Socio-Demographic Determinants of Health Seeking Desires of Youth Involved in Substance Abuse in Kinondoni Municipality - Dar Es Salaam, Tanzania

Dr. Ezekiel Henry Mbao
Lecturer, Department of Nursing, International Medical and Technological University (IMTU), Tanzania

Dr. Twaha Issah Waziri
Lecturer, Department of Social Work, Institute of Social Work, Tanzania

Abstract:
The main purpose of this study was to identify and assess the role of socio-demographic factors associated with health seeking desires by young people involved in substance abuse in the Kinondoni Municipality of Dar es Salaam in Tanzania. The background of this study is in the fact that although little, if anything is known about social and demographic factors associated with the tendency of youth involved in substance abuse to seek health support and rehabilitating services. The study was informed by the Health Belief Model. The study was also guided by the positivist and constructivist paradigms based on a combination of quantitative and qualitative data resulting from a mixed method of research approach. The study was nested in a cross-sectional descriptive survey with a blending of both quantitative and qualitative approaches. The main target population was youth involved in substance abuse including persons who regularly interact with them in a variety of ways. Data was collected by using closed ended questionnaires, in-depth interviews, focus group discussions (FGD’s) and documentary reviews. The methodology and support theories were triangulated to authenticate collected data. The respondents and participants in the study were randomly and purposively sampled out. Quantitative data was analyzed by using the Statistical Package for Social Sciences (SPSS) version 20.0 while qualitative data was analyzed using content analysis. The findings show that sex, education level, and income were significant socio-demographic factors associated with the tendency and urge of youth involved in substance abuse to seek health support services. The age, marital and occupational status of the respondents were identified to be among the suspect socio-demographic determinants of the desire of persons involved in substance use to seek health support. The researcher concluded that social and demographic factors such as sex, education, income, age, marital status and occupation were associated with the urge of the concerned persons to seek health support. The researcher recommends that more efforts should be made to prevent and control substance abuse among the youth through inter alia strategies that integrate the identified factors. The government and Civil Society Organizations (CSOs) should team up and collaborate in accommodating these socio-demographic factors in their planning initiatives in the joint effort to stamp out substance abuse in Tanzania.

Keywords: Health seeking behavior, substance abuse, youth, Kinondoni, Tanzania

1. Introduction
Worldwide about 35 million people are involved in substance abuse and the youth are the most affected group in every national population. (World Drug Report, 2019). For example, in the United States of America (USA), about 5.1 million youth aged between 18 and 25 years were involved in substance abuse in 2017, this being 14.8% of the population (Substance Abuse and Mental Health Services Administration, SAMHSA, 2018). This statistic implies that youth who are the back bone of economy in every country are significantly affected and it is estimated that 9% of the global population aged ≥12 years are classified as dependent on psychoactive substances (Volkow & Li 2005) Studies have confirmed that there is a growing epidemic of tobacco, heroin and alcohol use among youth in the developing world, especially in sub-Saharan Africa as a whole. (Amoo et al., 2017, Aromaa et al., 2011). Substance abuse may affect youth self-esteem, social interaction, physical and psychological harm and even, their chances of personal injury and harming themselves and others; leading to poor quality of life and criminal penalties (Bradshaw et al 2012).

History reveals that substance abuse around the world is as old as the history of mankind (Possi, 1996). For example, in China, the Chinese knew about cannabis sativa in 2700 B.C (Kariuki, 1989). In support of this statement, Freda et al., (1995) confirm that the use of chemical substances that can change human behavior started during the Stone Age period in human evolution. The Columbia Electronic Encyclopedia (2012) argued that substance abuse, including excessive use of alcohol, had been in use from time immemorial. For instance, the Bible provides evidence that Noah, after coming out of the ark planted a vineyard, drank and got drunk to the extent of throwing about his garments and remained
naked in his tent. Despite this evidence from the Bible, empirical data suggests that substance abuse has been a common phenomenon in different societies in different parts of the world. For example, in Egypt, wine was commonly used from the early years while narcotics were abused from 4000 B.C. Nonetheless not until the 19th century A.D were the active substances in drugs extracted. The most common substances during this period included: morphine, laudanum, and cocaine (Kariuki, 1989). In recent years, substance abuse has become one of the most tenacious social problems across the globe. Statistical evidence indicates that worldwide around 27 million people are involved in substance abuse and it is estimated that 1.65 million of them are also living with HIV/AIDS as a result of sharing syringes (United Nations Office on Drugs and Crime (UNODC, 2015 and Adekeye, et al., 2015)). The World Drugs Report (2017) confirms that, worldwide substance abuse has been on the increase.

