

Relationship between Socially Abused Drugs and Diseases among the Aged in Rivers State, Nigeria

Oriji, Christian Chigozi¹, Dr Mrs Rosmary Ekechukwu²

¹Department of Sociology, Faculty of Social Sciences, University of Port Harcourt, Rivers State, Nigeria

²Department of Educational Psychology, Guidance and Counselling Faculty of Education University of Port Harcourt

Mamatriplets01@yahoo.com

Abstract: The focus of the study is to investigate the relationship between socially abused drugs and diseases among the aged people in Rivers State. Three hypotheses are generated to guide the study. Survey design is adopted for the study. The population covers all aged people in Rivers State. A sample of 600 respondents is randomly selected for the study. The selection is done through the use of simple random sampling and purposive sampling techniques. The questionnaire is the instrument used for data collection. The instrument is face-validated by professionals in the Department of Educational Psychology, Guidance and Counselling, Faculty of Education, University of Port Harcourt, Port Harcourt. The reliability value of 0.68 Correlation Co-efficient is established for the study. Biographic data of the respondents are analyzed using percentage and frequency table. The hypotheses for the study are tested at .05 level of significance using Pearson Product Moment Correlation. The results of the analysis reveal that socially abused drugs significantly relate to diseases among the aged people in Rivers State. Based on the findings, the study recommends, among others that State and Local Governments provide adequate information about the effects of social drugs on the aged people, and why they should not be used or abused in Rivers State.

[Oriji, Christian Chigozi, Mrs Rosmary Ekechukwu. **Relationship between Socially Abused Drugs and Diseases among the Aged in Rivers State, Nigeria.** *Cancer Biology* 2015;5(2):7-12]. (ISSN: 2150-1041). <http://www.cancerbio.net>. 2

Keywords: *Socially Abused Drugs, Diseases, Aged People, Rivers State, Nigeria*

Introduction

Social drugs are drugs that do not have legal threat to either the seller or buyer, unless they are abused (Oriji, 2012). These social drugs include alcohol, tobacco, *kolanuts*, and beverages associated drugs such as Nescafe and tea. Those who commonly use these drugs are youths and elderly with all intents and purposes to gain certain satisfaction either to depress (for a sleep) or to stimulate (for alertness). In the circumstances of the foregoing facts, many aged people today abuse these drugs in so far that they are adversely affected with terminal diseases, which require urgent measure to be addressed. In order to find a way out of these diseases, first, the study reviews literature on the relationship between alcohol abuse and diseases among the aged; relationship between tobacco abuse and diseases among the aged; and the relationship between *kolanut* abuse and diseases among the aged, the world over.

Relationship between alcohol abuse and diseases among the aged people:

First and foremost, alcohol is a drink that is fermented from trees and grains and/or brewed through processes of production for human consumption (Oriji, 2012). People use alcoholic drinks for celebration and/or to satisfy certain psycho-physiological desire. However, when the intake of

alcoholic drinks becomes incessant among people, the resultant effect is health challenges. This is so because Levinthal (2005) sees alcohol abuse as a serious problem that could lead to fetal alcohol syndrome, such as serious condition involving mental retardation and facial-cranial malformations in the off-spring of an alcoholic mother. In spite of the effect of alcohol on off-spring of an alcoholic mother, alcohol abuse also leads to certain health problems that involve liver disease, cancer, cardiovascular disorder, senile dementia and Wernicke-Korsakoff syndrome among Nigerians (Oriji, 2012). Equally important is that research shows that shrinkage of the frontal lobes increases with alcohol consumption and is associated with intellectual impairment in both older and younger subjects with alcoholism (Harper, Kril, Sheedy, Halliday, Double, Dodd and Lewohl, 1998). In addition to this, Pfefferbaum, Suttivan, Mathalon and Lim, K.O. (1997) using magnetic resonance imaging techniques, found more brain tissue loss in subjects with alcoholism than in those without alcoholism, even after their ages had been taken into account to be within certain uniform brackets.

