

FEATURES AND CHALLENGES OF ALCOHOL ABUSE TREATMENT IN UGANDA

David Kalema^{1,2} & Wouter Vanderplasschen¹

¹Department of Special Education, Ghent University, Belgium

²Makerere University, Kampala, Uganda

ABSTRACT

Although alcoholic beverages have existed for long in traditional societies in Africa, across the continent, recent studies that categorize the majority of drinkers to be among those with risky drinking patterns depict rampant alcohol abuse. This paper reviews various reports on alcohol misuse in the sub-Saharan Africa (SSA) in general and highlights negative alcohol related consequences in Uganda. The article further describes approach, components and setting of alcohol abuse treatment. The authors highlight the role of AA in shaping treatment and notes dominance of the Minnesota model which combines the 12 steps program with pharmacological and psychosocial approaches. The Hazelden based strategy emphasises abstinence from all mood altering drugs in the residential setting and professional set up although the mainstream health facilities do not provide more than detoxification. Nevertheless, the implementation of treatment in Uganda appears to be a 'cut and paste' of the American model without prior research which challenges application in the local context. Challenges of the Minnesota model notwithstanding treatment providers are faced with inadequate skills and facilities rendering them unable to meet the ever increasing demand. Research into culturally adopted treatment intervention strategies is necessary to enhance the effectiveness and treatment of alcohol abuse in Uganda.

Key words: Alcohol abuse, addiction treatment, Uganda, alcohol dependence, sub-Saharan Africa

INTRODUCTION

Although alcohol consumption has existed for long across the African continent (Pan, 1975), the World Health

Organization (WHO, 2004; 2011; 2014) has shown alarming consumption trends in the Sub-Saharan region. Uganda is listed as one of the countries with the largest proportion of hazardous drinkers

due to the high prevalence of risky alcohol consumption patterns such as drinking to intoxication, binge drinking and underage alcohol abuse (Swahn; 2014; WHO, 2004; 2011; 2014). The last three decades have been marked with high consumption rates to the extent that in 2004, the country's per capita consumption of pure alcohol (19.8 liters) was declared the highest globally (World Health Organization (WHO, 2004). However, findings on the latest levels of alcohol consumption per capita are contradictory. Whereas in 2014, the WHO report indicated a reduced rate of 9.8 liters, small scale surveys reveal an alcohol consumption level of 23.7 liters and list Uganda as the number one in Africa and the 8th globally (WHO, 2014; Neild, 2013; Hahn, 2014). The alcohol consumption level in Uganda is alarming and significantly higher than the average consumption levels in Africa (WHO, 2014).

For a long time, alcohol had a distinguished place in the religious and symbolic sphere as well as the social, economic and interpersonal domains (Pietilä, 2002; Kalema, Vindevogel, Baguma, Derluyn & Vanderplasschen, 2015). The drinking culture in Sub-Saharan Africa (SSA) changed significantly in the 19th century with the colonization and following commercialization of alcohol, which was accompanied by a deterioration of alcohol-related problems (Adelekan, 2008; Pan, 1975). Alcohol-related problems further increased in the post-colonial era (from the 1950s onwards), as the newly appointed governments expanded the industrial alcohol production and sale instead of controlling it (Adelekan, 2008; Dumbili, 2014). Several researchers have associated increased problem drinking and drunkenness with inadequate legislation, massive production and indis-

criminate marketing of alcohol targeted at, for example, young people of 13 - 15 years (Jernigan & Obot, 2006; Swahn, 2013). Also, eroding socio-cultural norms contributed to the alcohol epidemic, as African traditions restricted drinking depending on the circumstances and socio-economic status of persons, while typical values such as communal living and sharing responsibility prevented alcohol misuse (Adelekan, 2008; Carlson, 1992).