On the African continent, especially Sub –Sahara Africa (SSA) empirical evidence indicates that the continent is one of the most affected regions of the world by the plague of substance abuse (Dumbili, 2015 and Amoo et al, 2017). For instance, Donnenfeld (2019) found that it is predicted that the East African countries are due to experience the fastest rise in the proportion of its population involved in substance abuse. Compared to West Africa, where substance use is estimated to roughly double between 2019 and 2050, in East Africa substance use is projected to triple, from the current two million cases to about 5.5 million in 2050. Cannabis remains the most extensively used substance on the African continent. The highest incidence is reported in West and Central Africa with rates between 5.2% and 13.5% respectively. The most commonly abused substances in many African countries include alcohol, tobacco, cannabis and khat (Mbata et al, 2009). The use of other substances such as opioids is also on the rise in Africa.

In the United Republic of Tanzania, substance abuse has continued to be one of the pressing social problems. Substance abuse in Tanzania is in the form of alcohol, tobacco and khat. These have been in use for a long time. In recent years, new substances such as heroin, cocaine and valium are imported for consumption in the local market (Nchimbu, 2005). According to the United Nations Office on Drugs and Crime (2003) Tanzania was ranked 6th in world-wide record in 1997 with 2.7% of the total global seizure of herbal cannabis (Global illicit Drug Trends, 1999). Similarly, the World Drug Report (1997), estimates that about 2-9 tons of herbal cannabis were seized in Tanzania in 1985. This report is supported by Masibo et al., (2013) who argued that, despite the existence of control laws in Tanzania intended to prohibit substance abuse, many people especially the youth are increasingly getting involved in substance abuse.

According to Yusuph et al., (2016) substances such as cannabis, heroin, cocaine, khat, alcohol, and cigarettes are the most commonly used substances by 5-12% of the youth. According to the Drug Control Commission (DCC) report of 2012, in Tanzania the number of addicts ranges between 150,000 and 500,000 where 96% are youth. The Commission (2013), indicated that in 2013, 85 tons of cannabis were netted compared to 48 tons in 2012 and 12.8 tons of khat were netted compared to 5.2 tons during 2012. This trend suggests that substance abuse in Tanzania is on increase, a situation which calls for urgent comprehensive intervention. The risk factors associated with the problem include: favorable attitudes and as yet low perceived-risk of harm, family history of substance abuse, influence of peer groups, community laws and community norms (Snyde and Fleming, 2009 and U.S Department of Health and Human Services, 2010).

The government of the United Republic of Tanzania has come up with different intervention measures to redress the problem, both direct and indirect measures. The indirect measures are in the form of conventions, laws and policies. Some of these measures include: ratification of various international conventions related to control of substance abuse such as the Single Convention on Narcotic Drugs (1961), the United Nations Convention on Psychotropic Substances (1971) and the United Nations Protocols Amending the 1961 Convention for Narcotic Drugs Adopted by the United Nations Conference at Geneva, March, 1972. The United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988) and the Protocol for Combating Illicit Drug Trafficking in Southern Africa Development Community (SADC) region, 1996 have also been ratified by Tanzania. Regional Protocols on Combating Illicit Drugs and Trafficking for East Africa, were adopted on 8th February, 2002 (Kazimoto, 2014). At national level, measures to control substance abuse started since 1926 through the introduction of the Cultivation of Noxious Plants (prohibition) Cap 34 to strictly prohibit the cultivation of plants that can lead to abuse of drugs. The government has also enacted the Drugs and Prevention of illicit Traffic in drugs Act, 1995 which restricts the importation of chemicals that can be used for the manufacturing of illicit drugs.

This paper contends that, despite the existing efforts undertaken by the government, substance abuse among youth continues to persist in Tanzania (Ndayongeje et al; 2018). The persistence of this problem has negative consequences to the welfare of youth in general. Blanco et al., (2015) maintains that substance abuse can lead to serious threats to health and human well-being, substantial family distress, and a massive societal economic burden. Youth involved in substance abuse need health care services to enable them to abstain from the use of drugs and reinstate them as socially acceptable members of communities able to live productive lives within their families, workplaces, and communities (Blanco et al., 2015). However, in Tanzania youth involved in substance abuse have had complex pathways towards in search of the urgently needed health services (Mbao et al., 2017).

