

# Proximity and Density of Alcohol Outlets as a Risk Factor of Alcohol Abuse Amongst the Youth: A Case Study of a Border Town in Northern Region of Namibia

Miriam Winnie Hasheela<sup>1</sup>, Jabulani Calvin Makhubele<sup>2</sup>, Janetta Agnes Ananias<sup>1</sup>, Frans Koketso Matlakala<sup>2</sup>, Prudence Mafa<sup>2</sup>, Beatrice Namoonga Chiwal<sup>1</sup>, Selelo Frank Rapholo<sup>2</sup>, Rachel Johanna Freeman<sup>1</sup>, Anesu Svinurai<sup>2</sup> & Tiberia Ndanyakuwa Ilonga Hamuse<sup>1</sup>

<sup>1</sup> Department of Social Work, University of Namibia, Windhoek, Namibia

<sup>2</sup> Department of Social Work, University of Limpopo, Sovenga, South Africa

Correspondence: FK Matlakala, University of Limpopo, Private Bag X1106, Sovenga 0727, South Africa. E-mail: fransmatlakala@gmail.com

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## Abstract

The proximity and density of alcohol outlets are positively associated with drinking patterns and increase in alcohol consumption resulting in deviant behaviors such as excessive drinking, risky sexual behaviors, violent and crime in communities. This study was aimed at identifying and assessing the proximity, density of alcohol outlets as a risk factor to potential behavioral influence amongst the youth in a border town in the northern region of Namibia. The study was qualitative in nature and used ethnographic design in order to describe the proximity and density of alcohol outlets. Data was collected through unobtrusive observation method and analyzed by means of content analysis. The researchers used field notes to capture data observed. Eco-systems theory was used as a theoretical framework for this study. The study found out that there were quite a number of shebeens in close proximity of educational establishments, churches, public roads and residential areas which contribute to easy accessibility of alcohol by youth in and out of school. Various themes emerged from the study such as closeness of alcohol outlets to schools and churches and residential areas, mushrooming of shebeens, children and youth spending time at shebeens and Drunkenness. The study concluded that the closeness of alcohol establishments to residential areas, churches and schools influence drinking behaviors of people residing in these areas. Equally important, the more alcohol outlets in the environment, the higher the alcohol consumption which results in deviant behaviors and excessive drinking.

**Keywords:** proximity, density, alcohol abuse, alcohol outlets, shebeens, deviant behaviors

## 1. Introduction

The proximity and density of alcohol outlets are positively associated with drinking patterns and increase in alcohol consumption resulting in deviant behaviors such as excessive drinking, risky sexual behaviors, violence and crime in communities. Accordingly, Livingston (2012) discovered that the increase of alcohol establishments particularly shebeens, is a social and political pressing issue in most Southern African countries like South Africa and Namibia. Bowers Rendall-Mkosi, Davids, Nel, Jacobs and London (2014) define shebeens as informal alcohol outlets found in rural areas of Southern African countries. In Namibia, shebeens are referred to as premises exclusively or mainly used for the sale to and the consumption on the premises by, the public of light liquor and refreshments” (Government Republic of Namibia, 1998:10). The increase of these establishments has been an issue of argument and affirmed to contribute to more alcohol abuse among most African countries (Livingston, 2012; Phetlho-Thekisho, Ryke and Strydom, 2013). Moreover, Livingston (2012) argues that the mushrooming of shebeens in some African communities resulted in easy accessibility of alcohol by youth and underage children. In corroboration, Mubita (2013) also acknowledged that accessibility and availability of shebeen outlets is a risk factor to alcohol consumption among adolescents. In other words, the more the shebeens in the community, the more the young people get exposed to alcohol, to the point that they start consuming alcohol at a younger age. Based on this argument, it is clear that the increase of shebeens in communities has been overly highlighted as a contributing factor to most alcohol related problems.