Numerous studies have shown a correlation between alcohol abuse and adverse societal effects (Jernigan, 2014). Alcohol is ranked third among the leading global risks for burden of disease as measured in disability-adjusted life years (DALYs), after underweight and unsafe sex (WHO, 2009). In Uganda, however, the burden of disease is greater since alcohol is the second (after tobacco) risk factor for poor health and premature death (WHO, 2014) and a catalyst of other social problems such as interpersonal violence, HIV/AIDS, traffic accidents, and self-harm (Abushedde, 2013; Graham, Bernards, Knibbe, Kairouz, Kuntsche, Wilsnack, et al.2011). The challenges posed by alcohol abuse in Uganda create dire need of policy regulations and adequate interventions. This paper builds on a recently published article on the alcohol abuse and policy and treatment responses in SSA. (Kalema, Vindevogel, Baguma, Derluyn & Vanderplasschen, 2015) to describe the features of alcohol treatment in Uganda. The paper further focuses on the challenges the sector is facing and concludes by highlighting research into culturally adapted treatment programs as one of the recommendations to deal with the glaring treatment needs in Uganda and other SSA countries. In this paper, we use the term 'alcohol abuse' to refer to chronic or periodic drinking characterized

by impaired control over drinking, frequent episodes of intoxication, preoccupation with alcohol and the use of alcohol despite adverse consequences (American Psychiatric Association, 2000).

Features of alcohol abuse treatment in Uganda

Alcohol treatment centers are defined as specialized centers, supporting persons with alcohol abuse problems towards recovery and can be based within units that are medical or non-medical, governmental or non-governmental and public or private (Vanderplasschen, 2004). Understanding specialized substance abuse treatment systems is a challenging task, as there is no univocal definition of treatment nor a standard terminology that describes different elements of treatment (Sullivan & Fleming, 1997). The situation becomes even more complex in contemporary settings where treatment protocols change regularly as service providers start to implement tailor-made programs to meet the dynamic individual needs of patients. To explore typical features of alcohol treatment in Uganda, this paper examines three closely interrelated dimensions of treatment, namely the approach, setting and components (Landry, 1996; WHO, 2010). Under treatment approach, we elaborate the underlying philosophical principles that guide the type of support that is offered and that influence admission and discharge policies as well as expected treatment outcomes, attitudes toward patient behaviour, and staff composition. Regarding the treatment setting and components, we scan the environment in which treatment is delivered and the specific clinical interventions and services that are offered to meet individuals' needs respectively.

Treatment approach

Specialized residential treatment initiatives in Uganda evolved out of the Alcoholic Anonymous (AA) work that was started in the 1980s by American missionaries (Gelinas, 1990). Owing to the training that pioneer professionals received from South Bend in the United States, the Minnesota model of chemical dependency treatment became the predominant treatment approach in residential treatment settings Uganda. It consists of public as well as private treatment facilities, mostly modelled after the fixed-length inpatient rehabilitation programs with its roots in the Hazelden Foundation and Johnson Institute (Sullivan & Fleming, 1997). Its philosophy goes back to the the 19th century, when the medical profession described alcoholism as a disease, characterized by altered brain structure and functions due to genetic and physiological causes (McDougall, 1989; McKim & Hancock, 1997; Sadock & Sadock, 2002). This notion emphasised that alcohol abusers were not in control of their behaviour, that they primarily needed treatment and hence was the start of the medical management of alcoholism (Sullivan & Fleming, 1997). In the 1930s, this approach was widely promoted (especially in the US) by the AA groups led by Wilson and Bill, who were themselves physicians and had overcome protracted struggles with alcohol (Alcoholics Anonymous, 2001). Treatment facilities hence subscribe the 12 steps AA orientation as a major tool for recovery and relapse prevention with varying intensities of aftercare support. Pharmacological interventions are used, particularly for detoxification and the treatment of co-occurring disorders (most treatment centres also have detoxification units and admit

patients who do not want to go through the hospital system). Although the Minnesota Model initially required 28 to 30 days of inpatient treatment followed by extensive community-based aftercare services (Sullivan & Fleming, 1997), residential treatment programs in Uganda usually last for 90 days due to difficulties in providing aftercare follow-up sessions after the residential phase. Clients who are - for various reasons - unable to afford residential treatment or those participating in aftercare services are offered non-residential or outpatient program. The Out patients system requires reporting to treatment centres on weekly basis for a period of 4 months but the frequency diminishes with time if the client progresses well.

