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Incidence of Substance Abuse among the Hearing Impaired Adolescents

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Abstract: Substance abuse is one of the problems associated with every adolescent, the hearing impaired inclusive. The study investigated the incidence of substances abuse among the hearing impaired adolescent. The study revealed that the hearing impaired adolescent are seriously involved and have some peculiar additional vulnerability that are connected to the impairment which tend to make the prevalence of substance abuse more predominant among them. The study recommended that the hearing impaired should have full access to educational provisions on substance use and there should be an improvement in the programs and services for their range of peculiar needs.

Key words: Incidence, hearing inpaired, adolescents, rang of peculiar, Nigeria

INTRODUCTION

Substances act on specific parts of the body to cause a change in physiology. It could produce specific beneficial or detrimental effects on the body depending upon the toxicity or specific action on cellular function. In the past decades, there has been an increasing alarm about the continuing substance use and abuse among the adolescents. Between 1986 and 1996 according to United Nations source, there was a remarkable increase in substance abuse, mostly among the adolescents of school age, business executives, drivers and sports men. Also the United Nations Office for Drug Control (2001) reported that in an estimated 180 million people worldwide, 4.2% of them aged 15 years and above consumed drugs. Notably, 144 million consumed cannabis, 29 million used amphetamine, 12 million took cocaine, 13 million abused opiates, while 9 million were addicted to heroine.

It is worthy to note that the use and abuse of substance by the youths have social, legal, medical and psychological implications in the society. Observably, adolescence is a time for trying new things. Teens use substances for many reasons including curiosity, to feel grown up, to be accepted by peers, to reduce stress and the desire to create excitement from boredom. These adolescents are vulnerable to substance use because of conflicting message concerning substance in the society. Some substances are simply mysterious considering their effects while others are medical tools and panacea for most discomforts. Further, others are used openly by supposedly responsible adults for entertainment. Thus, adolescents are bewildered and confused about substance use, because they often witness adults using the substances without apparent harm.

In case of the hearing impaired adolescents their situations are more profound. The hearing impaired finds their bewilderment constrained by communication limitation due to hearing loss. They suffer relatively more when compared to other children because they lack the opportunity to interact fully in the society. To this end, the hearing impaired adolescents are poorly informed or misinformed about issues concerning substances by their hearing counterparts, who are themselves confused.

Arguably, the hearing impaired adolescents are just like their hearing counterparts experiencing turmoil characterised by this period of adolescents. Due to their feelings of insecurity, the adolescents often slavishly conform to certain behaviors, desiring to belong and behave like the group they associate with. During this period they separate psychologically from family norms and form a sense of self-identity outside the family system. They tend to look increasingly unto each other, that is, their peers, than to parents, teachers and other adults for social recognition and rewards. Consequently, those that get addicted to drugs, acquire a vast majority of their substance from their peers. Researches have shown that the onset and maintenance of substance use of all types are linked directly to interactions with peers (Odejide, 1995; Falase, 1998).

Social relationship with opposite sex or psychosexual development is another turmoil that adolescents contend

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with because of the strains and stresses attendant upon achieving sexual and physical maturity. Arising from the foregoing, adolescents may be introduced to certain substance to serve as aphrodisiacs to aid their sexual experience. Marijuana, alcohol, narcotics may reduce anxiety, lower inhibitions distort thoughts and stimulate sexual interaction when used acutely (Keer *et al*., 1987).

Substance use is associated with a variety of consequences including increased risk of serious addiction later in life, school failure and poor judgement, which may put the adolescents at risk for accident, violence, unplanned and unsafe sex and suicide. All these underscore the need to investigate the incidence of substance use and abuse among the hearing impaired adolescents.

