Psycho-Active Drugs as Predictor of Mental and Behavioural Disorder among Patients of the Federal Psychiatry Hospital Benin – City, Nigeria from 2008 – 2012: Implications for Health Education

Joseph O. Ogbe, Ph.D
Department of Physical and Health Education, Delta State University, Abraka, Delta State.
Email: Ogbe_Joseph@yahoo.com

Abstract
This study analysed psycho-active drugs as predictor of mental and behavioral disorder among patients of the federal psychiatric hospital Benin – City as a means of establishing the magnitude drug problem. Three independent variables of age, gender and specific drug specificity in the causation of mental and behavioral disorder (dependent variable) were analysed. The method was the use of secondary data summary as kept in the medical record department of the hospital. The data were analysed using multiple regression analysis at 0.05 alpha. The findings were that; the ages of 19 – 30 years constitute those mostly affected by the use of drugs; males were much more affected than females, cannabis is the drug that causes most of the mental and behavioral disorder. It was recommended that drug education as part of health education be started early in the school curriculum before the adolescent age to avoid early involvement among other recommendations.

Keywords: Drugs, behaviourial disorder, federal psychiatry hospital, Nigeria.

1. INTRODUCTION
Very often, people talk about drugs of different types. But what comes to mind is the therapeutic effects of drugs. In common use; is the word “medicine” which describes the use of drugs in treatment and prevention of diseases. However, medicine is just a group of drugs, others are the psycho-active drugs popularly referred to as hard drugs. Hard in the sense that they connote a particular action on the brain and therefore affects behaviour.

Akinwande (2004) classified medicine as drugs that are used for the prevention, control and treatment of diseases but Ajala (2006) stated that all medicine are drugs but not all drugs are medicine. Awake (2001) defined drug as “any chemical substance, whether of natural or synthetic origin which can be used to alter perception, mood or other psychological states”. Drug used in this sense means psychoactive drugs. According to Awake (2001), with the above definition, alcohol is also a drug. However, Wikipedia, the free encyclopedia; sees “drug as a substance which may have medical, intoxicating, performance enhancing or other effects when taken or put into a human body or the body of another animal or is not considered a food or exclusively a food”.

Olufumilayo (2006) reported Marchie and Nnamdi (2003) who stated that drugs exert a major influence on the brain and the psychological functioning resulting in such effects as sedation, stimulation or change in mode or behaviour.

Mental and behaviour disorders are parts of a long list of mental illness which Okoro (2006) citing World Health Report (2001) who referred to a range of disorders caused by an interaction of social, genetic, traumatic and infectious factors leading to acute or chronic physical, emotional and/or behavioral disabilities. The World Health Report (2001) stated that neuropsychiatry disorders account for about 12 percent of the global burden of disease. There is association between the level of psycho-active drug consumption and mental and behavioral disorder. Hence drug abuse and misuse are re-current issues in social health issues and health education. The consumption of psycho-active drugs bringing about mental and behavioral disorders in mental or psychiatric hospitals reflect the need for control agencies on drugs. Hence in Nigeria, the National Drug and hard Enforcement Agencies (NDLEA) decree was promulgated in 1989 and amended in 1990. It was established to control illicit trafficking, misuse and abuse of narcotic drugs and psychotropic substance in Nigeria. A drug is abuse or misuse when used for non-therapeutic purpose or without a medicine prescription. It also be said to be abused or misused when taken beyond the prescribed standard. Hence Akunwande (2004) defined drug abuse as the use of adverse or negative pharmacological properties of drug for selfish, economic or psychoactive purposes e.g. cocaine hydrochloride. Gulba (2003) stated that drugs commonly abused were cigarettes, alcohol, marijuana, cocaine and heroin.