Due to the hybrid nature of the Minnesota model, a combination of professionals mainly psychologists and psychiatrists (WHO, 2010) is supplemented by general practitioners, social workers and spiritual animators to meet clients' needs. The medical staff is responsible for the assessment and diagnosis and pharmacological therapy of alcohol and any co-occurring disorders such as delirium tremens, schizophrenia, and mood and anxiety disorders. The psychotherapy staff consists of counsellors and social workers, some of them who benefited themselves from a recovery program (e.g. AA members), use behavioural approaches as a major tool to help clients to understand and deal with the nature of their problems. Unlike in hospitals, service users are referred to as clients and are expected to take an active role during the psychosocial activities during their treatment. While each individual will have specific long- and short-term goals, abstinence is always emphasized given its strong association with positive

long-term outcomes (Sullivan & Fleming, 1997; McKay & Hiller-Sturmhöfel, 2011). Lapses or slips (occasional and usually temporal alcohol drinking episodes) are recognised as part of the recovery process and used to draw lessons to prevent future relapse. No differentiation is made regarding the treatment of clients with various backgrounds (e.g. age, gender, ...) and types of addictions are treated in the same facilities (Amanya, 2011; Kalema, 2008). Individuals are usually referred to treatment by mainstream health care facilities which are usually the first and most frequently contacted places by persons with alcohol-related health complications. Although some law enforcing institutions like the police refer people for rehabilitation, there is no diversion of offenders from the criminal justice to treatment system, e.g. for driving under the influence of alcohol.

Treatment setting

Basically, two treatment systems coexist (traditional health care services and treatment/rehabilitation centers), with a varying prevalence throughout the country. Also, traditional healers commonly claim to treat alcoholism (Kalema, Vindvogel, Baguma, Derluyn & Vanderplasschen, 2015). Approximately 60% of the population seek care from them (Ministry of Health, 2010a). They are known to offer brief counselling to clients and support them with herbs of which some work as anti-abuse medication. However, traditional healers' operations and practices are hardly documented and therefore, this aspect is not dealt with in this paper. On the side of mainstream health care, Uganda counts 2,855 health care units, including 105 hospitals for a total population of 35.6 million inhabitants. Hospitals

are staffed by the public and private sector. Although some government hospitals and NGOs offer outpatient treatment in mental health care centres (WHO, 2010), the majority of persons who undergo detoxification are referred to residential centers (Ministry of Health, 2010b). Primary health care units (PHC) essentially provide inpatient hospitalization to persons with alcohol use disorders during the acute intoxication phase; they manage detoxification and other medical needs of patients, usually for a short period of time (Hammerstedt, Chamberlain, Nelson, & Bisanzo, 2011; Ministry of Health, 2010b; WHO, 2010), and refer psychiatric crises to regional referral hospitals (n=11). These psychiatric units are supposed to treat severe alcoholism, and psychiatric co-morbidity (Ministry of Health, 2010b).

Uganda has only one public alcohol and drug unit found in the Butabika national psychiatric referral hospital. Other specialised rehabilitation services are provided by 7 centres (for example Hope and Beyond), mainly concentrated in the capital city of Kampala. In residential treatment centres, clients are offered various psychosocial activities and are kept in settings that limit their contacts with the external environment to restrict access to alcohol. Since alcohol addiction is regarded an immediate consequence of the availability of alcohol and the related conditioning process (pharmacological model), alcohol is banned in places of rehabilitation. Self-help groups like AA for clients and Al Anon for their relatives are invited to provide mutual support and encourage abstinence during and after formal treatment.

Treatment components

Specialized treatment programs integrate biological, psychological, social, and

spiritual elements (a bio-psychosocial spiritual model). Psychological, psychiatric and medical assessments are performed at the beginning of and during treatment to determine clients' treatment needs and health risks. The main alcohol abuse screening tool is the "AA-12 Questions index for alcohol dependency" which indicates alcohol abuse in case of a score equal to or above 4 (AA World Services, 1973). The other common assessment tool is the CAGE questionnaire (Ewing, 1984) which puts 80% chances of alcoholism on a respondent with one score. Pharmacological interventions are used, particularly for supporting detoxification and treatment of co-occurring disorders. The government has set guidelines for the screening and management of acute and chronic alcohol poisoning in health centres (Ministry of Health, 2010b; WHO, 2010). These guidelines included the application of four classes of drugs: anti-craving, antipsychotics, antidipsotropics and others for the common illnesses. Anti-craving medication is commonly used such as benzodiazepines (diazepam, clonazepam) and Chlorpromazine to suppress withdrawal symptoms and block or reduce euphoric feelings. While antipsychotics such as Olanzapine and Risperidone are prescribed to improve clients' psychological state and to treat those presenting with comorbid psychiatric disorders, antidipsotropic drugs like Disulfiram (Antabuse) are prescribed to a limited extent for relapse prevention (Gary, Osborne, Leigh, & Adam, 1999; Ministry of Health, 2010b; WHO, 2010). Alcohol treatment centres are also stocked with other drugs to manage general health concerns of clients during treatment.