Statement of problem: Educating the hearing impaired children on drugs and alcohol use is generally poor. An adolescent, whether deaf or hearing, frequently experiment with alcohol, drugs and sex. Hearing impairment creates barriers to many types of incidental hearing such as TV, Radio, gossip and adults talking. Newspapers and other written materials may be inaccessible, due to the generally lower average reading skills, which is more prevalent among the hearing impaired. The aforestated problems of poor education of the hearing impaired adolescents on drugs and general substance use; the disposition of adolescents generally to experiment with drugs and sex; the reduced avenue of incidental hearing and limited scope of written materials at their disposal predispose the hearing impaired to substance abuse. Therefore there is need to investigate the patterns and incidence of substance use among the hearing impaired adolescents.

Objectives of the study: The broad objective of the study is to investigate the incidence of substance use among the hearing impaired adolescents. Specifically, the study seeks to: Identify the profile of substance use by the hearing impaired and examine the level of awareness and knowledge of implications of substance use by the subjects.

Justification for the study: Researches in the incidence of substance use in the hearing impaired and general population is similar. However, we have paucity of similar studies in Nigeria that had focused on the hearing impaired.

A critical examination of the education, prevention and treatment programs of adolescents and indeed adults in Nigeria, is largely biased against the hearing impaired. Therefore, an investigation into the incidence of substance use focusing on the hearing impaired is germane, as it will add to the body of literature on substance prevalence and the modalities of addressing the associated problems among the adolescents. It will also provide information and statistics on the use of substances among the adolescents with hearing impairment. In addition the study will sensitize the society to the fact that the hearing impaired are equally vulnerable to all adolescents related problems just like their hearing counterparts and thus, adequate attention should be paid to them concerning this.

Literature review in the field of adolescents' substance use from 1980 till date suggests that the problem is not declining. School surveys conducted in different parts of the country show that alcohol is the commonest of substance being used by Nigerian youths and the age of first contact is 11 years (Ebie and Pela 1982; Osodin, 1981).

Similarly, Nevadomsky (1981) carried out a survey on the patterns of drug use among 484 randomly selected secondary school students in Warri and Efunrun, Delta State of Nigeria. He found that 66% of boys and girls have had some experience with alcohol. Further, the International Council on Alcohol and Addiction (ICAA) carried out a survey in, 1988 on the extent of drug abuse among secondary school students in Lagos, Oyo, Bendel and Anambra states of Nigeria. The result of the study also showed that alcohol was one of the most commonly abused substances by secondary school students.

In the same vein, the National Drug Law Enforcement Agency (1993) in a report showed that out of 2,660 students surveyed in Lagos state 2 to 11% had used or abused the following substances: cigarette, alcohol, valium, cannabis, heroine and cocaine. The report noted that the socially acceptable substances are cigarette, alcohol and a prescription drug (Valium). The result further revealed that 75% of patients undergoing treatment for substance abuse in the nation's psychiatric hospitals are youths between ages 16 and 25 years. It also reported that about 75% of those arrested and prosecuted for drug related offences are youths of the same age bracket.

Adelekan, Abiodun, Ogunremi, Obayan and Oni (1992) reported that alcohol was one of the most commonly used substances. They observed that 42% of the students were current users. Ohaeri and Odejide (1993) reported that the relative frequencies at which abuse of drugs are recorded in northern centres was 77%

for cannabis, 19.9% for alcohol, 2.4% for heroine. 1.1% for cocaine. In southern centres, the figures were 60% for cannabis, 15.6% for alcohol, 40.3 for heroine, 23.7% for cocaine. The study showed that patients were mostly young males from low socio-economic background. Further, Odejide (1995) also found out that cannabis remains the most widely used drugs in Nigeria. Drug use is widely spread between northern and southern areas of the country.

Notably there is a dearth of research in the area of incidence and pattern of substance use among the special need populations. This is perhaps because they are in the minority in the society and mostly people do not believe that the adolescent with hearing impairment is exposed to the risk of developing social problems such as substance use, rape, sexual abuse, teenage pregnancy, truancy, stealing and violence like their regular counterparts.

However, in USA, McCrone (1982) estimated that in deaf population there may be 73,000 deaf alcoholics, 85,000 deaf heroin users, 147,000 deaf cocaine users and 110,000 deaf people who use marijuana on regular basis.

