Characteristics of drug abusers in an urban community of Tanzania

Stephen E.D.Nsimba¹, Edmund J. Kayombo², Amos Y. Massele³, Yovin Laurent⁴, Mwakyusa Lusajo⁴

1. School of Medicine & Dentistry, College of Health Sciences, University of Dodoma (UDOM), United Republic of Tanzania, East Africa.
2. Institute of Traditional Medicine, Muhimbili University of Health & Allied Sciences Tanzania.
3. School of Medicine University of Botswana, Republic of Botswana, Southern Africa.
4. Drug Control commission, United Republic of Tanzania.

Corresponding Author:
Dr Stephen ED Nsimba (PhD), School of Medicine & Dentistry, College of Health Sciences, University of Dodoma (UDOM), P. O. Box 259, Dodoma, United Republic of Tanzania, East Africa. Email: nsimbastephen@yahoo.co.uk Mobile: +255-758539287/+255-713-318113.

ABSTRACT

Objective: Problem of drug abuse in Tanzania is serious and growing one. The thrust of this study was to identify core characteristics of drug abusers in Dar es Salaam, the biggest commercial city of the United Republic of Tanzania.

Study design: Descriptive, cross sectional.

Place and duration of study: The study was undertaken from July-September 2007 at three municipal councils of the city of Dar es Salaam namely Kinondoni, Ilala and Temeke each with a population of about 3.5 million inhabitants.

Subjects & Methods: It was a descriptive cross sectional study; interviewing 1198 adolescents male and female aged between 20-40 years recruited on random sampling method.

Statistical Analysis and Results: Descriptive statistical analysis was used. In this study, the highest percentage of drug abusers was found within age group of 21-30 years for males while in the females the highest user age group was less than 20 years. Employment status was 33.6%. Labourers with primary education were among the highest users (63.9%). Amazingly among literates the abuse was very low (7.4%). Regarding the marital status of respondents 57% were not married. Smoking was the commonest route of administered drugs accounting for 90.5% of respondents.

Conclusion: The study was a problem identifier of the magnitude of the problem in one of the biggest cities of Tanzania, which can be prevented if tackled prudently.
INTRODUCTION

The health and wellbeing of many young people worldwide today are being seriously threatened by increasing use of illicit drugs like cocaine, heroin, bhang, etc. The use of illicit drugs has serious consequences in homes, schools, and communities (Nsimba, 2011; Nsimba and Massele, 2012; 2012). Literature review show that there are strong links between high-risk of using illicit drugs and in family breakdown, economic and emotional poverty, neglect, abuse, violence and lost opportunities and unsafe sexual behaviour and lost opportunities. The health, social and economic costs of illicit drug use-related problems among young people impose a substantial burden on society. The use of illicit drugs/substances is currently being reported to be on an increase in Tanzania and other developing countries (Nsimba, 2007; 2011).

The availability of drugs in the region fuels early initiation of drug use to in-school and out of school youths. For example, African Union Ministerial Conference on Drug Control in Africa reported abuse of opiates in at least 16 countries in Africa, (Abdool, 2004). Drug abuse amongst the youths in Tanzania has become a serious problem countrywide. It leads young people into psychosocial and economic hardship as the use and abuse become recurrent and chronic. The use of drugs range from glue-sniffing, heroin and cocaine to ecstasy among street children (NACADA, 2005).

There are also global reports on potential risks from energy drinks, particularly for the youngsters and these have been associated with wider substance abuse and various risky behaviours (Wimer and Levant, 2013; de Haan et al, 2012). These energy products actually they continue to be produced in large numbers and very often widely marketed or
promoted with striking a lot of health benefits claims. These advertisements or promotions of these energy products quite often target the youngsters (Weills et al, 2013). As a result of these global health benefit claims through advertisements, the US Food and Drug Administration has formed a committee of experts to investigate these energy drinks following reports of deaths and serious injuries (Peacock et al, 2012; Nikpartow et al, 2012). While the US Food and Drug Administration is investigating on that, the European Food Safety Authority has reported no scientific evidence or proof to support for health benefits claimed by energy drink manufacturers. However, growing evidence appears to show that since majority of youngsters prefer using these products, manufacturers and retail/salers are over-pricing these stuffs as a results of grossly misleading health benefit claims which again on the other hand use of these products threaten health (makes them vulnerable or at risk) of these youngsters (Malik and Hu, 2012).