In realization of the seriousness of the problem several similar scholarly studies on the subject have been conducted in Tanzania (Possi, 1996; Timpson et al, 2006, Mbao et al., 2017 and McCurdy et al; 2010). Possi (1996) conducted an investigation on drug abuse effect on cognitive and social behaviours: a potential problem in Tanzania. Timpson et al (2006) reported another similar study on the relationship between substance abuse and HIV/AIDS in Tanzania. Mbao et al (2017) reported on awareness and decision making on seeking the available treatment options among substance abuse youth in Tanzania. Albeit it is a good start since these studies have made a significant contribution to the understanding of the problem of substance abuse among the youth in Tanzania. Information on socio-demographic factors associated with the desire for the youth to seek health support services remains scanty. This study builds on
previous research conducted on substance abuse by assessing the socio-demographic factors involved in health seeking desires of youth involved in substance abuse in Tanzania with particular attention to the Kinondoni Municipality in the outskirts of the city of Dar-es-Salaam in Tanzania.

2. Methodology

This paper is based on a study carried out to assess the social and demographic factors associated with health seeking desires and behaviors among the youth involved in substance abuse in Kinondoni District in Tanzania. The choice of Kinondoni municipality was influenced by the high prevalence of youth involved in substance abuse in the area. According to Sudef (2008), Kinondoni Municipality has the biggest number of youths involved in substance abuse. In carrying out this study a mixed research method approach was used and informed by pragmatic philosophical assumptions. Data collection, analysis and interpretation based on quantitative and qualitative methods used the convergence model (Creswell, 2014). The quantitative and qualitative aspects of the study were mixed at the presentation of the study findings. However, data collection was undertaken concurrently. The mixed method research approach was based on the supposition that all methods have a bias and faults and the collection of both quantitative and qualitative data would offset the flaw of each form of data collection (Creswell, 2014).

Therefore, the use of a range data sources and methodologies was meant to validate the data. The sample size was determined using the Krejcie and Morgan (1970) table of random numbers to determine the sample size of a given population using the formula as given below:

\[ S = \frac{X^2NP(1-P)}{d^2(N-1)} + X^2P(1-P). \]

Where \( S \) = required sample
\( X^2 = \) Table value of Chi-square from one degree of freedom relative to the desired level of confidence which is 3.841 for the 95\% confidence level and
\( N = \) the given Population size, \( P = \) population proportion that for table construction has been assumed to be 0.5 and
\( d = \) Degree of accuracy the value for \( d \) being 0.05.

According to Krejcie and Morgan a population size of 1300, from the representative sample size should be at least 297 and since the estimated population size of all youth involved in substance abuse at Kinondoni Municipality was 1300 (Sudcf, 2008) a sample size of 300 was considered representative enough. The respondents were randomly selected from the given sampling frame. Instruments for data collection consisted of a questionnaire, in-depth interview guide and a focus group discussion guide. All instruments were pre-tested.

The Quantitative data was analyzed using the statistical package for the social sciences (SPSS) version 20.0. The Chi-square statistic was used to test the association between the variables at .05 level of significance. Logistic regression analysis was done to find the adjusted odds reaction for the selected socio-demographic determinants associated with health seeking behaviors among the youth involved in substance abuse. The qualitative data gathered from in-depth interviews (IDs) and focused group discussions (FGD) was anchored on the research questions, and consequently transcribed and triangulated to identify the theory related as well as recurrent themes. According to Bryman (2012) the use of triangulation ensures the validity of the study findings. Data quality control was assured by different methods. For example, the questionnaire was validated by pre-testing it on 10 (5\%) respondents of the selected sample. Three days of training was organized with data research assistants on the data collection and processing procedures. The findings from the pre-testing were used to modify and adjust the instruments. For the daily activities, data collectors were closely supervised by the principal investigators. Completeness of each questionnaire was checked by the principal investigators on a daily basis.