## 1.1 Literature Review

### 1.1.1 Proximity of Alcohol Outlets to the Main Roads

Alcohol outlets that are located close to main roads pose as a risk factor to alcohol related road accidents. Similarly, Pereira et al. (2013) stated that there are various studies which indicated that there is a relationship between alcohol outlets and traffic – related consequences. In addition, Dultz and Frangos (2013) and Derry (2017) assert that alcohol is an imperative risk factor that is correlated to traffic crashes especially in developing countries as traffic regulations are not properly enforced. Lack of traffic regulations enforcement such ‘Do not drive under the influence of alcohol’ results in some drivers not obeying the law and thus weakens the judgement, motor and cognitive coordination of motorists, resulting in traffic crashes. In a developing country like Namibia, little research has been conducted on alcohol impairment and proximity of alcohol establishments as a risk factor to alcohol related road injuries. Evidently, Dutt (2017) states that the availability of liquor outlets along the segments of highways will not control fatalities that happened on highways, but it will instead increase the number of road accidents. In India, for example, in 2015 about 16928 road accidents and 6755 fatalities were reported as a result of people who were driving under the influence of alcohol (Dutt, 2017). On the same wavelength, Pereira, Wood, Foster, and Hagggar (2013) avow that alcohol outlets in close proximity of traffic roads contributes to drinking and driving, riding with drivers under the influence of alcohol, pedestrian collision related to alcohol and traffic accidents. When users are under the influence of alcohol, they increase the risk of them being bumped by vehicles on the road as they might be unable to control their behaviors cautiously.

LaScala, Johnson and Gruenewald (2001) hypothesized that most pedestrian injuries are mostly noticed in areas where there is high density of alcohol outlets, frequency of drinking patterns and alcohol availability. In support, Reboussin, Song and Wolfson (2011) found that driving after drinking and experiencing nonviolent alcohol-related consequences are associated with on and off premise alcohol outlet density. High number of pedestrian injuries are mostly associated with environments where there is a greater population, high unemployment rate, people with lesser income and mostly communities dominated by youth and older people. Furthermore, Sloan, Stout, Whetten-Goldstein, and Liang (2000:50) found that “availability of alcohol in a geographical area is associated with an increase of alcohol related crashes and that this association is robust to inclusion of other variables explaining variation in crash rates”. Again, WHO (2004) has reported that driving under the influence of alcohol is one of the well-documented risk factors for road traffic accident. This denotes that communities where alcohol outlets are in close proximity to roads contribute to an increase in pedestrian accidents and injuries.

There is little safety for people living in areas with high density of alcohol outlets and people who are intoxicated are a safety concern. Evidently, LaScala et al. (2001) reported that there were about one third of pedestrians from 16 years and older that were involved in traffic crashes associated with alcohol intoxication. This substantiate the findings of Mohamed, Batcha, Ahmad, Fahmi and Othman (2013) who aver that In South East Asia, about 50% of the region’s road traffic deaths are among vulnerable road users. Moreover, Sloan et al. (2000) have discovered that there is an association between alcohol related vehicle death, the price and availability of alcohol and drinking and driving. Again, Mohamed et al. (2013) indicated that pedestrians are vulnerable to be hit by motor vehicle and other countries such as Malaysia do not have data to reflect the real problem of alcohol use among fatal or seriously injured pedestrians. To some extent, research into alcohol-impaired driving, riding and walking has not been regarded as a road safety priority.

### 1.1.2 Proximity of Alcohol Outlets to Schools and Places of Worship

In a typical African community, one may find establishments such as churches, schools, houses, alcohol outlets and other public facilities along the same street. The closeness or distance of alcohol establishments to places of worship and schools depends on the liquor laws of each country or state. Some African countries like South Africa have a 500m radius limit of alcohol outlets to churches and schools. According to the regulations in the National Liquor policy in South Africa, no alcohol outlet should be operating within 500m radius to schools and churches and other public facilities (Liquor Act, 2009). This means that if an alcohol outlet is operating less than the 500m radius, the outlet should be closed down. The liquor licensing laws should consider spatial factors when determining the applicability of distance between alcohol outlets and schools and churches establishments in both the rural and urban areas as there is a distinction between these two areas (Liquor Act, 2009).

In a study conducted by Reboussin, Song, and Wolfson (2011) examining the co-occurrence of youth behaviors with alcohol outlet density within geographical areas indicates that alcohol is easily and readily available to youth. In this study, it was indicated that 62% of grade 8 learners, 81% of grade 10 learners and 92% of grade 12 learners reported that alcohol was easily accessible to them. Kaynak, Winters, Cacciola, Kirby, and Arria (2014) assert that obtaining alcohol from parents in addition to other sources was associated with the greatest odds for episodic

heavy drinking. This implies that they have access to alcohol whenever they want to, be in their home or in the street. In support, Mosher and Saetta (2008) stated that the only way to reduce excessive consumption of alcohol is to regulate the density of alcohol outlets and restricting the use and development of land.