Watson *et al.* (1979) reported their belief that deaf drug users are unrecalled, untreated and uncounted for. They said that the majority of services were designed for hearing people and mostly the counsellors have no knowledge of psychosocial aspects of deafness and cannot use sign language.

Rendon (1992) researched Alameda country, USA and estimated that out of the number of the deaf people statistically expected to have problems with alcohol or drugs only 10% have been part of traditional or non-traditional recovery programmes including Alcoholics Anonymous and Narcotics Anonymous.

Sullivan *et al.* (2000) reported that a sample of 312 deaf and hard of hearing children evaluated at the Boys Town National Research Hospital (BTNRH) from 1984 to 1994 was reviewed to determine the maltreatment characteristics of a consecutively referred population of children with disabilities. The study revealed that deaf males are more likely than deaf females to become perpetrators of substance abuse and to develop alcohol and drug related problems.

Deafness can isolate individuals from the society because of language and cultural differences. Drug use may be a way adopted by the hearing impaired to cope with the discomfort and frustration of problems with communicating due to their impairment. Understandably, this is not an ideal coping strategy. According to Rendon (1992) and Guthmann (2005) hearing impared addits may be isolated from society because of alcoholism and hearing loss, thus, leaving the deaf alcoholic doubly isolated. Isolated from the general population by deafness and isolated from the deaf community by an alcohol problems. They must overcome not only the effects of hearing loss but also of a desease which encourage isolation.

Research questions:

- What is the level of awareness and use of substances among the hearing impaired adolescents?
- Who are the sources of information and supply of substances?
- What are the reasons for the use of substances?
- How informed are the hearing impaired about the consequences of substance use.

MATERIALS AND METHODS

Research design: Descriptive survey research design was adopted for the study.

Population and sample: The study population was the hearing impaired adolescents in Oyo state, Nigeria. The sample involved in the study consisted of 100 hearing impaired adolescents available in the two integrated secondary schools, in Ibadan, Oyo State.

Purposive sampling technique was adopted for the selection of the schools. Intact class of hearing impaired SSSI-SSSIII in the schools was used.

Instrumentation: The instrument used for data collection was a questionnaire designed by the researchers. The study represents elicited data on the bio-data of the respondents. This Research focused on information about level of awareness, profile of substances, sources and reasons for drug use.

Data analysis: Descriptive statistics involving the use of frequency counts%ages, mean and standard deviation were used in analysing the data.

Table 1 shows that the level of hearing impaired adolescents' level of awareness of substance is high for

Table 1: Level of awareness of substance

Substance	Yes	No	X	SD
Palm-wine	79	21.00	1.79	0.40
Burukutu	65	35.00	1.65	0.47
Pito 68	32	1.68	.46	
Ogogoro	69	31.00	1.69	0.46
Bear 66	43	1.66	.47	
Whisky	57	43.00	1.57	0.49
Brandy	50	50.00	1.50	0.50
Gin 60	40	1.60	49.00	
Wine	59	41.00	1.59	49.00
Cigarette	58	42.00	1.59	49.00
Snuff 57	43	1.43	49.00	
Crushed Tobacco	43	57.00	1.43	49.00
Indian Hemp	49	51.00	1.49	50.00
Heroin	49	51.00	1.49	50.00
Cocaine	65	35.00	1.65	4.7.0