The level of damage caused Nigerians involvement in drugs can only be appreciated by the study of the pattern of drugs induced mental and behavioral disorders in psychiatric hospitals. Hence this study ventured into the study of psycho-active drugs as predictor of mental and behavioral disorder in psychiatric hospital Benin – city. The focus was to analyse age involvement and assess which drugs are mostly criminated as causal factor(s) in mental and behavioral disorder as to determine the magnitude of the drug problem.
Government through various agencies are spending much money in the control of hard drugs and the treatment and rehabilitation of drugs induced mental and behavioral disorders. Every effort is being made to prevent youths involvement in hard drugs and to control the use of drugs, thus reduce mental and behavioral disorder and reduce drug induced crime in the society (U.S. Department of Education, Drug Prevention Curricular, 2008). The purpose of the study was to determine the relevance of age, gender and specific hard drug as causation factors in mental and behavioral disorders among patients of the Federal Psychiatry Hospital, Benin – City. The study will provide data with which health educators, psychiatrics and nurses as well as social workers will provide health education and counselling to the society in the prevention of mental ill–health and provide basic information for maintenance and promotion of good mental and physical health. Policy formulation and implementation will also find the data useful in the formulation and implementation of drug control guide towards prevention of mental ill-health. This study was meant to assess the magnitude of the drug problem in Nigeria by analyzing drug induced mental and behavioral disorder as presented by the number of patients in psychiatric hospitals. Health education is a human interaction process that could alimoerate the degree of the drug problem hence this study was hinged on three theories/concepts.

1.1 The Concept of Social Problem: Rowland (2005) citing Nisbet (1966) defined social problem as a way of behaviour that is regarded by a substantial part of the social order as being in violation of one or more generally accepted or approved norms. The drug problem either as misuse, abuse or addictive are violation of societal norms generating into both individual and societal problem. Thus mental and behavioral disorder or crimes associated with drugs are societal problem that calls for concern of all. Health could be used as a panacea to reduce drug involvement.

1.2 The Social Learning Theory: believes that behaviour is a function an individual’s expectations about values of an outcome. According to Moronkola and Okanlawon (2003) citing Dembo (1994), Blair (1993), Padilla and Bulerage (1991) stated that if people outcome are desirable and attainable, they are likely to change their behaviour to achieve the goal. Hence Health education intervention in the drug problem can bring about reduction is the magnitude and severity of the drug problem in our society. Health educators working at every level of the health system and through the classroom and community can reduce the problem by their teaching and counseling.

1.3 Behavioral Theory: The goal of this theory is behavioral change. Moronkola and Okanlwon (2003) opined that the health educator identified a target behaviour which he intend to encourage or discourage. In this study the behaviour to discourage is that of drug abuse, misuse or addiction which are precursor to mental and behavioral disorders. Those to be encourage would be good surveillance on adolescent or identification of adolescent peer group to avoid negative influence. Health education could be a major tool in attaining societal norms and goal on the use of drugs and rehabilitation of discharged patients involved in drug induced mental and behavioral disorders.

2. Review

Some empirical studies on drug use, misuse, abuse and addiction were reviewed in the course of the study. Sanusi, Gaya and Lanzi (2006) reported in their study on in-patients and out-patients of Federal Neuropsychiatric hospital Maiduguri Nigeria, had tobacco, alcohol, solvent, cannabis, diazepam, cocaine and others as drugs mostly abused and misused. Their study showed that 93% of drug abusers were males and 72% of those that abuse drugs were between 11 – 30 years. Another study revealed that marijuana is the illicit drug, mostly abused as reported by the 2008 Australian school students’ Alcohol and drug survey. The survey stated that 14% of student aged 12 – 17 years had ever used marijuana in their life with 3% of 12 years old reporting ever used marijuana compared to 26% of 17 years olds. In another survey, the national Drug Strategy household survey as reported on Marijuana and Adolescent (2012), it was found that the gap of marijuana use between males and females aged 14 to 19 years has closed up over time and are no longer greater among males. According to the survey report, the results were similar to the pattern seen for tobacco smoking and alcohol consumption between males and females. In another study, Troisi, Pasini, Saacco and Spalletta (1998) found that the severity of depression, anxiety and alexithymic symptoms (cognitive and emotional deficits) increased progressively with the degree of involvement in cannabis and chronic use of cannabis was associated with high prevalence of co-morbid psychiatric disorder. In another study, Ejelonu, (2012) asserted that memory is effected by high does of marijuana as a result of tetrahydrocannabinol (THC) altering the way in which information is processed by the hippocampus. Ejelonu (2012) further Opined that the THC acts on the hippocampus and inhibits memory retrieval and alters the way in which sensory information is interpreted, if marijuana is taken, it weakens the short term memory and damage the nerve cells by creating structural changes to the hippocampus region of the brain. In another study Obioha (2004) stated that drug abuse is tearing apart human societies, spawning crime, spreading diseases such as AIDS, and killing the youth and the future. There are estimated 190
million drugs users around the world (Annan Kofi: United Nations Secretary General cited in Awake 1999:3), which is one way in which malaise of a confused and disordered society is expressed. It is very often intricately interlinked with various other manifestations of suffering or failure to adapt, suicide, delinquency, violence and rejection of all integration into schools or working life among the youths (UNESCO, 1987:13).