3. Ethical Considerations

In the actual process of conducting this field study, the authors acquired due clearance from the Open University of Tanzania via the institution's ethics committee. Permission to carry out the study was also sought and was granted by the Kinondoni Municipal Medical Officer. During the process of carrying out this research, honesty was observed in reporting the findings. There were no manipulations or undue assumptions. The responses gathered were treated with greatest care to protect the respondents’ privacy by not revealing their identities. The subjects were also guaranteed that the results obtained would be used for research purposes only. Informed consent was sought and the respondents were not coerced but were free to participate in the study or not to participate.

4. Study Findings and Discussion

The study was conducted in seven (7) wards of Kinondoni Municipality, namely: Manzese, Kimara, Tandale and Magomeni. The other wards were Kigogo and Sinza. Out of these wards 300 young respondents were randomly selected to fill in the questionnaires. The researchers then purposively selected ten (10) participants involved in qualitative data collection aspects of the study. The participants were recruited from health officers categorized as follows: four (4) nurses, three (3) doctors and three (3) clinical officers. The results of the study and the discussion were based on the data obtained through closed-ended questionnaires, in-depth interview, focus group discussions and documentary analysis. The theory adopted to guide this study was intended to serve as a reference point for the interpretation of the findings. The presentation of the findings is preceded by presentation of demographic characteristics of respondents as indicated in Table 1. After that the presentation of key findings on socio-demographic factors associated with the desire by youth...
involved in substance abuse to seek health support are also presented in Table 2, followed by qualitative findings in textual form (i.e. in the form of direct quotations or verbatim quotes).

| Variable          | Frequency | %  |
|-------------------|-----------|----|
| **Age**           |           |    |
| 18-22             | 97        | 32.3|
| 23-27             | 103       | 34.4|
| 28-32             | 56        | 18.6|
| 33-37             | 44        | 14.7|
| **Gender**        |           |    |
| Female            | 78        | 26  |
| Male              | 222       | 74  |
| **Marital Status**|           |    |
| Single            | 225       | 74.9|
| Married           | 75        | 25.1|
| **Education level**|       |    |
| Uneducated        | 19        | 6.3 |
| Primary education | 169       | 53.7|
| Secondary education | 113     | 37.7|
| College education | 7         | 2.3 |
| **Occupation**    |           |    |
| Employed          | 16        | 5.3 |
| Unemployed        | 265       | 88.3|
| Business          | 16        | 5.3 |
| Students          | 4         | 1.1 |

*Table 1: Socio-Demographic Characteristics of the Research Respondents*

| Variable                  | B    | S e  | Wald | Df | Significance |
|---------------------------|------|------|------|----|--------------|
| Age                       | -.145| .056 | 6.735| 1  | .009         |
| Gender (1)                | -.2507| .859 | 8.513| 1  | .004         |
| Marriage                  | -.107| .267 | 1.162| 1  | .687         |
| Education                 | -.2142| .616 | 12.100| 1  | .001         |
| Income                    | -.3217| .526 | 37.451| 1  | .000         |
| Occupation                | -.204| .779 | .069 | 1  | .793         |
| Family                    | .093 | .495 | .035 | 1  | .851         |
| Head of family            | -.278| .799 | .121 | 1  | .728         |
| Occupation of Head        | -.228| .829 | .076 | 1  | .783         |
| Source of income          | -.2867| 1.279| 5.023| 1  | .025         |
| Shelter                   | .071 | .414 | .029 | 1  | .864         |
| Expenditure               | -.646| .341 | 3.587| 1  | .058         |
| Health Status             | -.197| .473 | 6.388| 1  | .011         |
| Connection                | -.083| .859 | .009 | 1  | .923         |
| Place of residence        | -.107| .267 | .162 | 1  | .687         |

*Table 2: The Logistical Regression of the Respondents’ Socio Demographic Factors Associated with Substance Abuse among Youth*

The results from logistic regression show that the social and demographic factors that strongly predicted the health seeking behaviors among the youth involved in substance abuse were sex, education level, Health status and incomes levels as their p-value were statistically significant. The quantitative results were supported by qualitative information which is presented below. Through FGD it was reported:

‘If you just stay in the street you can easily imagine that the substance abuse problem is related more to males. But if you get a chance to go to a hospital you will wonder after seeing a number of females taking treatment for substance abuse problems’ (FGD)