Tanzania is a vast country with an area larger than the area of Kenya, Uganda, Burundi, and Rwanda put together. Tanzania shares 54 official border points with eight countries most of which are land-locked (Ministry of Home Affairs Report, 2004). It also has 3 international airports, 11 inland ports, 8 seaports, 4 major exit railway stations and 25 major post offices and courier service operators. The location of Dar-es-Salaam, once capital city of Tanzania and now commercial city, makes the country to be vulnerable for easy penetration by drug traffickers and transit of drugs to other countries. It is being acknowledged that in Tanzania drugs are trafficked through sea, air, road, rail and illegal routes through the borders. Most of drugs come in the country from Pakistan, India, Middle etc on transit to South Africa, Europe and United Sates (Ministry of Home Affairs Report, 2004).

At first Tanzania was used as a transit of illicit drugs but in recent years there is evidence of producing of illicit drugs. For example the Government Chemistry Laboratory Reports (GCLA’s; 2000; 2002; 2005) observed that the seizure of a clandestine laboratory in Dar es Salaam in 2000 signaled that Tanzania is shifting from being a transit and consumer to a drug producing nation. Whereas, the Drug Control Commission Reports showed that the household survey in four regions of Tanzania mainland (DCC-2001-6; 2004-9), reported a 3.8% lifetime cannabis use and 3.7% lifetime khat use.
Hospital in-patient surveys (Mbatia and Kilonzo, 1996), indicated that 61% of patients out of 225 admitted at Muhimbili National Hospital Psychiatric Unit-Dar-es-Salaam region, screened positive for cannabis in blood and urine. Furthermore, another in-patients survey at Muhimbili National Psychiatric Hospital in Dar-es-Salaam reported that cannabis was most abused by patients coming from all over Tanzania and this was cited as a factor which necessitated most admissions among patients who were brought to this referral hospital (Ndosi, 1999). It was further observed that Khat (Mirungi) was excessively abused by adolescents and young adults and most patients who abused Khat presented with history of delusion, anorexia, constipation, stomatitis and gastritis (Ndosi, 1999).

Also, the percentage of total psychiatric admission into Mirembe Hospital-Dodoma region due to psychoactive drug use disorders increased from 4.5% in 1999 to 28.8% in 2003. Treatment needs assessment conducted in Dar es Salaam from 624 drug addicts revealed that 77.7 % used diazepam valium\textsuperscript{8}, indicating diversion of prescriptive drugs to illicit use (DCC, 2001-6). Thus, this findings shows the necessity of having current data as the latest household data for 4 regions was done in 1991 which may not be relevant as drug use problems may have changed over recent years. The current trend in Tanzania on drug consumption, indicates a rapid increase in the use and trafficking of both traditional and non-traditional drugs such as heroin, cocaine and mandrax. For example, the number of total cases involving non-traditional drugs from 1991-1996 was 178 while that of 1997-2002 was 1,399, an increase of approximately 686%. On the same period the number of cannabis related cases rose from 3,486 to 23,038, which is an increase of 561% (Ministry of Home Affairs Report, 2004). Also the Tanzania Government chemist laboratory agency report observed that the number of seized illicit drugs analyzed by the laboratory from 1995-2004 was found to contain controlled drugs (Ministry of Home Affairs Report, 2004).

**Study Design and Methodology**

The study used both prospective and retrospective cross-sectional survey involving adolescent and young adult drug abusers/injectors in the 3 municipals of Dar-es-Salaam region, Tanzania.

**Study sites**

The study was carried in Dar-es-Salaam region which has a total of population of about 2.5-3.5 million people (National Population Census, 2002). About 49% Dar-es-Salaam
residents were females and the City has a growth rate of 4.3%. The Population national census of 2002, show that 52% (1,302,031) of Dar-es-Salaam City’s population is within 15-39 years age group, and more than a half of these were in the age group of 20-24 years (see Table 1). It is with these age groups where most illicit drug users were found. Based on these statistics and being focal point where presumably most illicit drug traffickers pass, Dar-es-Salaam City was chosen for this study. The study was done in the 3 municipals of Dar-es-Salaam region; namely Kinondoni, Ilala and Temeke in 2007. Dar-

**Study Population**

The study population was adolescents and young adults both males and females aged 18 years and above (18-35 years) who were illicit drug users. A prospective cross sectional epidemiological survey of adolescents and young adults was carried in the 3 municipals of Dar-es-Salaam region. The targeted population was randomly selected after identification of the study sites.

Key informants, peer leaders within the drug abuse group in each site were identified and snow-balling approach was used to reach the others (i.e. after interviewing on person and this person was requested to bring another person or friend he/she knew is a substance abuser).