3. **Research Questions:** Three research questions were generated to guide the study:

1. What is the age distribution of drug induced mental and behavioral disorder among patients of psychiatric hospital Benin – City from 2008 – 2012?
2. To what extent does gender difference exist in drug induced mental and behavioral disorder among patients of psychiatric hospital Benin – City from 2008 – 2012?
3. Do psycho-active drugs equally predict mental and behavioral disorder among patients of psychiatric hospital Benin – City from 2008 – 2012?
4. To what extent can Health education be used to reduce the drug problem?

3.1 **Hypotheses:** Three hypotheses were generated to guide the study:

1. Age is not a significant predictor of drug induced mental and behavioral disorders among patients of psychiatric hospital Benin – City from 2008 – 2012.
2. There is no significant difference between males and females in drug induced mental behavioral disorders among patients of psychiatric hospital Benin – City from 2008 – 2012.
3. Psycho-active drugs will not equally be significant predictor of mental and behavioral disorders among patients of psychiatric hospital Benin – City from 2008 – 2012.

The Federal Psychiatry Hospital, Benin – city is a Federal government health institution meant to serve as a referral centre for psychiatric cases in the South – South of Nigeria. Established more than thirty years ago is popular for its performance in management and rehabilitation of neuropsychiatric cases. It has more than 200 beds for admitted cases and run 24 hours out patient service.

4. **MATERIALS AND METHOD**

The study employed the ex-post facto design. The reasons were that the data were both secondary data summary as obtained from the Federal Psychiatry Hospital medical record department and the perception of the hospital workers. The summary data were the admission and discharged patient record from 2008 – 2012. To obtain the data, request letter was made to the medical record in 2011 on the understanding that the records were meant for students’ studying in research in delta State University, Abraka, Delta State, Nigeria. The second group of data were staff perception towards the implication of Health education in drug induced mental and behaviour disorders. It consisted of only statements with five options with which the respondent could obtain only one of his most preferred. It was validated by colleagues and found acceptable. A test-retest was used to analyze it for reliability. It was found reliable at r- 98 (Pearson Product Moment Coefficient). Both primary and secondary data were analyzed for drugs induced mental and behaviour disorder, against age, gender and drug frequency of use frequency count with percentages. The multiple regression analysis at 0.05 alpha using SPSS 16, Microsoft widow were used to analyze the data.

5. **Findings**

5.1 **Research Question I:** What is the age distribution of drug induced mental and behavioral disorder among patients of psychiatric hospital Benin – City from 2008 – 2012?

5.1.2 **Research Question II:** Do psycho-active drugs equally predict mental and behavioral disorder among patients of psychiatric hospital Benin – City from 2008 – 2012?
5.1.3 Table I: Age, drug frequency count and percentages contribution to mental and behavioral disorder among patients of the Federal Psychiatry Hospital Benin – City from 2008 – 2012

<table>
<thead>
<tr>
<th>Drugs</th>
<th>0 – 5 years</th>
<th>6 – 18 years</th>
<th>19 – 30 years</th>
<th>31 – 40 years</th>
<th>41 – 60 years</th>
<th>61 years +</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>F10 (Alcohol)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>46</td>
<td>37.7</td>
<td>26</td>
<td>21.3</td>
</tr>
<tr>
<td>F11 (Heroin)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>22.2</td>
<td>2</td>
<td>22.2</td>
<td>5</td>
</tr>
<tr>
<td>F12 (Cannabis)</td>
<td>0</td>
<td>0</td>
<td>36</td>
<td>3.93</td>
<td>699</td>
<td>76.39</td>
<td>135</td>
<td>14.75</td>
</tr>
<tr>
<td>F14 (Cocaine)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>40.00</td>
<td>2</td>
<td>2.00</td>
<td>4</td>
</tr>
<tr>
<td>F15 (multiple drug use)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>39</td>
<td>47.56</td>
<td>26</td>
<td>31.70</td>
<td>17</td>
</tr>
<tr>
<td>F17 (Tobacco)</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.88</td>
<td>57</td>
<td>50.04</td>
<td>34</td>
<td>30.08</td>
</tr>
<tr>
<td>F19 (stimulants &amp; caffeine)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>50.0</td>
<td>1</td>
<td>25.5</td>
<td>1</td>
<td>25.00</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>37</td>
<td>849</td>
<td>225</td>
<td>136</td>
<td>7</td>
<td>1255</td>
</tr>
</tbody>
</table>

