rejected
9	Deodorant	2.44	Rejected	2.46	Rejected
10	Spray paint	2.67	Accepted	2.37	Rejected
11	Ether	2.30	Rejected	2.21	Rejected
12	Nitrous oxide (laughing gas)	2.63	Accepted	2.33	Rejected
13	Chloroform	2.20	Rejected	2.42	Rejected
14	Amyl nitrites	2.22	Rejected	2.19	Rejected
15	Butyl nitrites	2.19	Rejected	2.38	Rejected

Table 1 above shows that male teachers are aware that only five products out of 15 are Inhalants. These are item numbers 3, 4, 7, 10 and 12. They scored mean values 2.61, 2.56, 2.52, 2.67 and 2.63 respectively. Female teachers are not aware of any product called inhalant. None of the items scored accepted mean value.

Research question 2

Table 2: Male and female teachers' responses on their extent of knowledge of the dangers inhalant can pose to health.

S/N	Items	Male X	Decision	Female X	Decision
1	They cause mild stimulation of the central nervous system	2.55	Accepted	2.52	Accepted
2	Nausea, coughing and sneezing are common	2.63	Accepted	2.57	Accepted
3	Vision may be impaired	2.56	Accepted	2.61	Accepted
4	Can cause amnesia	2.36	Rejected	2.38	Rejected
5	Temporary paralysis may set in	2.31	Rejected	2.46	Rejected
6	Can cause Cardiac arrhythmia (irregular heart beat)	2.46	Rejected	2.41	Rejected
7	Inadequate supply of				

	oxygen to tissues	2.35	Rejected	2.43	Rejected
8	Can cause sudden death	2.50	Accepted	2.53	Accepted
9	Can damage the brain	2.26	Rejected	2.38	Rejected
10	Can damage the lungs	2.33	Rejected	2.42	Rejected
11	Can damage the kidney	2.41	Rejected	2.32	Rejected
12	Cause accidents	2.28	Rejected	2.26	Rejected
13	Cause hypertension	2.39	Rejected	2.22	Redetect
14	Can endanger the foetus if used by a pregnant woman	3.12	Accepted	2.89	Accepted
15	Increases the effects of tranquilizers and alcohol	2.36	Rejected	2.40	Rejected

Table 2 above shows that male and female teachers' extent knowledge of the dangers of abuse of inhalants can pose to health is not encouraging. Of the 15 items describing the dangers inhalants can cause, male and female teachers know only 4 items to be the dangers it can cause to health. They are item numbers, 1, 2, 3 and 8. They scored mean values 2.55, 2.63, 2.56 and 2.50 for males. For female teachers, they scored mean values 2.52, 2.57, 2.61 and 2.53.

Hypothesis 1

Table 3: t-test analysis of male and female teachers' responses on their extent of awareness of the products called inhalants.

Respondents	N	X	SD	t-cal	df	t-crit	Decision
Male teachers	145	3.14	1.73	1.41	1048	1.95	NS
Female teachers	905	3.33	0.88	0.14	1038	1.96	NS

Table 4 above shows that at 1048 degrees of freedom, the calculated t-value of 0.14 was less than t-crit. 1.96. at 0.05 level of significance. The hypothesis was therefore not rejected. Therefore, there is no significant difference between responses of male and female teachers on their extent of knowledge of the dangers the products called inhalants can pose to health.

Discussion

The result of research question one shows that male and female teachers' extent of awareness of the products called inhalants is not encouraging. This result implied that children may be abusing certain inhalants in the presence of teachers and they may not be aware of what the children are doing; since teachers can identify very few products to be inhalants. This finding is in consonance with the findings of Sharp (1992) who found out that majority of teachers, parents and adults are not aware of the products called inhalants. This finding is worrisome because moulding of children for proper development and good habit inculcation depend on adult figures around. The result of research question two shows that male and female teachers' knowledge of the dangers abuse of inhalants can cause to health is not encouraging. Teachers are supposed to possess adequate knowledge of danger of inhalants so that they can educate learners on the need to abstain from its abuse. Users report a feeling of euphoria which lasts for less than an hour after one inhalation (Obot, 1993) Nausea, coughing and sneezing because of the irritation of the airways are common. Vision may be impaired;

amnesia and temporary paralysis may set in (Sharp, 1992). High dose cause irregular heart beat which may result in death. Apart from death, inhalants can cause many health problems including damage to the brain, lungs, kidneys and hypertension. Teachers should be exposed to drugs of abuse and the dangers they pose to health. Abuse of Inhalants can affect educational development of users adversely. This habit should be totally discouraged. Hypothesis one shows that there is no significant difference between the extent of male and female teachers' awareness of products called inhalants. Hypothesis two shows that there is no significant difference between the extent of knowledge of male and female teachers on the dangers abuse of inhalants can cause to health.

Implications for child development

The findings imply that teachers are not aware of the many inhalants abused by the children they teach. It then means that the children may be inhaling any of these dangerous products in their presence without being cautioned. It is therefore necessary that teachers get themselves committed in teaching children healthy life styles.

Recommendations

Government should make health education a compulsory subject in teacher education. This policy would afford every teacher the opportunity to be equipped with knowledge concerning drugs especially ones usually abused. Teachers would then be in a position to enlighten learners on the dangers of abuse of drugs such as inhalants. And so far, government enlightenment campaign has been on higher drugs of abuse like cocaine, cannabis, marijuana, and others, there is no mention of inhalants. Government should therefore campaign against the abuse of inhalants. The public should know what inhalants are and ways by which they are abused. Abusers of inhalants should be made to serve some punishment no matter their ages; to serve as deterrent.

Conclusion

Abuse of inhalants is dangerous to health. Children should be trained to inculcate good habits and healthy lifestyles that would enable them have sound wholesome development. By so doing, good health for all would be achieved. Achievement of this goal depends on the level of awareness created in the society.

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