**RESULTS**

This is a study of 1198 adolescent and young adult drug abusers, who participated in this investigation and revealed information on various internal and external factors relating to the phenomenon of drug abuse. Within different age groups, the highest percentage of drug abusers in the study was found within age group of 21 to 30 years in males (96%) but in females the highest drug users were in the age group of less than 20 years (5.5%, refer to table 1).

Amazingly the frequency of drug abuse was higher among respondents who had finished primary education and were semi- illiterate (63.9% refer to table 2).

Regarding socio-economic profile, 33.6 % of them were self- employed, at the time of interview whereas 2% were unemployed (refer to table 3). The three higher classes of
drug abusers were: businessmen, 27 %, house-wives 1.3.% and students 0.9% (refer to table 3).

For marital status, 57% drug abusers were not married (refer to table 4). Heroin was the most reported abused drug (80%). The stated common routes of administration for these different drugs was smoking (95%) and sniffing (13%) (refer to Table 5).

Table 1: Characteristics of respondents by age and sex

<table>
<thead>
<tr>
<th>Age in years</th>
<th>SEX</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male N=1154</td>
<td>Female N=44</td>
</tr>
<tr>
<td>&lt; 20</td>
<td>107 (94.5%)</td>
<td>6 (5.5%)</td>
</tr>
<tr>
<td>21 – 30</td>
<td>735 (96%)</td>
<td>31 (4%)</td>
</tr>
<tr>
<td>31 – 40</td>
<td>294 (97.7%)</td>
<td>7 (2.3%)</td>
</tr>
<tr>
<td>&gt; 40</td>
<td>18 (100%)</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2: Characteristics of respondents by level of education

<table>
<thead>
<tr>
<th>level of education</th>
<th>Number of responses N=1198</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not gone to school</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Not finished primary education</td>
<td>243</td>
<td>20.3</td>
</tr>
<tr>
<td>Finished primary Education</td>
<td>766</td>
<td>63.9</td>
</tr>
<tr>
<td>Not finished secondary education (Ordinary level)</td>
<td>80</td>
<td>6.7</td>
</tr>
<tr>
<td>Advanced level secondary education</td>
<td>4</td>
<td>0.3</td>
</tr>
<tr>
<td>College education</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Adult education</td>
<td>4</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Table 3: characteristics of respondent by occupation

<table>
<thead>
<tr>
<th>Type of occupation</th>
<th>Number of responses</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>24</td>
<td>2.0</td>
</tr>
<tr>
<td>Self- employment</td>
<td>402</td>
<td>33.6</td>
</tr>
<tr>
<td>Peasant</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td>House wife</td>
<td>16</td>
<td>1.3</td>
</tr>
<tr>
<td>Student</td>
<td>11</td>
<td>0.9</td>
</tr>
<tr>
<td>Businessman</td>
<td>324</td>
<td>27.0</td>
</tr>
<tr>
<td>Others</td>
<td>414</td>
<td>34.6</td>
</tr>
</tbody>
</table>

Table 4: Characteristics of respondents by marital status

<table>
<thead>
<tr>
<th>Marital status</th>
<th>Number of respondents</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>145</td>
<td>12.1</td>
</tr>
<tr>
<td>Not married</td>
<td>683</td>
<td>57.0</td>
</tr>
<tr>
<td>Cohabiting</td>
<td>276</td>
<td>23.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>53</td>
<td>4.4</td>
</tr>
<tr>
<td>Separated</td>
<td>41</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Table 5: Common routes of administration of abused drugs

<table>
<thead>
<tr>
<th>Routes</th>
<th>Number Respondents (N = 1198)</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injection</td>
<td>105</td>
<td>8.8</td>
</tr>
<tr>
<td>Orally</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Sniffing</td>
<td>14</td>
<td>13.3</td>
</tr>
<tr>
<td>Smoking</td>
<td>95</td>
<td>90.5</td>
</tr>
</tbody>
</table>
DISCUSSION

The study findings convey an understanding of variety of characteristics associated with drug abusers. This study attempts to provide an update on patterns and trends of drug abusers. The characteristics explored here are more or less comparable with information provided in Tanzania National Survey on Drug (Ministry of Home Affairs Report, 2004), about 96% of male drug abusers are very young, less than 30 years of age while 5.5% of the female counterparts were less than 20 years of age. This is very alarming for a society because a majority of young generation will not be able to complete their studies due to the problem of drug abuse. Moreover, these are productive years for both male and females and if disrupted by drug abuse may severely hamper the progress of society and significantly contribute to poverty of the country.