Table I shows that cannabis is responsible for 915 cases, 72.90% of the total of 1255 mental and behavioral disorder between 2008 – 2012, while Alcohol was responsible for 122 cases representing 9.70%. When ranked, others were multiple drug use – 82 (6.53%), tobacco 113 (1.03%), cocaine 10 (0.79%), heroine 9 (0.71%) and stimulant and caffeine 4 (0.39%). The age of 19 – 30 years were involved in drug induced mental and behavioral disorder with 849 (67.6%) out of 1255 cases. When ranked, others were ages 31 – 40 years 225 (17.92%), 41 – 60 years 136 (10.83%) while 6 – 18 years had 37 (2.94%) and above 61 years had 7 (0.55%).

5.2 Research Question III: To what extent does gender difference exist in drug induced mental and behavioral disorder among patients of the Federal Psychiatry Hospital Benin – City from 2008 – 2012?

5.2.1 Table 2: Drug distribution in relationship to gender as correlates of mental and behavioral disorder among patients of the Federal Psychiatry Hospital Benin – City from 2008 – 2012

<table>
<thead>
<tr>
<th>Drugs</th>
<th>M</th>
<th>%</th>
<th>F</th>
<th>%</th>
<th>MBO*</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>F10 Alcohol</td>
<td>107</td>
<td>87.70</td>
<td>15</td>
<td>12.29</td>
<td>122</td>
<td>9.72</td>
</tr>
<tr>
<td>F11 Heroin</td>
<td>07</td>
<td>77.77</td>
<td>2</td>
<td>28.57</td>
<td>9</td>
<td>0.71</td>
</tr>
<tr>
<td>F12 Cannabis</td>
<td>856</td>
<td>93.60</td>
<td>58</td>
<td>6.40</td>
<td>914</td>
<td>72.82</td>
</tr>
<tr>
<td>F14 Cocaine</td>
<td>6</td>
<td>60.00</td>
<td>4</td>
<td>40.00</td>
<td>10</td>
<td>0.79</td>
</tr>
<tr>
<td>F15 multiple drug use</td>
<td>19</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>19</td>
<td>1.51</td>
</tr>
<tr>
<td>F17 Tobacco</td>
<td>1</td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>F19 stimulants &amp; caffeine</td>
<td>161</td>
<td>89.44</td>
<td>19</td>
<td>10.55</td>
<td>180</td>
<td>14.34</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1157</td>
<td>92.19</td>
<td>98</td>
<td>7.80</td>
<td>1255</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2 shows that more males than females were involved in drugs. Males contributed 1157 (92.19%) against a total of 1255 cases admitted at the Federal Psychiatry Hospital Benin – City from 2008 – 2012

5.2.2 Hypothesis I: Age is not a significant predictor of drug induced mental and behavioral disorders among patients of psychiatric hospital Benin – City from 2008 – 2012

5.2.3 Table 3: Co-efficient of age as predictor of mental and behavioral disorder among patients of the Federal Psychiatry Hospital Benin – City from 2008 – 2012