Relationship between smokeless tobacco and diseases among the aged people:

Tobacco includes smoke (cigarette) and smokeless (dry moist, sweetened, flavoured, salted,

scented substance that are used to stimulate the brain in order to gain certain satisfaction). In consideration of the latter, Oriji (2012: 85) explains:

The two forms of smokeless tobacco are chew tobacco and moist tobacco. The chew tobacco consists of the loose leaf, fine-cut plug and twisted leaf while the moist form of tobacco is usually grinded, and also could be described as being dry, moist, sweetened, flavoured, salted and scented, which may be given in a pinch of snuff called a quid. This form of moist tobacco is mostly abused by elderly men and women in rural communities in Nigeria.

Consequently, the abuse of smokeless tobacco seems to pose some dangers on the users. This is so as continuous contact with tobacco in the mouth has been shown to precipitate precancerous cell changes, as is the case in leukoplakia (white spots) and erythroplakia (red spots) inside the mouth and nasal cavity (Levinthal, 2005). In addition to this, according to Foulds, Ramstram, Burke and Fagerstrom (2003) “a large number of studies in India, including cohort, case-control, and intervention studies support an association between oral cancer and smokeless tobacco, and these studies are consistent, strong, coherent and temporally plausible”. In the same vein, the Surgeon General’s Report on the Health Consequences of Smokeless Tobacco Use concluded that smokeless tobacco is causally related to oral cancer and gum recession, that it can lead to dependence on nicotine, and that it is not a safe alternative to smoking cigarettes (Field, 1995).

Relationship between Kolanut abuse and diseases among the aged people:

The *kolanut* fruit is produced from *kolanut* tree largely grown in West African countries like Nigeria (Onyeausi and Ikpe, 2004). According to Akinsanni (1991), there are two species of the *kolanut*; cola *acuminata* (brown or *Igbo kola*) and cola *nitida* (yellow or *Hausa kola*). *Kolanut* is a central nervous system stimulant. However, like all stimulants, if taken in large quantities, it may prevent proper sleep and depress the body and nerves (Irvine, 1989). Besides these functions, *kolanut* contains the xanthine alkaloids that have purine bases which contain methyl substituents (Onyeausi and Ikpe, 2004). For Onyeausi and Ikpe (2004) these xanthines inhibit phosphodiesterase and reduce the rate of breakdown on 5 cycles AMP (adenosine monophosphate) which then accumulates in the tissues promoting glycogenolysis in the liver and skeletal muscles. Apart from this, glycosylated haemoglobin refers to the product of non-enzymatic reaction between glucose and the free amino group of haemoglobin (Meidema and Caspaire, 1994). It is an indicator of long-term glycaemic control and provides valuable information

about the blood glucose levels tracing back over a period of 1-2 months (Goldstein, Parker and England, 1988).

Besides, *garcinia kola* is another type of *kolanuts* known as bitter *kola*, and it belongs to the family of tropical plant we often refer to as *Guttiferae*. The seeds of *garcinia kola* have also been used traditionally to treat hepatitis and other viral infections such as those caused by influenza and Ebola viruses (Iwu and Igboke, 1982). This claim by Iwu and Igboke (1982) is still under World Health Organization, WHO’s, scientific investigation. Equally too, it was believed that *Garcinia kola* contains caffeine and therefore may also affect learning and memory (Nmaju, Bisong, Nwankwo, Joshua and Osim, 2014).

Statement of the Problem

During the pre-colonial period in Nigeria, certain social drugs such as alcohol (*kai kai* (illicit gin), palm wine and raffia wine), tobacco (smoke and smokeless) and *kolanuts* were used in ceremonies and other social activities to host visitors. In the same vein, native doctors, diviners, herbalists, cultural psychiatrists also use social drugs to appease their gods and goddesses, especially when they want to consult them for treatment of patients. In addition to this, Nigerians who used social drugs during colonial period did so to show off at eating saloons, motels and hotels, as well as social ceremonies such as marriages, burials, book launches, chieftaincy inaugurations, new yam festivals and so on (Oriji, 2012). In the circumstances of the foregoing facts, the intake of social drugs appeared prominently abused in the Nigerian society, in so far that in post-colonial period they became legal, but were regulated and controlled on the basis of prices, quantity, availability and place of usage.

Based on this trend, today many aged people abuse social drugs with all intents and purposes to gain certain satisfaction which may either make them calm or alert in their homes. In spite of this satisfaction gained from abusing these drugs, many aged people still complain of depression, stress, insomnia, poor penis erection and so on, to significant and generalized other persons and seek care in the study area. With regard to these complaints of diseases by the aged people who abuse social drugs, the study investigates the relationship between socially abused drugs and diseases among the aged people in Rivers State, Nigeria.