‘The majority of youth who engage in substance abuse are mainly those who fail to continue with further studies due to discontinuation for reasons of poor school attendance, peer pressure, lack of proper guidance from parents and early involvement in substance abuse.' (Interview with a street executive officer)

‘Most of these youth who attend hospitals for available treatment options are usually from families with stable income and so it is easy for them to afford the cost of transport, food and even their parents take good care of them’ (Interview with a social worker)
5. Discussion of Findings

This study contributes to the body of knowledge on health-seeking behaviors among the youth. The primary strength of the study was that, unlike many other youth studies, it did not restrict itself to recruitment based on type of venue, such as schools or clinics, but rather obtained the sample from the community, thereby maximizing the potential of the study to include vulnerable youths who may be outside of formal systems. The results show that almost half of the respondents had primary education, followed by those who had secondary education and very few less than 2% had college education. More than Ninety percent of participants had either primary or secondary education. The possible explanation for most of the substance abusers to be those with primary and secondary education is most likely that, these were mainly those who had failed to continue with further studies due to various reasons and so got involved early in substance abuse encouraged by peer group pressures. Biancorosa et al., (2004) observed that in most cases youth start to indulge in substance abuse when they are below 19 years of age. This makes it difficult for them to continue with further education due to the effects of the substances such as laziness, tendency to drop out of school and lack of concentration on any matter including studies. Monazza and Greta (2010) support these results when they observed that education was positively related to the desire to seek health support.

Education is considered a proxy of socio-economic status. Educational attainment generally results in better employment and incomes which allow individuals broader spectrums of choices when it comes to health care (Zyaambo et al., 2012). The foregoing reasoning could offer an explanation on why substance abuse was strongly associated with poor health seeking behaviours in this study. The implication of the results is that the majority of substance abusers had primary to secondary education and that their low education level was likely to contribute towards low tendency of health seeking behaviour. On the other hand, it was observed by Carolyn et al., (2010) that low educational level influences delays in seeking and using available health services when under ill health symptoms.

This is different from the educated who show quick response the need for health service when they feel they are in ill health. The study results agree with the findings contained in the International Journal of Collaborative Research on Internal Medicine and Public health, (2012) which established that when young people with low education level mixed with peers who had had bad morals and bad manners and had limited knowledge, they could not differentiate good or bad, hence they end up involved in substance abuse and drug trafficking to earn quick money and eventually find no time to seek health service and available treatment options. These findings also imply that formal literacy status of individuals at different times interplay with other factors such as culture and religious beliefs to determine the choices among available treatment options.

The findings from this study revealed that women were more likely than their counterparts to seek available treatments. Though there is a remarkable difference between men and women with regards to health seeking behaviors (Wechsberg et al., 2008, Perkins et al., 2016) women have substantially higher chances of visiting a healthcare facility compared to men. This confirms the main finding in literature that women have been acknowledged to be more responsive to healthcare needs and more receptive to receiving help for health-related conditions (Beogo et al., 2014; Thompson et al., 2016; Zyaambo, Siziya & Fylkesnes, 2012). In relation to why men were found to have lower chances of visiting a healthcare facility for health support service, a possible explanation drawn from literature is that many men may reject the notion of seeking healthcare due to their dominance of masculinity. (Lubega et al., 2015). The implication of this finding is that an increased focus should be given to making healthcare services to make them more attractive and less of a threat to male masculinity. Some studies have pointed out that, women less frequently seek health services compared to men. Several reasons have also been proffered for this.

According to Rani and Bonu, (2003), men are the principal decision-makers in communities and thus control available resources in addition to deciding when and where the women should seek health care. Most times, women are less likely to recognize disease symptoms, and even when they perceive an existing symptom, they wish it away as not meaningless (Wechsberg et al., 2008). Some cultural inclinations also forbid women from taking decisions with respect to their own health and that of their children. The effect of this is that such women cannot visit healthcare facilities alone, and there are also times of the day when they are not permitted to visit such facilities. Therefore, such women have suffered for failure or non-provision of opportunities to seek health support even in times of emergencies (Uchudi, 2001).