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstd co-efficient B</th>
<th>Std co-efficient Std Error</th>
<th>Beta</th>
<th>t-ratio</th>
<th>Sig</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age A 0 – 5 years</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age B 6 – 18 years</td>
<td></td>
<td></td>
<td>-6.12</td>
<td>.004</td>
<td>4th</td>
<td></td>
</tr>
<tr>
<td>Age C 19 – 30 years</td>
<td>1.08</td>
<td>.004</td>
<td>.845</td>
<td>296.22</td>
<td>.00</td>
<td>1st</td>
</tr>
<tr>
<td>Age D 31 – 40 years</td>
<td>.755</td>
<td>.023</td>
<td>.109</td>
<td>33.08</td>
<td>.00</td>
<td>3rd</td>
</tr>
<tr>
<td>Age E 41 – 60 years</td>
<td>1.23</td>
<td>.016</td>
<td>.069</td>
<td>75.68</td>
<td>.00</td>
<td>2nd</td>
</tr>
<tr>
<td>Age F 61 years</td>
<td>2.42</td>
<td>.072</td>
<td>5th</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 reveals that the ages of 19 – 30 years were significant at t – value of 296.22 and alpha of .001. ranked first among the ages, others were ages 40 – 60 years with t – value of 75.68 at .001 alpha was significant and 31
– 40 years with t – value of 33.05 at .001 alpha was significant become the second and third respectively. Others had collinerarity with other values. Ages 0 – 5 years and 60 years and above were not significant.

5.3.1 Hypothesis II: There is no significant difference between males and females in drug induced mental behavioral disorders among patients of psychiatric hospital Benin – City from 2008 – 2012

5.3.2 Table 4: Gender co-efficient in relationship to mental and behavioural disorders among patients in the Federal Psychiatry Hospital Benin – City from 2008 – 2012

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized co-efficient</th>
<th>Std. co-efficient</th>
<th>Beta</th>
<th>t</th>
<th>Sig</th>
<th>95% confidence interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>64.36</td>
<td>37.05</td>
<td>1.73</td>
<td>.15</td>
<td>-38.51</td>
<td>167.24</td>
</tr>
<tr>
<td>Male</td>
<td>2.16</td>
<td>.49</td>
<td>2.05</td>
<td>4.424</td>
<td>.011</td>
<td>.806</td>
</tr>
<tr>
<td>Female</td>
<td>-17.36</td>
<td>7.30</td>
<td>-1.10</td>
<td>-2.37</td>
<td>.076</td>
<td>-37.63</td>
</tr>
</tbody>
</table>

Dependent variable: Mental and behavioral disorder.

Table 4 shows that males had a t–value of 4.42 and significant at .01, while females had a t–value of -2.37 and non–significant.

5.3.3 Hypothesis III: Psycho-active drugs will not equally be significant predictor of mental and behavioral disorders among patients of the Federal Psychiatry Hospital Benin – City from 2008 – 2012

5.3.4 Table 5: Co-efficient of Drugs as predictor of mental and behavioral disorder among patients of the Federal Psychiatry Hospital Benin – City from 2008 – 2012

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstd. co-efficient</th>
<th>Std. co-efficient</th>
<th>Beta</th>
<th>t-ratio</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>48.77</td>
<td>52.78</td>
<td>.924</td>
<td>.453</td>
<td></td>
</tr>
<tr>
<td>Alcohol</td>
<td>5.17</td>
<td>4.08</td>
<td>5.83</td>
<td>1.265</td>
<td>.333</td>
</tr>
<tr>
<td>Cannabis</td>
<td>1.92</td>
<td>.348</td>
<td>2.37</td>
<td>5.546</td>
<td>.031</td>
</tr>
<tr>
<td>Tobacco</td>
<td>-12.91</td>
<td>0.047</td>
<td>-14.59</td>
<td>-2.14</td>
<td>.165</td>
</tr>
<tr>
<td>Stimulants &amp; Caffeine</td>
<td>5.769</td>
<td>3.52</td>
<td>6.630</td>
<td>1.63</td>
<td>.244</td>
</tr>
</tbody>
</table>

\[ F – Value \] 20.295
\[ Sig. \] 0.48
\[ R - \] .0988
\[ R^2 - \] .976
\[ Adjusted R^2 - \] .926

Heroin
Cocaine
Multiple drug use

\{ \text{were not significant (excluded variables)} \}

Table 5 reveals the co-efficient statistics of drugs as predictor of mental and behavioral disorder. Cannabis has t – value of 5.55 and significant at .031 alpha. All other drugs were not significant. Drugs include in the analysis were Alcohol, Cannabis and stimulants and Caffeine. These drugs had \( F – value \) of 20.29 and significant at .48. \( R^2 \) value of .97 and adjusted \( R^2 \) .926. Thus drugs contributed 97% to all cases of mental and behavioral disorder in the hospital.