### 1.1.3 Proximity to the Residential Areas

It is worth noting that, proximity and density of alcohol outlets does not only contribute to alcohol abuse, but it also plays a major role in contributing to the cycle of poverty (Bowers, 2014) and many other alcohol related problems. As noted by Phetlho-Thekisho et al. (2013), shebeens are mostly located within residential areas. These establishments contribute to a disorderly, overpopulated, unhygienic communities because of their density. Moreover, the more the shebeens are in a community, the more the community is polluted with noise (from the loud music) and alcohol users at different shebeens. It was observed that, the music from shebeens is played throughout the day and night, within the trading hours. Phetlho-Thekisho et al. (2013) found that the noise pollution agitates residents causing sleep disturbance, loss of concentration of school going children, disturbance in normal functioning and productivity for many. Moreover, World Health Organization (n.d) discovered that people living in communities whereby alcohol outlets are in close proximity of their homesteads find it difficult to avoid consuming alcohol. The exposure to alcohol outlets makes it difficult to resist drinking alcohol even for pregnant woman and under age children. Similarly, a study conducted by Seid et al. (2018) found that there is a closer link between close distance of alcohol outlets in places of residence and alcohol use by women. The use of alcohol by pregnant women increases the risk of fetal alcohol spectrum disorder (FASD) in unborn children which is commonly known as the worldwide leading cause of congenital disability (Seid et al, 2018). Other researchers, Schonlau et al., (2008), Connor, Kypri, Bell, and Cousins, (2011), Pereira, Wood, Foster, and Hagggar, (2013), Halonen et al. (2013), repeatedly showed that density of alcohol outlets close to residential areas is mainly associated with binge drinking and an increase in drinking patterns. In support, Halonen et al., (2013) found that, women who live on premises with alcohol outlets were found to be more likely to drink excessively than women who do not reside in close proximity to alcohol outlets. Binge drinking may cause injuries, assaults and self-inflicted harm and it may also increase the risk of chronic diseases such as cardiovascular diseases, pancreatic diseases and liver diseases (World Health Organization, 2007)

### 1.2 Theoretical Framework

In conducting this study, the ecological system theory was used to describe behaviors observed in order to develop theories and predict behaviors of people. The ecological system theory is more applicable and relevant to explore and describe how people interact with external environmental factors like shebeens or other alcohol outlets and how this interaction influences behaviors. The proximity and density of alcohol outlets within the close proximity of homesteads, schools, churches and traffic roads may be viewed as factors that may place people at risk of behavioral change. The theory can also explain how people living in this communities learn behaviors and grow through the interaction of one another and other systems surrounding them. The systems inevitably influence one another one way or the other in every aspect of life (Bronfenbrenner, 2014). In other words, the importance of the ecological system theory in this study is that it explains how individual behaviors are influenced by the characteristics of the external environment in which they live and interact one way or another. This implies that, individuals who are interact with alcohol outlets are at risk of consuming alcohol than individuals who are less exposed to alcohol outlets (Roundy, 2016). Ahmed, Amer and Killawi (2017) states that ecological theory provides in depth understanding of the person's experiences through their interactions in question. Thus, ecological system theory is vital to this study because it is easier to explain dysfunctional behaviors within the communities.

## 2. Methods

This study was based on qualitative study as a form of research design. Qualitative research aims to provide a detailed description of events on the phenomena during observations (Creswell, 2014). The research design was utilized to investigate, describe the research site and identify themes from what has been observed around alcohol outlets, specifically shebeens. This study was an ethnographic study. Observational data collection method was employed in an unobtrusive manner to gain insight of the proximity of shebeens or cuca shops to schools, churches, homesteads and density of this alcohol outlets within the research site. O'Brien (2011) asserts that unobtrusive methods provides an opportunity for a researcher to be distant from subjects under study and makes provision for subjectivity rather than objectivity. Therefore, this study opted for an unobtrusive observational method to explore and describe events of the study rather than engaging subject that will perhaps not be willing to express their behaviors in a sensitive nature. Unobtrusive observation provided researchers with a chance to clearly investigate the distance, density of alcohol outlets in the environment and also observe the behaviors, events in and around alcohol outlets that people may not be willing to disclose in interviews. The observation site was a rural area. The

venues observed were shebeens and bars. The observers mainly investigated the proximity, density, patterns of behaviors in order to make sense of the physical environment. Observation took place over a week for five days on the research site and data was captured by means of note taking on what was observed and what was happening in and around the alcohol outlets.