Weighted average 1.59

Table 2: Students sources of information on substances

Substance sources	Father	Mother	Brother	Sister	Other relations	Friend	Teacher	Radio	T.V	News paper	Sellers	Cannot remember	-
Palm wine	44	6	4	2	11	8	3	1	6	2	7	6	-
Burukutu	23	13	4	2	12	19	2	-	9	2	10	4	-
Pito	23	8	2	12	7	14	2	3	8	8	6	7	-
Ogogoro	20	10	-	2	23	15	2	6	9	2	5	6	-
Beer	18	12	6	5	13	13	6	1	7	9	4	6	-
Whisky	17	11	4	3	12	10	10	3	8	6	7	9	-
Brandy	19	12	7	6	10	10	9	3	2	7	3	12	-
Gin	17	18	10	5	12	4	5	2	9	7	5	6	-
Wine	21	15	8	10	6	6	9	3	2	1	9	11	_
Cigarette	27	17	2	12	7	13	2	4	2	-	4	10	-
Snuff	33	12	6	4	18	5	11	2	3	0	6	10	-
Crushed tobacco	15	21	8	2	22	8	2	-	5	4	6	7	-
Indian Hemp	19	7	2	4	22	5	4	5	14	3	4	11	-
Heroine	18	8	3	6	13	4	4	3	12	5	12	2	-
Cocaine	18	5	1	12	-	2	11	13	9	1	12	14	-

palm-wine (Yes = 79, No = 21, $\overline{X}$ = 1.79) Burukutu $\overline{X}$ = 1.65; Pito $\overline{X}$ =1.68; Ogogoro $\overline{X}$ = 169, Beer ($\overline{X}$ = 1.66); Gin $\overline{X}$ =1.60; Wine $\overline{X}$ = 1.59; Cigarette $\overline{X}$ =1.58; Snuff $\overline{X}$ 1.57 and Cocaine $\overline{X}$ = 1.65.

However, awareness is neither low nor high for Brandy, which has a mean value of $\overline{X}$ 1.50 and for Crushed Tobacco $\overline{X}$ = 1.43, Indian Hemp $\overline{X}$ = 1.49 and Heroine $\overline{X}$ = 1.49 the awareness is low.

This overall calculation presented a weighted average 1.59, which summarized the fact that the hearing impaired adolescents are fully aware of many substances around them.

Table 2 reveals the run out frequencies of hearing impaired adolescents who indicated each of their sources of information on substances. The Table shows that for all the substances, the major source of information is the father. To this end, 44% of the students picked their father as the source of information for palm wine, 23% for burukutu, 23% for pito, 18% for beer, 17% for whisky, 19% for brandy, 24% for wine, 33% for snuff, 18% for cocaine and 27% for cigarette. For ogogoro the major source of information is other relations 23%, while it is also the major source of information for crushed tobacco = 22% and Indian hemp, 22%.

Table 3 and 4 reveal that the hearing impaired actually knows the consequences and problems that could arise from the use of substances.

From Table 3, they claimed to know the consequences of the use of palm wine $\overline{X}$ = 1.67

Burukutu $\overline{X}$ = 1.57
Pito $\overline{X}$ = 1.53
Ogogoro $\overline{X}$ = 1.60
Beer $\overline{X}$ = 1.57
Wine $\overline{X}$ = 1.63

Table 3: Hearing-Impaired adolescents' knowledge of the consequences of the use of substances

Substance	Yes	No	X	SD
Palm wine	67	33	1.67	0.47
Burukutu	57	43	1.57	0.49
Pito	53	47	1.52	0.50
Ogogoro	60	40	1.60	0.49
Beer	57	42	1.57	0.49
Whisky	24	76	1.24	0.42
Brandy	24	76	1.42	1.30
Gin	45	55	1.45	0.50
Wine	63	37	1.63	0.48
Cigarette	51	49	1.51	0.50
Snuff	53	47	1.53	0.50
Crushed tobacco	57	43	1.57	0.49
Indian Hemp	38	62	1.38	0.48
Heroine	50	50	1.50	0.50
Cocaine	45	55	1.45	0.50

Weighted average 1.51

Cigarette $\overline{X}$ = 1.57
Snuff $\overline{X}$ = 1.53)
Crushed ($\overline{X}$ = 1.57)
Heroine $\overline{X}$ = 1.50.

However, generally they do not really know the consequences of whisky $\overline{X}$ = 1.24, brandy $\overline{X}$ = 1.42, Gin $\overline{X}$ = 1.45, Indian Hemp $\overline{X}$ = 1.38 and Cocaine $\overline{X}$ = 1.45.