Psychosocial activities constitute the bulk of treatment interventions in the

rehabilitation centres. Clients who have stabilised after detoxification are exposed to a variety of cognitive behavioural therapies (CBT) with the purpose of changing their lifestyle (values, attitudes and behaviours) to support non-drinking habits. The overall goal of the activities is to teach new behaviours and cognitions that allow old habits to be controlled by new learning. These CBT activities are based on the AA-12 steps recovery program which are intended to change clients' lifestyle through self-monitoring and peer support (building new relationships with alcohol-free friends), substitute alcohol with new recreational activities and reward abstinence (Amanya, 2011; Kalema, 2008; Sullivan & Fleming, 1997). The AA 12-step orientation is hence used as a major tool for recovery and relapse prevention. Each client gets a buddy (sponsor), usually an experienced AA member with whom to work through the 12 steps recovery program. Participation in daily in-house and weekly general AA meetings is encouraged for residents and discharged clients, as the backbone of treatment and major form of continuing care respectively.

One of the major strategies for change is education about chemical dependency provided through lectures, readings, and publications to help clients and designated others understand the diagnosis and effects of alcohol. Education emphasizes the benefits of treatment and touches upon numerous other substance abuse related topics, which also includes the teaching of new coping skills and cognitive restructuring (Kirk et al., 1989) all directed at enforcing self-control. Through educational sessions, clients are taught to recognize high-risk situations or emotional "triggers" that induce alcohol (ab) use and how to cope with craving and

informed on developing contingency plans for handling stressful situations (Amanya, 2011; Kalema, 2008; Sullivan & Fleming, 1997). Individual and group therapy are important components, as well as the involvement of the family in treatment planning and aftercare. As part of individual counselling, a therapist is assigned to each individual client to give them and their social network confidence and trust in recovery. This is particularly important in the early stages of treatment to prevent dropout and encourage participation. As treatment progresses, clients are introduced to group therapy to experience closeness, share experiences, communicate feelings and build mutual support. The discussions often extend beyond alcohol-related topics to include other issues affecting clients as they emerge (Sullivan & Fleming, 1997). Through individual, group and family sessions, therapists revisit cognitive processes that lead to maladaptive behaviour, intervene in the chain of events that lead to alcohol abuse and promote and reinforce necessary skills and behaviours for achieving and maintaining abstinence. Family therapy focuses on alcohol use behaviour of clients in relation to the maladaptive patterns of family interaction and communication. Family members are stimulated to help ensure compliance to the treatment plan and monitor abstinence.

Finally, life skills, livelihood skills and spiritual programs are offered to supplement the above-mentioned therapies. Under life skills programs, clients are supported through self-awareness/help skills like stress management/relaxation techniques and interpersonal and decision making sessions to empower them with skills to sustain a sober life. Purposeful recreational activities in the form of

games, sports and peer entertainment through creative art and occasional picnics are as well designed to give a therapeutic and relaxation effect to the clients. Livelihood skills, also known as occupational therapy, provide clients with hands on/entrepreneurial skills such as craft making, gardening and animal husbandry. Spiritual care services which include daily devotions, meditation and prayers and routine retreats are intended to deepen clients' faith values and help them to overcome their deficits. Proponents of the moral model of addiction allege that in order to sustain their addiction, alcohol abusers adopt a dysfunctional lifestyle characterized by dishonesty, selfishness, isolation and blame which eventually leads to feelings of loss, despair and suicide that can only be relieved by the re-establishment of a deep-seated sense of belonging, meaning and purpose in life (Alcoholics Anonymous, 2001; Sullivan & Fleming, 1997). Like the rest of the activities, the most commonly practiced type of spirituality is that of the 12 steps, which emphasizes the 'Higher Power' concept of God-the way he is understood by the client. Depending on the orientation of the treatment centres, some clients are helped to perform preferred religious practices to strengthen their conviction.