Objectives of the Study

The objectives of the study are:

i. To investigate the relationship between alcohol abuse and diseases among the aged people in the study area.

ii. To examine the relationship between tobacco (smokeless) abuse and diseases among the aged people in the study area.

iii. To determine the relationship between *kolanut* abuse and diseases among the aged people in the study area.

Statement of hypotheses

The following null hypotheses are stated for the study:

i. There is no significant relationship between alcohol abuse and diseases among the aged people.

ii. There is no significant relationship between tobacco abuse and diseases among the aged people.

iii. There is no significant relationship between *kolanut* abuse and diseases among the aged people.

Methodology

Survey design is used for the study. The population of study is Rivers State. Specifically, this covers all aged people who live in Rivers State. A sample size of 600 respondents is randomly selected for the study. The selection is done through the use of simple random sampling and purposive sampling techniques. Thus, simple random sampling technique is used to select one Local Government Area (LGA) in Rivers State. In doing so, the 23 LGAs of Rivers State were written on papers and wrapped by the researcher and put in a basket for picking. Someone was called to mix-up the wrapped papers of the 23 LGAs for the purpose of picking one LGA. Through this process, the person called upon picked Etche LGA of Rivers State for the study. Furthermore, respondents were independently selected using purposive sampling technique. In achieving this, 600 respondents were selected in Etche LGA. The instrument used for data collection is the questionnaire. It is structured into two sections: Section A is the biographic data with multiple questions (items) based on marital status, educational status, socio-economic status, health status and religion of respondents; while Section B is based on field responses on the relationship between socially abused drugs and diseases among the aged, using modified four-point Likert scale of Strongly Agreed (SA) rated 4, Agreed (A) rated 3, Disagreed (D) rated 2 and Strongly Disagreed (SD) rated 1.

Face validity of the instrument is established by professionals in the Department of Educational Psychology, Guidance and Counselling, Faculty of Education, University of Port Harcourt, Port Harcourt. Beyond this, test-retest method of reliability is used to determine the reliability value of 0.68 Correlation Coefficient for the study. The researcher administered the copies of the questionnaire with the help of his paid

personnel; and they collected same immediately the responses were completed by respondents. The statistics used for the study are percentage and frequency table, as well as Pearson Product Moment Correlation. Percentage and frequency table are used to analyse biographic data of respondents while Pearson Product Moment Correlation is used to analyse the tested hypotheses for the study.

Results

The results of the study are presented in Tables 1, 2, 3 and 4. Table 1 results deal with biographic data of respondents while Tables 2, 3 and 4 results deal with tested hypotheses for the study.

The results of marital status show that 96 respondents, representing 16% were single aged people, 252 (42%) were married, 132 (22%) were divorced, while 120 (20%) were separated aged people who were once married. For educational status, the results depict that 264 respondents, representing 44% had no formal education, hence they were illiterate aged people, 168 (28%) had FSLCs, 132 (22%) had WASSCs, while 36 (6%) of them had degree certificates. Furthermore, the results of socio-economic status show that 336 respondents, representing 56% were aged people with low socio-economic status, 228 (38%) were middle class, while 36 (6%) were high class, who were the few rich in the society. For health status, the results indicate that 540 respondents, representing 90% were sick aged people, while 60 (10%) are recuperating aged people, who had one old age disease or the other. Finally, for religion, the results depict that 336 respondents, representing 56% were aged people in Christian religion, 156 (26%) were in traditional religion, while 108 (18%) were in other religions.

The result of the analysis as presented in Table 2 depicts that calculated r value of 0.25 is higher than the critical r value of .062 at the significant level of .05 with 598 df. In this regard, the null hypothesis that there is no significant relationship between alcohol abuse and diseases among the aged people is rejected. Based on this result, it means that there is a significant relationship between alcohol abuse and diseases among the aged people in Rivers State.

The result of the analysis as presented in Table 3 shows that the calculated r value of 0.96 is higher than the critical r value of .062 at the significant level of .05 with 598 df. With this result, the null hypothesis that there is no significant relationship between smokeless tobacco abuse and disease among the aged people is rejected. Based on the foregoing result, it means that smokeless tobacco abuse significantly relates to diseases that affect the aged people in Rivers State.