5.4.1. Research Question IV: To what extent can Health education be used to reduce the drug problem?

5.4.2 Table 6: Implications of Health Education in drug induced mental and behaviour disorder

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>Males</th>
<th>Females</th>
<th>Ground Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>7</td>
<td>11.66</td>
<td>2</td>
<td>3.33</td>
</tr>
<tr>
<td>2.</td>
<td>20</td>
<td>33.33</td>
<td>6</td>
<td>10.00</td>
</tr>
<tr>
<td>3.</td>
<td>6</td>
<td>10.00</td>
<td>5</td>
<td>8.33</td>
</tr>
<tr>
<td>4.</td>
<td>6</td>
<td>10.00</td>
<td>2</td>
<td>3.33</td>
</tr>
<tr>
<td>5.</td>
<td>3</td>
<td>5.00</td>
<td>3</td>
<td>5.00</td>
</tr>
<tr>
<td>Total</td>
<td>32</td>
<td>69.9</td>
<td>18</td>
<td>30.1</td>
</tr>
</tbody>
</table>

Table 6 reveals that most respondents, 26 (43.33%) suggested Health/Drug education at all levels of education as a way to reduce drug involvement while closing access to drug/drug trafficking scored second and imprisonment as a sanction came third under suggestions to reduce the incident of drugs.
6. DISCUSSION

In this study, three research questions and three hypotheses were analyzed in attempt to investigate the magnitude of drugs induced mental and behavioral disorder associated with drug misuse, abuse and addiction.

6.1 Research Question I and Hypothesis I

In this study, it was found that there was much age variation in the use and abuse of drugs leading to drug induced mental and behavioral disorder. At 0 – 5 years, drug induced mental and behavioral disorder was zero. It shows that drug induced mental ill health is a social and environmental issues. In other words, children of drug induced mental and behavioral parents do not transfer such genes to their upspring. Put in better form drug induced mental and behavioral disorders are not transferred. Above 61 years, the issue of drug induced mental and behavioral was uncommon except among alcoholic where 5.7% was recorded. The ages of 19 - 30 years owned much of the drug induced mental and behavioral disorder with 67.2%, while 31 – 40 years recorded 17.92% and 41 – 60 years recorded 10.83%. When age was tested on hypothesis, it found that 19 – 3- years was significant with t – value of 296.22, significant at .001 alpha, 31 40 year had a t – value of 33.08 significant at .001 alpha while 40 – 60 years had a t – value of 75.08 and significant at .001 alpha. When ranked; 19 – 30 years came first, 40 - 60 years came second and 31 – 40 years came third.

The ages of 19 – 30 years being the age at which most people presents drug induced mental and behavioral disorder as found in this study tally with the findings of Sanusi (2006) where 21 – 30 years was the age of person presenting them for treatment for drug abuse and misuse. This present finding also correlates that of Olowe (1994), and National Law Enforcement Agency (NDLA) (1996) who stated that Nigerian youths (those between 12 – 30 years) both in Urban and rural and from different socio – economic backgrounds indulge in drug use and abuse.

6.2 Research Question II and Hypothesis II

In this study, it was found that males with drug induced mental and behavioral disorder were 92.19% against females with 7.80%. The hypothesis showed that males had t – value of 4.42 significant at .011 alpha while females had t – value of -2.37 at .076 alpha which was not significant, although there was significant correlation between males and females at f – value of 69.55. The finding of this study tally with the finding of Sanusi et al (2006) in which they found much more males than females reporting for treatment due to drug use and misuse at the federal hospital Maiduguri. However, the Australian 2007 national drug strategy household survey showed that rates of recent marijuana use between males and females age 14 – 19 years was closing up and have converged over time.

6.3 Question III and Hypothesis III

It was found that Cannabis had 72.90% of all cases admitted due to mental and behavioral disorder. When ranked: Cannabis 72.90%, Alcohol 9.70%, multiple drug use, 6.53%, Tobacco, 1.35, Cocaine 0.79%, Heroin 0.71%, as 1st, 2nd, 3rd, 4th, 5th, 6th, and 7th respectively. Hypothetically, Cannabis was significant with 5.53 at .031.