Treatment challenges

The challenges for alcohol abuse treatment services in Uganda are enormous, ranging from human resource capital over infrastructural and logistic limitations to treatment and quality of care-related issues (Kalema, Vindevogel, Baguma, Derluyn & Vanderplasschen, 2015). First and foremost, the Minnesota model that is being used has been invariably criticised for focusing on addiction as an incurable

disease and regarding addicts as people with pathological personalities, hence restricting treatment to a particular aspect rather than addressing clients as a holistic and complex individual. In the model, therapists control and confront clients whose disloyalty to the program is regarded as 'denial' (Thompson, 2007). Furthermore, the model is said to ignore other significant elements of recovery, such as clients wellbeing by measuring success solely based on abstinence from all mood-altering substances. Even the use of prescribed mood-altering drugs is regarded as relapse. Also, high rates of treatment drop-out are reported due to this stringent approach and long duration of the program (Huebner & Kantor, 2011).

The shortcomings of the Minnesota model notwithstanding, many health professionals lack the skills to effectively assess and treat patients with alcohol use disorders (Kalema, Vindevogel, Baguma, Derluyn & Vanderplasschen, 2015). A study in PHC settings in Kampala showed that only 7% of all admitted patients were asked about their alcohol use by health care professionals (Kullgren et al., 2009). Yet, **specialized** treatment is only publicly available at the National psychiatric Referral (Butabika) hospital, which has a bed capacity of 30 patients (Kigozi, 2005). Moreover, planning public alcohol treatment in mental health care institutions discourages many alcoholics from seeking treatment due to the stigma associated with mental disorders (Sullivan & Fleming, 1997). The alternative private treatment initiatives, are mainly concentrated in central Uganda and hardly accessible and affordable for the majority of Ugandans due to the relatively high costs (around 15 EUR per day) (Kigozi, 2005). Another inadequacy stems from

the limited variation in intervention techniques, which are mainly based on hospitalization and general residential rehabilitation. Also, no specific interventions are available for special needs groups such as prisoners, adolescents, and women. The combination of the above-mentioned factors, hinder alcohol treatment in Uganda and lead to the eventual neglect of the needs of the vast majority of excessive drinkers, since less than 20% of the deserving population receives treatment at some point (WHO, 2010).

Towards culturally adapted treatment programs for alcohol misusers in Uganda

Although the prevalence of alcohol problems is high, available treatment initiatives are not properly constituted or guided, resulting in low detection and treatment participation rates. Alcohol misuse and its treatment are relatively new concepts in Uganda, only dating 10 to 20 years back. Based on the history of alcohol treatment, it appears that no prior preparations and baseline information was collected to plan and address the needs of potential service users in alcohol abuse rehabilitation centres.

The currently adopted Minnesota model has documented limitations and is compounded by other structural problems (see above). It is against this background that a research project has been initiated by the universities of Ghent (Belgium) and Makerere (Kampala, Uganda) to evaluate the existing treatment programs for alcohol abusers and to develop appropriate, culturally sensitive interventions for this population. Besides a review of the available literature on alcohol abuse and treatment interventions in SSA, the study compares service users' and treatment providers' perspectives

on alcohol problems, its treatment and recovery. This comparison is based on qualitative interviews in Uganda and a country with a much longer tradition of treating alcohol problems (Belgium). The study further examines the characteristics of alcohol abusers entering treatment in Uganda and monitors their evolution over a 12-month period. In particular, personal and social aspects contributing to recovery and improved quality of life are assessed. Successful cases will be profiled to document key factors supporting successful recovery from alcohol abuse. Empirical evidence resulting from this study will allow to inform policy-makers on good practices for the treatment of emerging alcohol problems in Uganda and neighbouring countries. The characteristics and needs of alcohol abusers entering specialized treatment will further help to develop interventions that are better targeted to service users' needs. Also, the expected outcomes of such interventions will be documented as well as pathways to recovery and the reintegration of former alcohol abusers. The study may further provide a justification for the resources allocated to alcohol treatment and bring about insights for the development of a comprehensive alcohol treatment policy in Uganda. In addition, the description of specific recommendations, program components and concrete tools for practitioners will enhance the development of good practices and capacitate professionals to deal with this major public health problem in an appropriate way.