Table 1: Biographic data of respondents

| Biographic characteristics | No. of respondents | Percentages |
|---|--------------------|-------------|
| Marital status | | |
| Single | 96 | 16 |
| Married | 252 | 42 |
| Divorced | 132 | 22 |
| Separated | 120 | 20 |
| Educational status | | |
| None | 264 | 44 |
| First School Leaving Certificates (FSLC) | 168 | 28 |
| West African Senior School Certificates (WASSC) | 132 | 22 |
| Degree Certificates | 36 | 6 |
| Socio-economic status | | |
| Low class | 336 | 56 |
| Middle class | 228 | 38 |
| High class | 36 | 6 |
| Health status | | |
| Sick | 540 | 90 |
| Recuperating | 60 | 10 |
| Religion | | |
| Christianity | 336 | 56 |
| Traditional religion | 156 | 26 |
| Others | 108 | 18 |

Table 2: Analysis of the relationship between alcohol abuse and diseases among the aged people

| Variables | ΣX | ΣX^2 | ΣXY | r |
|--------------------------------|------------|--------------|-------------|-------|
| | ΣY | ΣY^2 | | |
| Alcohol abuse | 4404 | 5613 | | |
| | | | 89542 | *0.25 |
| Diseases among the aged people | 3615 | 5524 | | |

* significant at 0.05 level, critical $r = .062$, degree of freedom (df) = 598.

Table 3: Analysis of the relationship between smokeless tobacco abuse and diseases among the aged people

| Variables | ΣX | ΣX^2 | ΣXY | r |
|--------------------------------|------------|--------------|-------------|-------|
| | ΣY | ΣY^2 | | |
| Tobacco (smokeless) abuse | 3111 | 5024 | | |
| | | | 88544 | *0.96 |
| Diseases among the aged people | 3152 | 5232 | | |

* significant at 0.05 level, critical $r = .062$, df = 598.

Table 4: Analysis of the relationship between kolanut abuse and diseases among the aged people

| Variables | ΣX | ΣX^2 | ΣXY | r |
|--------------------------------|------------|--------------|-------------|-------|
| | ΣY | ΣY^2 | | |
| Kolanut abuse | 3544 | 5542 | | |
| | | | 89633 | *0.49 |
| Diseases among the aged people | 3553 | 5633 | | |

* significant at 0.05 level, critical $r = .062$, df = 598.

The result of the analysis as presented in Table 4 indicates that the calculated r value of 0.49 is higher than the critical r value of .062 at the significant level of .05 with 598 df. With this result, the null hypothesis that there is no significant relationship between *kolanut* abuse and diseases among the aged people is rejected. This result therefore means that *kolanut* abuse significantly relates to diseases that affect the aged people in Rivers State.

Discussion of findings

The result of the first hypothesis reveals that there is a significant relationship between alcohol abuse and diseases among the aged people in the study area. This result is supported by Levinthal (2005) who sees alcohol abuse as a serious problem that could lead to fetal alcohol syndrome, such as serious conditions involving mental retardation and facial cranial malformations in the off-spring of an alcoholic mother. Also in support of the first hypothesis, Oriji (2012) explains that alcohol abuse leads to certain health problems that involve liver disease, cancer illness, cardiovascular disorder and senile dementia as well as Wernicke-Korsakoff syndrome among Nigerians.

In addition, the result of the second hypothesis depicts that there is a significant relationship between smokeless tobacco and diseases among the aged people in the study area. In tandem with the result of the second hypothesis, the Surgeon General's Report on the Health Consequences of Smokeless Tobacco Use concluded that smokeless tobacco is causally related to oral cancer and gum recession, that it can lead to dependence on nicotine and that it is not a safe alternative to smoking cigarettes (Field, 1995). Besides this, the result of the third hypothesis also shows that there is a significant relationship between *kolanut* abuse and diseases among the aged people in the study area. This is so because, if taken in large quantities, it may prevent proper sleep and depress the body and nerves (Irvine, 1989). To further support the third hypothesis, it is believed that *Garcinia kola* contains caffeine and therefore may also affect learning and memory (Nmaju, *et al* 2014).