The overall mean score for their knowledge of consequences is $\overline{X}$ = 1.51.

Table 5 reveals that the source of substance is mostly their fathers and sellers. For the father, the frequency ranges from 21-47 while for sellers it ranges from 19 - 27. Other sources include mother (for pito, whisky, wine and snuff, crushed tobacco, Indian hemp, heroine and cocaine. Brother for burukutu, pito and cocaine. Friends for palm wine, beer, brandy, gin, wine, Indian hemp and heroine while other relations for Ogogoro, Beer, Whisky, cigarette, Snuff and Crushed tobacco.

Table 6 shows that the hearing impaired adolescents that are currently using all the substances with the highest substance in use being crushed tobacco N = 87, while palm wine is the lowest being used (N = 42).

Table 7 reveals that the respondents' reasons for using substances are varied and the trend in responses shows that they believe that substances make them sleep well, cure diseases, enjoyable, feel like friends and strengthens one to commit crimes. However, only very few respondents show that they use substance as study aids and to get bold.

Table 4: Perception of hearing impaired adolescents on problems that could arise from substance use

Substance	Intoxication	Brain damage	Cancer	Stomach ulcer	Heart problem	Liver problem	Accident	Wastes money	Quarrelling with people	Addiction	I don't know
Palm wine	36	8	12	4	1	4	3	1	4	1	26
Burukutu	25	16	1	3	4	4	-	9	2	1	32
Pito	28	10	2	2	9	-	7	2	5	-	31
Ogogoro	23	12	2	-	18	4	2	10	-	3	23
Beer	31	7	1	4	17	7	6	2	2	-	18
Whisky	26	19	4	17	5	-	4	2	1	-	22
Brandy	31	2	8	5	20	3	1	2	-	-	26
Gin	26	8	12	3	11	10	1	1	3	1	77
Wine	28	15	5	10	4	2	3	4	1	6	14
Cigarette	24	20	3	3	14	13	8	-	2	2	8
Snuff	23	24	4	6	7	7	6	2	-	5	13
Crushed tobacco	28	26	3	6	3	6	-	2	4	3	10
Indian Hemp	25	36	3	6	3	6	-	2	4	3	10
Heroine	26	25	1	7	7	5	5	2	2	6	14
Cocaine	23	30	1	8	8	-	1	4	4	2	17

Table 5: Sources of supply of substances to the hearing impaired adolescent

Substance	Father	Mother	Brother	Sister	Teacher	Friend	Other relations	Seller
Palm wine	47	9	9	4	6	11	-	14
Burukutu	32	8	15	2	5	4	11	23
Pito	24	20	10	6	7	6	8	19
Ogogoro	37	4	3	3	5	5	19	24
Beer	32	7	7	-	5	12	17	29
Whisky	31	14	9	2	4	8	11	21
Brandy	32	4	5	3	6	17	7	26
Gin	30	9	5	5	4	17	4	26
Wine	31	15	5	-	2	15	9	23
Cigarette	28	13	6	5	3	7	13	27
Snuff	30	15	1	4	3	5	13	29
Crush tobacco	24	12	8	4	6	11	7	27
Indian hemp	21	17	4	7	6	11	7	27
Heroine	21	18	9	4	5	10	8	25
Cocaine	22	11	11	8	5	9	8	26

N = 100

Table 6: Respondents' Use of Substances

Substance	Yes	No
Palm wine	42	58
Burukutu	60	40
Pito	51	49
Ogogoro	76	24
Beer	71	29
Whisky	83	17
Brandy	68	32
Gin	71	29
Wine	70	30
Cigarette	76	24
Snuff	80	20
Crushed tobacco	87	13
Indian hemp	82	18
Heroine	78	22
Cocaine	85	15