CONCLUSION

Although the majority of people who meet the criteria for alcohol abuse do

not seek formal treatment (Colpaert, De Maeyer, Broekaert, & Vanderplasschen, 2013), research has demonstrated that alcohol treatment plays a significant role in reduced alcohol-related problems (Welch, Rettammel, & Moberg, 2002). Despite the severe negative consequences of excessive drinking, individuals with alcohol abuse problems face the challenge of limited access to treatment resources. Given the substantial alcohol abuse problems and the global lack of information on alcohol treatment (WHO, 2007), it is important to document the various ways treatment is practiced in Uganda. Since treatment of alcoholism is among the global strategies to prevent harmful use of alcohol (WHO, 2008), evidence-based approaches form an important foundation for organising alcohol treatment programs not only in Uganda, but in the whole Sub-Saharan region. Scientific research is well needed to assess the cultural appropriateness of available practices and interventions and to support the implementation of culturally sensitive interventions and policies.

REFERENCES

- A.A. World Services, I. (1973). Is A.A. For You? Twelve questions only you can answer. *Alcoholics Anonymous*. Retrieved 31st December 2013, 2013, from <http://www.aa.org/lang/en/subpage.cfm?page=71>
- Abushedde. A.(2013). Uganda's drink of death. *The independent*. September 20th, 2013. Retrieved from: <http://www.independent.co.ug/features/features/8243-ugandas-drink-of-death#sthash.lpNr5wov.dpuf>,
- Adelekan, M. (2008). Noncommercial alcohol in sub-Saharan Africa. In Adelekan, M., Razvodovsky, Y.U., Liyanage, U., & Ndetei D. (Eds.), *Non-commercial alcohol in three regions* (pp. 3–16). Washington, DC: International Centre for Alcohol Policies.
- Alcoholics Anonymous. (2001). *Alcoholics Anonymous: The Story of How Many Thousands of Men and Women Have Recovered from Alcoholism* (Vol. 4). New York: Alcoholics Anonymous World Services, Inc. .
- Amanya, J. (2011). *National Care Centre activity report 2009–2010*. Kampala: National Care Centre.
- American Psychiatric Association. (2000). *Diagnostic and Statistical Manual for Mental Disorders* (Vol. Fourth Edition Text Revision.). Washington.
- Colpaert, K., De Maeyer, J., Broekaert, E., & Vanderplasschen, W. (2013). Impact of addiction severity and psychiatric comorbidity on the quality of life of alcohol-, drug- and dual-dependent persons in residential treatment. *Eur Addict Res*, 19(4), 173-183. doi: 10.1159/000343098
- Ewing, J.A. (1984). Detecting alcoholism: The CAGE questionnaire. *JAMA: Journal of the American Medical Association*; 252:1905-1907.
- Gary, R., Ogborne, A., Leigh, G., & Adam, L. (1999). *Substance Abuse Treatment and Rehabilitation*. Ontario: Office of Alcohol, Drugs and Dependency Issues Retrieved from <http://www.hc-sc.gc.ca/hppb/alcohol-otherdru>.
- Gelinas, M. (1990). *Alcoholism and you*. Nairobi: St.-Paul Publications- Africa.
- Graham, K., Bernards, S., Knibbe, R., Kairouz, S., Kuntsche, S., Wilsnack, S. C., . . . Gmel, G. (2011). Alcohol-related negative consequences among drinkers around the world. *Addiction*, 106, 1391–1405.