Conclusion

Based on the findings of the study, it is obvious that socially abused drugs such as alcohol, smokeless tobacco and *kolanuts* lead to diseases that affect the aged people. In order to further protect the aged people from diseases associated with socially abused drugs, the study urges for precise researches on *the relationship between inadequate nutrients and old age organic malfunction* as well *the relationship between improper home care and complications of diseases*

among the aged people in Rivers State and indeed in Nigeria.

Recommendations

In line with the findings of the study, the following recommendations are made:

- i. The State and Local Governments should provide adequate information about the effects of social drugs on the aged people, and why they should not be used or abused;
- ii. The State and Local Governments should employ qualified health personnel, especially the medical social workers to enable them provide outreach care for the aged people who are not in government homes, but who visit hospitals when they are down with alcoholism or associated social drug diseases;
- iii. The State Government should establish old people's homes in every Local Government Area for easy accommodation of the aged people, especially the sick ones;
- iv. The State and Local Governments should fund the old people's homes in order to have adequate health services for the aged people who are sick and/or degenerating physically and socially;
- v. The State Government should strengthen the law on social welfare for the aged people by involving private companies, international organizations, media organizations, among others in the study area.

Authors:

Oriji, Christian Chigozi¹ · Dr Mrs Rosmary Ekechukwu²

¹Department of Sociology, Faculty of Social Sciences, University of Port Harcourt, Rivers State, Nigeria

²Department of Educational Psychology, Guidance and Counselling Faculty of Education University of Port Harcourt

Mamatriplets01@yahoo.com

References

1. Akinsanni, C.C. (1991). *Nigerian Plants: Agricultural Science for Senior Secondary Schools (3rd ed.)*. Oxford Press: 73 -90.
2. Fields, R. (1995). *Drugs in Perspective (2nd ed.)*. Washington. WCB Brown & Benchmark: 90.
3. Foulds, J. Ramstrom, L., Burke, M. & Fagerstrom, K. (2003). *Effect of Smokeless Tobacco (snuff) on Smoking and Public Health in Sweden*. Retrieved from tobaccocontrol.bmj.com.
4. Goldstein, D.E. Parker, K.M. & England, J.D. (1998). *Clinical Application of Glycosylated Haemoglobin Measurements Diabetes*. 31 (suppl) (3): 70 -78.

5. Harper, C., Kril, J., Sheedy, D., Halliday, G.M., Double, K., Dodd, P.R., & Lewohl, J. M. (1998). *Neuropathological Studies: The Relationship between Alcohol and Ageing*. In Gomberg, E: Gomberg, E. S.L.; Hagedus, A.M.; and Zucker, R.A. *Alcohol Problems and Ageing. NIAAA Research Monograph No. 33*. NIH Pub. No. 984163. Bethesda, MD: NIAAA.
6. Irvine, F. R.(1989). *West African Crops*. London. Oxford University Press. (2): 22-23.
7. Iwu, M.M. & Igboko, O. (1982). Flavonoids of Garcinia Kola Seeds. *Journal of Natural Production*. (45): 650 -651.
8. Levinthal, C.F. (2005). *Drugs, Behaviour and Modern Society*. New York. Pearson Education: 216 -268.
9. Meidema, K. & Caspaire, T. (1994). Glycosylated Haemoglobin: Biochemical Evaluation and Clinical Utility. *Ann. Clin. Biochem*. (21): 2 -15.
10. Nmaju, A.U., Bisong, S.A., Nwankwo, A.A. Joshua, I.E. & Osim, E.E. (2014). Comparative Effects of Garcinia Kola and Memory in Mice. *British Journal of Medicine & Medical Research*. 4(2):732.
11. Onyeausi, J.C. & Ikpe, V.P. (2004). *Effect of Cola Acuminate on Blood Based Glucose and Glycosylated Haemoglobin Wistar Rats*. Retrieved from <http://www.google.cm/url?=&articles/journal%25202004>.
12. Oriji, C.C. (2012). *Socially Abused Drugs: The Volcanic Dangers in Nigeria*. Port Harcourt. University of Port Harcourt Press: 40 -86.
13. Pfefferbaum, A., Suttivan, E.V., Mathalon, D.H., & Lim, K.O. (1997). Frontal Lobe Volume Loss Observed with Magnetic Resonance Imaging in Older Chronic Alcoholics. *Alcoholiclin. Exp.Res*. 21 (3): 521 -529.

5/26/2015