This findings correlates the findings of 2008 Australian School Student and Alcohol and Drug Survey that reported 14% students had used marijuana at some stage in their life. The report went further to state that if adolescent use marijuana early in life and for a prolong period of time, it can lead to a number of significant problem. The report added that marijuana is still widely used by youths. This study findings also collaborates the findings of Troisi, Pasini, Saecco, and Spalletta (1998) who found that the severity of depression, anxiety and alexithymic symptoms (cognitive – emotional deficits) increased progressively with the degree of involvement with Cannabis and chronic use of Cannabis was associated with a high prevalence of co-morbid psychiatric disorders. However, this finding was at variance with that of Sanusi, Gaya and Lanzai (2006) who found multiple drug use as the most frequent cause of psychiatric hospital attendance. In that study, the authors found Cannabis (13%) second to Alcohol with 22%.

6.4. Research Question IV

From the results of the findings, most respondents suggested Health/Drug education as a good option in the fight against drug induced mental and behaviour disorder. This findings tally with the objectives of the National Institute of Drug Abuse and Prevention (2009), that school curriculum should be enhanced with drug education.

7. IMPLICATIONS FOR HEALTH EDUCATION

Health education is the education or persuasion of an individual or group into accepting, adopting the right attitude and practice towards a healthful practice in the maintenance and promotion of health. Hence Nwajei (2010) stated that health education is the process of an educational oriented approach to planned change that focuses on those behaviors or problem that directly or indirectly affects people’s health.

The age of 19 – 30 years implicated in this study was the age of starting a productive life not only for the individual who is now suppose to own a home but also for the national socio-economic life of the nation. Hence health education should make much efforts on teaching and spreading information of the evil of drug misuse and abuse in the society. Reaching the adolescent at earlier age would improve the bad situation. School curriculum
on drugs use should be taught professional health educators while counseling and guidance services should be provided by a health educator or a guidance and counseling teacher.

The drug commonly abused and inducing mental and behavioral disorder was Cannabis. Cannabis thrives well in most part of the tropics especially in most of the rain forest region in southern Nigeria. The problem is therefore that of easy access. Efforts should be made to reach farmers who are the cultivators of cannabis and be enlightened on the damage especially to their children and the society. Apart from this, a permanent surveillance team be put in place to monitor the rain forest region and farmers as to locate and destroy cannabis farms when found. It was found that more males are involved than females, peer group influence on the females could be used on their males peer of the dangers inherit in drug abuse and misuse.

8. CONCLUSION AND RECOMMENDATIONS

This study was undertaken to define the magnitude of the drug problem through the assessment of drug induced mental and behavioral disorders. It analyzed age, gender and the degree of individual and collective drugs involvement in drug induced mental and behavioral disorder. It was revealed that the age of 19 – 30 years were worst affected by the drug problem (drug misuse and drug abuse). Males were more involved than females. Cannabis was mostly responsible for drug induced mental and behavioral disorders. Health education could be a source of ameliorating the drug problem through school and community health education. Closing access to cannabis by youths and others will reduce the magnitude of the drug problem using females on males through peer group relation could also reduce males involvement in the drug problem. Health education can be seen a pancreas to the drug problem.

Based on the results of the study, the following are recommended:

1. Health education be taught in schools, right from the primary schools through the universities.
2. When found, there should be a mass destruction of cannabis farms and the cultivators given higher or more sense sanction than exist now. This include confiscation of all assess of the convict along a length jail sentence.
3. Health education should form community and school peer groups headed by females to persuade male youths on the avoidance of drugs.
4. Health campaign on drugs should concentrate more on the age 12 and above (adolescents) to guide against been victim of drugs misuse and abuse.
5. Parents should have regular and strong surveillance on their children from the age of 10.
6. Sales outlet of drugs should be exposed through community effort for police and drug law enforcement agents intervention.
7. Parents should be concerned over their children peer group to forestall involvement of their children through other.
8. Government and the media should be mindful of advertisement and media jingles.

Acknowledgement: I wish to acknowledge and appreciate the management and staff of the Federal Neuropsychiatric Hospital Benin city for the use of this data.

REFERENCES


Royal People (Nigeria) ltd. 1 – 5.

NDLEA, information pamphlets.
Washington, D.C Office of Education Research and Improvement.
This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE’s homepage: http://www.iiste.org

CALL FOR JOURNAL PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There’s no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** http://www.iiste.org/journals/ The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: http://www.iiste.org/book/

Recent conferences: http://www.iiste.org/conference/

**IISTE Knowledge Sharing Partners**

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digitial Library, NewJour, Google Scholar