### *2.1 Data Analysis*

This study was based on content analysis. Content analysis was used to investigate and interpret patterns of behaviors and presence of alcohol outlets in the community. Bengtsson (2016) states that content analysis is used to organize and draw meaning of the data collected to make meaningful conclusions. Content analysis was used to categorize behavioral data and classified them into different themes to make meaning and interpret findings. The authors used field notes and analyzed the findings using the following 5 steps of content analysis adopted from (Erlingsson & Brysiewicz, 2017):

- 1) Read through the field notes and finding relevant information
- 2) Go through the notes made in the margins and list the different types of information found
- 3) Read through the list and categorize each item in a way that offers a description of what it is about
- 4) Identify whether or not the categories can be linked any way and list them as major categories (or themes) and / or minor categories (or themes)
- 5) Compare and contrast the various major and minor categories.

### *2.2 Ethical Considerations*

Prior to commencement of data collection, ethical clearance was obtained from the Ethical Clearance Committee at the University of Namibia (UNAM). Permission to conduct the study was granted by the Ministry of Education, Governor of Oshana Region and the councilor of Oshikango.

## **3. Findings**

The study identified three main themes namely: proximity of alcohol outlets to main roads, proximity of alcohol outlets to schools and places of worship, proximity of alcohol outlets to residential areas.

### *3.1 Proximity of Alcohol Outlets to the Main Road*

From the study it was discovered that some shebeens are located close to the main road and this may lead to high risk of road accidents for shebeen patrons under the influence of alcohol. Some of the patrons were seen with alcohol bottles outside the shebeens and drinking. Researchers observed an intoxicated man who was unable to walk by himself due to drunkenness. This raised a concern as to how he was to get home. Alcohol abuse is also associated with the risk of risky sexual behaviors. If the person is under the influence of alcohol, he or she might engage in unprotected sex unknowingly.

The researchers observed a high density of alcohol outlets close to the roads especially in Oshikango town which could be a risk factor to road accidents of patrons, pedestrians and motorists. These alcohol outlets are easily accessible to school children as they make use of the routes on which these outlets are situated. Children in school uniforms were observed walking by these alcohol outlets. School going children may be easily be distracted by the exposure of these outlets and as a result end up using alcohol to the point of abuse and eventually drop out of school.

### *3.2 Proximity to Schools and Places of Worship*

The study could not provide an exact number of shebeens or cuca shops operating in the town, however, it was clearly observed that there is a high prevalence of shebeens or cuca shops that were in close proximity to schools and churches within the area. The average radius of shebeens or cuca shops to the other is approximately 30 meters from each other and about 500 meters away from schools and churches. This result could inform the reader that alcohol outlets were easily accessible in the community which could be a risk factor to alcohol abuse amongst youth in Oshikango. In every shebeen and cuca shop it was observed that there were a number of patrons consuming alcohol and mostly are youth. The alcohol outlets close to schools were playing music that was too loud which could be disruptive to school activities.

### *3.3 Proximity to the Residential Areas*

There were various alcohol outlets particularly shebeens that were observed operating too close to each other with a minimal distance between them. This contributes to the mushrooming of alcohol outlets in one area and cause disorder in the environment. This was also noted by Phetlho-Thekisho et al., (2013) who state that five shebeens

were commonly located in one street. In Oshikango there is an area wherein every house produces homebrewed concoction (*tombo*). Homebrewed alcohol was constantly observed to be used as a drink consumed during romantic times and for relaxation purposes. During these site observations there was a couple that was observed consuming homebrewed alcohol and they looked like they were having their romantic time. Even pregnant women were observed to indulge alcohol as it is easily available. The researchers also observed young children hanging around these homes. One of the *tombo* consumers observed was a young man who was clearly intoxicated but still asking for more alcohol. There were various homesteads close to the shebeens.