- Hammerstedt, H., Chamberlain, S. L., Nelson, S. W., & Bisanzo, M. C. (2011). Alcohol-related hypoglycemia in rural Uganda: socioeconomic and physiologic contrasts. *Int J Emerg Med*, 4, 5. doi: 10.1186/1865-1380-4-5
- Hahn, J., (2014). Comparing trends in unhealthy alcohol use measured by a phosphatidylethanol and self report in persons with HIV in rural Uganda. Inebria, Warsaw
- Heap, S. (2005). A Bottle of gin is dangled before the nose of the natives: The economic uses of imported liquor in Southern Nigeria, 1860–1920. *African Economic History*, 30, 69–85.
- Institute of Alcohol Studies Alliance (2013). *Economic impacts Economic impacts of alcohol Fact sheet*. London SW1H. Retrieved from: <http://www.ias.org.uk/uploads/pdf/Factsheets/Economic%20impacts%20of%20alcohol%20factsheet%20August%202013.pdf>
- Jernigan, D.H. (2014). *Alcohol marketing*. Paper presentation at the 68th IOGT World Congress, Cha Am, Thailand: IOGT International.
- Kalema, D. (2008). *Annual Report for 2007/2008*. Kampala: Serenity Centre.
- Kalema, D., Vindevogel S., Baguma P.K., Derluyn I., & Vanderplasschen, W. (2015). Alcohol misuse, policy and treatment in Sub-Saharan Africa: The case of Uganda. *Drugs Education, prevention and policy*, Early online: 1-7.
- Kigozi, F. (2005). *Building service delivery systems for substance abuse treatment*. Paper presentation at the UCLA Integrated Substance Abuse Program Conference, Istanbul, Turkey: UCLA Integrated Substance Abuse Programs.
- Kullgren, G., Alibusa, S., & Birabwa-Okecho, H. (2009). Problem drinking among patients attending primary healthcare units in Kampala, Uganda. *African Journal of Psychiatry*, 12, 52–58.
- Landry, M. J. (1996). Overview of addiction treatment effectiveness. Rockville. Vol. SMA 96-3081.
- McKay, J.R., & Hiller-Sturmhöfel, S., (2011) Treating alcoholism as a chronic disease: Approaches to long-term continuing care
- McDougall, J. (1989). *Theaters of the body: A psychoanalytical approach to psychosomatic illness* (Vol. 1). New York: W. W. Norton & Company.
- Ministry of Health. (2010a). *Health Sector Strategic Plan IIIIn2010/11-2014/15*. Kampala: Government of Uganda.
- Ministry of Health. (2010b). *Uganda clinical guidelines*. Kampala: Government of Uganda.
- Neild, B. (2013). World's 10 best-drinking nations. *Cable News Network (CNN)*. March 15th 2013. Retrieved from: <http://edition.cnn.com/2013/03/15/travel/best-drinking-nations/>
- Pietilä, T. (Ed.). (2002). *Drinking Mothers Feeding Children: Market Women and Gender Politics in Kilimanjaro, Tanzania*. USA: Heinemann.
- Pan, L. (1975). *Alcohol in the Colonial Africa*. Helsinki: Finish Foundation for Alcohol Studies and Scandinavian Institute of African Studies.
- Sadock, B. J., & Sadock, V. A. (2002). *Behavioral Science/Clinical Psychiatry*. North America: Lippincott Williams & Wilkins.
- Sullivan, E., & Fleming, M. (1997). A guide to substance abuse services for primary care clinicians. Rockville, MD: SAMHSA, Center for Substance Abuse Treatment.

- Swahn, M. H., Ali, B., Palmier, J. B., & Kasirye, R. (2013). Alcohol Exposures, Alcohol Marketing, and Their Associations with Problem Drinking and Drunkenness among Youth Living in the Slums of Kampala, Uganda. *ISRN Public Health*, 2013doi:10.1155/2013/948675.
- Thomas, F. B., John, C. H., John, B. S., & Maristela, G. M. (2001). *The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care*. Geneva 27, Switzerland: World Health Organization.
- Vanderplasschen, W. (2004). *Implementation and evaluation of case management for substance abusers with multiple and complex problems*. (Doctor of Pedagogical Sciences), Gent University, Academia Press.
- Welch, K., Rettammel, R., & Moberg, P. (2002). An Initial Look at the Effectiveness of Treatment for Alcohol and Drug Use Disorders. *Bureau of Substance Abuse Services*. Michael Quirke, MSW
- World Health Organization (WHO). (2004). *WHO global status report on alcohol 2004*. (Vol. 1). Geneva: World Health Organization,
- WHO. (2007). *Evidence-based strategies and interventions to reduce alcohol-related harm*. Paper presented at the WHO Sixtieth World Health Assembly.
- World Health Organization (WHO) (2008). *Strategies to Reduce the Harmful Use of Alcohol* (resolution WHA61.4). Geneva:
- World Health Organization. (WHO). (2009). *Global health risks. Mortality and burden of disease attributable to selected major risks*. Avenue. World Health Organization
- WHO. (2010). *Atlas on substance use: Resources for the prevention and treatment of substance use disorders*. Switzerland: World Health Organization.
- World Health Organization (WHO). (2014). *WHO global status report on alcohol 2004*. (Vol. 1). Geneva: World Health Organization,
- World Health Organization (WHO). (2014). *Noncommunicable Diseases (NCD) Country Profiles*. Retrieved from http://www.who.int/nmh/countries/uga_en.pdf?ua=1