Table 7: Respondents reasons for substance use

Substance	It makes me sleep well	It cures diseases	It enjoy it	As a study aid	Gives boldness	To comm it crime	For warmth	To be like my friends
Palm wine	58	19	16	1	-	-	4	
Burukutu	44	25	17	3	4	1	5	2
Pito	37	21	24	5	1	4	4	1
Ogogoro	39	18	19	4	8	6	3	3
Beer	43	04	29	4	8	6	3	3
Whisky	35	10	20	5	5	12	5	3
Brandy	40	06	18	5	2	10	8	8
Gin	30	13	19	4	9	10	4	11
Wine	36	13	25	4	2	6	3	11
Cigarette	32	21	13	9	3	7	4	11
Snuff	36	20	9	7	5	11	5	7
Crushed tobacco	32	22	16	3	11	9	2	5
Indian Hemp	28	09	24	6	7	14	2	10
Heroin	30	14	21	2	5	16	1	11
Cocaine	25	19	13	6	5	15	6	11

DISCUSSION

The results of this study had clearly revealed that the hearing impaired adolescents are not left out in the use and abuse of substances.

In response to the research question of what is the level of awareness and use of substance among the hearing impaired adolescents, the answer was that the level of their awareness and involvement in the use of substance is very high. They may have some peculiar additional vulnerability that is connected to their impairment, which tend to make the prevalence of substance more predominant among them. This corroborated with the findings of Mc combs, Kathryn-moores and Dennis.

The study also showed that the parents (father) and adults were the sources of supply and information of substances for the hearing impaired. While parents and older people may not consciously reinforce substance use and abuse, they may unconsciously be a role model for a potential substance user. This contradicted the study of Dick who found out that peer and school were the predictors of the hearing impaired use of substances.

Many parents may have scolded their child for substance use, while they themselves are smoking and drinking regularly. In addition, children whether hearing or non-hearing that are brought up in families or environment where there is heavy substance use and abuse are more at risk of developing such problems. This finding agreed with the findings of Guthman which reiterated that communication gap exist between parents and their hearing impaired children hence as the child grow older the family may tend to overlook the classic symptoms of chemical dependency and attribute it to hearing impairment.

Further, the study showed that the hearing impaired adolescents' reasons for taking substances varied from sedating them to pleasure. This funding corroborates Steitler (1984) finds, which opines that hearing impaired people may use drugs and alcohol to attain numbness and relief from oppression since they suffer unique pressures of social isolation, loneliness, difficulties in personal relations, lack of education and inability to hold jobs.

In addition, the study showed that despite the awareness of the problems that could arise from substance use, the adolescents are still involved. Since substance use is about increasing pleasurable feelings such as confidence, relaxation, happiness and/or decreasing unpleasant feelings such as anger, or shame, the respondents expressed the notion that they will continue in the use not minding the implications. This is in line with the findings of Guthmann and Sandberg which revealed that drug may be a way of coping with discomfort and frustrations of problems of communicating with hearing people, because they provide temporary relief from substance use. However, in the long run, it is not an effective coping strategy.

RECOMMENDATIONS

The hearing impaired deserves the right to equal treatment provision, especially in the area of social problems like substance use. They should have full access to appropriate educational provisions on substance use with appropriate language and communication services. Specialised facilities and services with well trained staff in sign language and non-hearing culture, technological and structural adaptations should be employed in schools and rehabilitation centres to tackle the complex and social needs of the hearing impaired.

NGOs, local and state governments should establish deaf agencies to provide counselling services on behalf of social needs of the hearing impaired such as HIV/AIDS, drugs, alcohol, teenage pregnancies, drop of and so on which hitherto are not provided for. Researches should be

encouraged by stakeholders in special needs education in the area of programmes, services and needs of the hearing impaired.

CONCLUSION

The study investigated the incidence of substance use among the hearing impaired adolescents. It was discovered that the hearing impaired like their hearing counterparts are really involved in the use of substances. In the light of this, substance education should be embarked upon in all secondary schools in order to assist and educate the hearing impaired adolescents who may be faced with challenges of this social vice. Parents are also enjoined to be a good role model with proper interaction with their children, because where there is no adequate parental relationship, substance dependency can become a substitute.

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