Some of the illicit substances commonly abused in Tanzania, include marijuana, cocaine, heroine, glue and petrol (McCurdy et al, 2005). However, marijuana and other substances are also widely used by American teens, despite a steady decline in use of other illicit substances (Nsimba, 2007, 2011, 2012; Nsimba and Massele, 2012; 2012). We hereby emphasise several key risks which could affect adolescents who are still attending schools if they indulge themselves with using illicit substances, such as poor achievement in school, memory loss, lower IQ, and reduced cognitive abilities in later life including mental disturbances/disorders. Furthermore, it has also been reported that children, youths/adolescents and young adults with subnormal kidney function, use of substances of abuse can lead to worsening renal function/can lead to severe renal impairment (Steele et al, 2012).

The 96% male gender findings might be attributable to specific socio-cultural environment where drug abuse in Tanzania is considered more stigmatizing and disgracing in their case leading to inhibitions in presenting for detoxification and reporting. However, it has been reported that differences in both prevalence of drug use and treatment attendance has shown to vary between countries (EMCDDA, 2005). For example in Cyprus, men out-numbered women by a ratio of 9:1 in attending drug treatment services, whereas, in Hungary the ratio was much lower 1.6:1.

Age is similarly reported to influence more gender difference. For example cannabis use is lower between male and female school students than the general adult population (aged
In general males outnumbered females in cannabis use but females outnumbered males for the use of pharmaceutical tranquillisers and sedatives (EMCDDA, 2005). Furthermore, there are reported gender differences as well among individuals related to clinical characteristics and psychiatric comorbidities among chronic cannabis users (Khan et al, 2012).

About 57% drug abusers are unmarried ones; this again is an area of concern. Perhaps non-marital life is more demanding and stressful than being supportive. It appears that not being married is not a protective factor but rather a vulnerable factor. In our study around 63% of the users were illiterate. Again it is not a pleasant finding, because Tanzania has low levels of literacy and rampant poverty, the high percentage of drug dependence in an illiterate population is not a good omen for a civil society. Among employed ones, labourers accounted for 33.6%. This class of illiterates because of their frustration as most of them do not have permanent employment and difficult life situation become vulnerable to drug dependence.

In 90.5% of the cases, the most frequent mode of drug use was smoking. Because of this the drug addicts also suffer from lung diseases and other respiratory tract infections (9). Other few negative consequences reported to be associated with substances of abuse include foetal abnormal growth in pregnant women who abuse substances (Soto et al, 2013); accident risks in road traffic (Lulsunde et al, 2012), and poor or lack of sleep (Weills and Vaughn, 2012). The problem of drug abuse is multi-faceted requiring multiple interventions to curb the problem for example; parents can work with others in their community to increase community awareness about local drug abuse problem. Educators can work with others in the school system to review current programs and identify research-based interventions geared towards students. Community leaders can organize community group meetings to develop community prevention plans, coordinate resources and activities, and support research-based prevention in all sectors of the community. We also propose that supportive housing interventions for street youths should be considered as this may help prevent injection drug use initiation within this high-risk population in Tanzania.
RECOMMENDATIONS

The issue of drug addiction is often overshadowed by other country priority development problems such as poverty alleviation, tackling illiteracy and initiatives to improve basic health care. It is important for policy, decision makers and research and communities to try to determine how the drug problem is likely to change, so that policies and programs can be altered accordingly. Research-based drug abuse community prevention approach has recently surfaced-up with new hope (Chou et al, 1998; Katerman et al, 1997; 2001). Here the first step is to assess the prevalence of risk factors associated with drug users (Chou et al, 1998). The next step is to assess the community readiness for launching prevention programs (Kasterman et al, 1997). The final step is to involve parents, educators and community leaders to carefully plan how, when and where to carry out each program (Kasterman et al, 2001).

We further recommend that parents should be closer to their families, establish friendly environment/ties with their children; and through this “we believe” parents have a powerful parenting role to play in curbing teenage substance misuse/influencing family initiated prevention programs (Bauman, 2001).

ACKNOWLEDGEMENTS

The quantitative survey on assessment of knowledge and HIV risk behaviours among adolescent drug users/injectors in the 3 Municipal districts of Dar-es-Salaam region, was inevitably supported by the Drug Control Commission (DCC)/ TACAIDS- Tanzania and collaborating institutions.

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