The research findings show that young people from well-to-do and stable families were more likely to seek health support compared with their counterparts who come from poor and unstable families. Literature shows that poverty is one of the main hurdles for young people involved in substance abuse to seek health support in health facilities with or without needed costs. (Njuki et al., 2014). Examples of these costs as shown in reviewed literature include transportation and taking time off work to attend clinics. The latter is a bottleneck for youth who are employed especially in casual labor where there is high competition for jobs and hence the risk of being ejected. This mitigates the access to healthcare for those who come from the poorest families (Njuki et al., 2014). Unfortunately, the consequence of this is sustained poverty cycle due to contextual setting namely, lack of good nutrition, overcrowded living and inability to afford health services. The poor not only experience worse health conditions in comparison to their counterparts from families with better income, but also have lower chances of improving their health. These conditions decrease the likelihood of the poor dissociating from substance use and due consequences (Harris et al., 2011; Mayosi and Benatar, 2014;). This calls for various efforts from government and non-government organizations and communities to take necessary actions to help young people out of this viscous cycle of substance abuse through empowering them and their families and friends to get needed health care and good remedial nutrition.
6. Limitations of the Study

The study findings should be cautiously interpreted due to pertaining limitations. The findings of this study cannot be generalized to the larger population on the grounds that the sample size was small and unique to the people who participated. Furthermore, the study was cross-sectional and location-specific hence limiting external validity.

7. Conclusion

The conclusion drawn from the study is that socio-demographic factors such as high education level, female gender, affluence and better incomes levels were significantly associated with the tendencies and readiness of youth involved in substance abuse to seek health support. The findings provide a baseline understanding of the influence of the referred factors in redressing the health conditions of youth involved in substance abuse. Policy formulation and or review and implementation should seriously consider these determinants. This is possible by targeting more male youth, educating them on the importance of health support while empowering them economically by encouraging them to engage in income generating activities. Future studies should focus on the role of social support in promoting health among youth with or prone to substance abuse.

8. Area for Further Research

The study was conducted only in Dar es Salaam as the most urbanized and populated city in Tanzania. Therefore, it is important to conduct a similar study in other regions which are less urbanized.

9. Acknowledgements

We record our appreciations and thanks to the study participants for their readiness to participate in this research.

10. References

i. Adekeye OA, Adeusi SO, Chenube O, Ahmadu FO, Sholarin MA (2015). Assessment of alcohol and substance use among undergraduates in selected private universities in southwest Nigeria. IOSR Humanities and Social Science; 20(3):1-7.

ii. American Psychological Association. (2016). Socioeconomic status. Retrieved from http://www.apa.org/topics/socioeconomic-status/

iii. Amoo EO, Igbinoba AO, Osarime A. (2017) Trends, Drivers and Health Risks of Adolescent Fatherhood in sub-Saharan Africa. 4th International Conference on Education, Social Sciences and Humanities, held in Dubai, UAE, 10-12 July.

iv. Aromaa, E, Tolvanen, A., Tuulari, J., & Wahlbeck, K. (2011). Personal stigma and use of mental health services among people with depression in a general population in Finland. BMC Psychiatry, 11:52.

v. Bandason T, Rusakaniko S. (2010) Prevalence and associated factors of smoking among secondary school students in Harare Zimbabwe. Tobacco Induced Diseases; 8(1):12.

vi. Beogo, I., Lui, C. Y., Chou, Y. J., Chen, C. Y., & Huang, N. (2014). Health-care-seeking patterns in the emerging private sector in Burkina Faso: A population-based study of urban adult residents in Ouagadougou. PLoS ONE, 9(5), 1-12.

vii. Blanco, C., Wall, M. M., He, J. P., Krueger, R. F., Olfsen, M., Jin, C. J., Burstein, M., & Merikangas, K. R. (2015) The space of common psychiatric disorders in adolescents: comorbidity structure and individual latent liabilities. J. Am. Acad. Child Adolesc. Psychiatry, 54:45-52.

viii. Bradshaw CPG, Rebok B, Zablotsky L, La Flair T, Mendelson and Eaton W. (2012). Models of stress and adapting to risk. In W. Eaton (Ed.). Public mental health. 269-302. New York: Oxford.

ix. Braine N. (2014) Sexual minority women who use drugs: prejudice, poverty, and access to care. Sex Res Soc Policy, 11:199-2010.

x. Bryman, A. (2012). Social research methods (4th ed.). Oxford, UK: Oxford University Press

xi. Carolyn, MF, Bayer, MB, Robert, G, Dami, O, Acosta, C, Cabrera, L, Vidal C. & Evans, CA. (2010). Factors associated with delayed Tuberculosis test seeking behavior in Peruvian Amazon. The American Journal of tropical medicine and hygiene, 81, (6), 1097-1102.

xii. Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Los Angeles, CA: Sage

xiii. Donnenfeld, Z., Welborn, L and Bello-Schunemann, J (2019). Drug Demand and Use in Africa. Modelling Trends To 2050

xiv. Dumbili, E. W. (2015). Media, alcohol consumption and young people in an eastern Nigerian university: A qualitative study. Doctoral Thesis submitted to the Brunel University London, United Kingdom.

xv. GBD 2016 Alcohol and Drug Use Collaborators (2018). The global burden of disease attributable to alcohol and drug use in 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet Psychiatry, 1-11 (published online, doi: 10.1016/S2215-0366(18)30337-7)

xvi. GBD 2016 Alcohol Collaborators (2018). Alcohol use and burden for 195 countries and territories, 1990-2016: a systematic analysis for the Global Burden of Diseases Study 2016. The Lancet, 392 (10152), 1015-1035.

xvii. Global illicit Drug Trends (1999). ODCCP studies on Drugs and Crime: United Nations Publication
xviii. Greenfield, S. F., Brooks, A. J., Gordon, S. M., Green, C. A., Kropp, F., McHugh, R. K., Lincoln, M., Hien, D., and Miele, G. M. (2007) Substance abuse treatment entry, retention, and outcome in women: a review of the literature. Drug Alcohol Depend. 86:1–21.

xix. Harris, B., Goudge, J., Ataguba, J. E., McIntyre, D., Nxumalo, N., Jikwana, S., & Chersich, M. (2011). Inequities in access to health care in South Africa. *Journal of public health policy, 32*(1), 102-123.

xx. Kariuki, D.G (1989). The Levels, Trends, and Patterns of Drug Abuse among Students in Selected Secondary Schools in Nairobi. In Kariuki, D.G., Okacha, F.M. Omari, 1M., and Kariuki, P.W. (eds). Teaching Psychological Research Nairobi: IORC.

xxi. Kazimoto, J. (2014). The Role of Multidimensional Approaches on Reducing Drug Abuse, A case Study of Kinondoni Municipality, Dissertation Submitted as a Partial Fulfillment of the Requirements for Master of Social Work Degree of The Hubert Kairuki Memorial University

xxii. Krejcie, R.V. and Morgan, D.W. (1970). Determining Sample Size forResearch Activities, Educational and Psychological Measurement.

xxiii. Mabuto, T., Latka, M. H., Kuwane, B., Churchyard, G. J., Charalambous, S., & Hoffmann, C. J. (2014). Four models of HIV counselling and testing: Utilization and test results in South Africa. *PloS ONE, 9*(7), 1-7.

xxiv. Martinez, AN, Lorvick J, Kral AH. (2014) Activity spaces among injection drug users in San Francisco. *Int J Drug Policy, 25*:516–24

xxv. Masibo, R. M., Mndeme, E., & Nsimba, S. E. D. (2013). An assessment of knowledge, attitudes and practices of psychoactive substance use among secondary school students in Dodoma Municipality, Tanzania. *American Journal of Research Communication, 1*(4), 200–240. Retrieved from www.usa-journals.com

xxvi. Mayosi, B. M., & Benatar, S. R. (2014). Health and health care in South Africa – 20 years after Mandela. *The New England Journal of Medicine, 371*(14), 1344-1353.

xxvii. Mbafo, E. H., Mwanisuya, T., Kiwanuka, A., Rweshothonza, H. (2017). Awareness and Decision Making on Health Seeking and Utilization Behaviors Among Substance Abuse Youths. *American Journal of Psychology and Behavioral Sciences, 4*(1), 1-6 1, No. 2, 2014, pp. 14-20.

xxviii. McCurdy SA, Ross MW, Williams ML, Kilonzo GP, & Leshabari MT (2010). Flashblood: blood sharing among female injecting drug users in Tanzania Addiction, 105, 1062-1070.

xxix. Ministry of Health Community Development Gender Elderly and Children MHCDGEC (2014) Report on the state of substance abuse in Tanzania

xxx. Monazza, A. & Greeta, K. (2010). Parental education and child health understanding the pathways of impact in Pakistan. *Research consortium on educational outcomes and poverty, 10*,146-158.

xxxi. Namagembe I, Jackson LW, Zullo MD, Frank SH, Byamugisha JK, et al. (2010) Consumption of alcoholic beverages among pregnant urban Ugandan women. *Maternal & Child Health Journal 14*:492-500

xxxi. Nchimbu, J.V. (2005). The Evaluation Of The Magnitude Of Drug Abuse, Trafficking And Related Issues In Selected Primary Schools In Kinondoni Municipality, Dar Es Salaam Region. The Open University of Tanzania & Southern New Hampshire University

xxxiii. Ndayongeje, J., Msami, A, Laurent, YJ, Mwankemwa, S, Makumbuli, M, Alois M. Ngonyani, A.M, Jenny Tiberio, J, Welty, S, Said, Morris, C.D, and McFarland, W (2018): illicit drug users in the Tanzanian hinterland: population size estimation through key informant-driven hot spot mapping : AIDS Behav. 2018 July ; 22(Suppl 1): 4–9. doi:10.1007/s10461-018-2057-x.

xxxi. Njuki, R., Kimani, J., Obare, F., & Warren, C. (2014). Using verbal and social autopsies to explore health-seeking behaviour among HIV-positive women in Kenya: a retrospective study. *BMJ women's health, 14*(1), 1-11.

xxxi. Oluwatuyi, O. (2010). Health seeking behaviour among the rural dwellers in Ekiti State, Nigeria. *African Research Review, 4*(2), 125-138

xxxi. Perkins, J. M., Lee, H. Y., James, K. S., Oh, J, Krishna, A., Heo, J, & Subramanian, S. V. (2016). Marital status, widowhood duration, gender and health outcomes: A cross-sectional study among older adults in India. *BMC public health, 16*(1), 1-8.

xxxi. Possi, M.K (1996). Effects of Drug Abuse on Cognitive and Social Behaviours: A potential problem among Youth in Tanzania:UTAFITI (News Series) Vol.3.No:1:111-128

xxxi. Rani, M., & Bonu, S. (2003). Rural Indian women's care seeking behavior and choices of provider for gynecological symptoms. *Stud Fam Plannin,* Vol.3.No:1:111-128

xxxi. Snyder L, Fleming-Milici F: Disentangling the Influence of Peer and Parental Norms, Attitudes, and Outcome Expectancies on Youth Drinking Behavior: A National Longitudinal Study. In Annual meeting of the International Communication Association. New York City, NY: Sheraton New York; 2009.

xl. Substance Abuse and Mental Health Services Administration. (2018). *Key Substance Use and Mental Health Indicators in the United States: Results from the 2017 National Survey on Drug Use and Health*

xli. Timpson S, McCurdy SA, Leshabari MT, Kilonzo GP, Atkinson J, Msami A, and Williams ML (2006) Substance Abuse, HIV Risk and HIV/AIDS in Tanzania. African Journal of Drug & Alcohol Studies, 5(2) 158-169

xlii. U.S. Department of Health and Human Services: To Live To See the Great Day That Dawns: Preventing Suicide by American Indians and Alaska Native Youth and Young Adults: Center for Mental Health Services, Substance Abuse and Mental Health Services Administration; 2010;
Uchudi, J. M. (2001). Covariates of child mortality in Mail: Does the health seeking behavior of the mother matter? *J Biosoc Sci;* 33: 33–54.

Volkow ND, Li TK. Drugs and alcohol: treating and preventing abuse, addiction and their medical consequences. Pharmacol Ther. 2005;108:3–17

Wechsberg WM, Luseno W, Riehman K, Karg R, Browne F, Parry C. (2008) Substance use and sexual risks within the context of gender inequality in South Africa. Substance Use and Misuse;43(8-9):1186-1201

World drug report 2017; Retrieved 5th September 2018 from; https://www.unodc.org/wdr2017/field/Booklet_1_EXSUM.pdf

Yusuph, K. & Negret, I. (2016). Adolescents and Drug Abuse in Tanzania: History and Evolution *Advances in Research.* 7(2):1-10. https://doi.org/10.9734/AIR/2016/24897 Retrieved on 31st August 2018 from

Zyaambo, C., Siziya, S., & Fylkesnes, K. (2012). Health status and socio-economic factors associated with health facility utilization in rural and urban areas of Zambia. *BMC health services research,* 12(1), 1-8.