#### 4. Discussion

The findings of the study confirmed that alcohol outlets situated close to main roads may contribute to alcohol related accidents on patrons, pedestrians as well as motorists. In the study conducted by Drivdal and Lawhon (2014) it is stated that shebeen patrons are faced with risks such as road accidents, unsafe sex which later results in HIV infection, petty theft, violence by users and verbal offences. Gruenewald and Johnson (2010) also agree that most pedestrian road injuries are detected in areas where there is high density of alcohol outlets. This happens because of the frequency of drinking patterns and alcohol availability. This denotes that communities with a high density of alcohol outlets contribute to pedestrian-crossing accidents.

Proximity and density of alcohol outlets are deemed as risk factors of high alcohol consumption in a community. The availability of alcohol and easy accessibility of alcohol puts children, youth and adults at risk of consuming alcohol even if they do not want to, influencing drinking patterns and eventually start abusing alcohol. Day et al. (2012) avow that alcohol outlets promote environments which foster social problems that impact alcohol related problems such as road accidents for both motorists and pedestrians. Therefore, there is a need to strengthen policies that are aimed at reducing availability of alcohol in communities' especially disadvantaged neighborhood. Such as restricting trading hours of alcohol outlets and restricting alcohol outlets to be operating very close to public roads. Shebeens in close proximity to schools, churches and homesteads can be viewed as being disruptive to activities taking place in those places as well as disturbing the peace. Children may find it difficult to concentrate during school lessons and be attracted by the music in these shebeens. The relationship was also confirmed by Ruggiero (2016) who asserts that noise in shebeens can be annoying to the people living in the vicinity, which affects one's concentration and psychological wellbeing. These shebeen annoyances often lead to people being frustrated, distressed, discomfited, eventually leading to poor quality of life. Communities in there is a high concentration of alcohol outlets may create an environment burdened by alcohol related problems. This is in view of (Morrison, 2015) who asserted that alcohol related problems are commonly observed in areas where there is a greater density of alcohol outlets.

The number of alcohol outlets plays a role in how people view the society in terms of the culture of alcohol drinking. As a result, young people who live in close proximity of alcohol outlets and where there is a high prevalence of shebeens might perceive consumption of alcohol normal and part of their society's culture (Dibe, 2016). Evidently, in Oshikango, some children were seen around alcohol outlets whereas there were older people drinking alcohol. This behavior can be learned by these children hence exposing children to early age drinking. These findings upheld the views of Natvig et al. (2014) who aver that alcohol behaviors are learned through observations and imitating others significant behaviors. Similarly, (Amiegheme, 2013) states that parental drinking patterns have an effect on children over their life course. Parents serve as role models to their children, and if parents are constantly visiting drinking places and consuming alcohol, children are likely to shadow those behaviors. A study by (Amiegheme, 2013) revealed that adolescents who had parents who abused alcohol were prone to adolescent alcohol abuse like their parents than those whose parents did not abuse alcohol. The study also found that patterns of alcohol consumptions in adolescents were also associated with easy accessibility and availability of alcohol. Alcohol outlets in close proximity of residential areas promotes alcohol abuse as well as expose young children to start drinking at an early stage. The distance of liquor outlets to residential areas, schools and worship places should be greater because it is likely to keep children away from these outlets and also exposing them to alcohol. Therefore, it is of outmost importance in liquor policies to consider social, economic and health aspects of people, especially children and youth living in areas that are have a high density of alcohol outlets.

The study found that the closeness of shebeens is associated with the higher probability of youth consuming alcohol or engaging in binge drinking resulting in more alcohol related problems. In a similar study conducted in Denmark by Seid, Berg-Beckhoff, Stock and Bloomfield (2018) it was hypothesized that proximity of alcohol outlets is associated with a greater alcohol consumption and people engaging in more deviant behaviors such as frequency in drinking patterns. Livingstone et al (2007) asserts that the greater the alcohol availability in societies

the more the consumption increases which directly influences alcohol related harm in communities.

## 5. Conclusion

The study assessed, explored the proximity and density of alcohol outlets in particular shebeens as a risk factor to alcohol abuse amongst youth in Oshikango. Alcohol abuse in all its forms is a real problem in most Southern African countries and should be addressed by all role players. It is believed the amendment of the liquor laws only, will not address this issue and therefore lengthy consultations at all levels of government and all role players should seek a proper solution.

The research gathered information through unobtrusive observation and it was found that, there were numerous shebeens in close proximity to schools, churches and homesteads, apart from that these alcohol outlets were scattered and countless in this society. The study hypothesized that the closer and the more alcohol outlets in a society the more they contribute to easy accessibility and availability of alcohol which may result in alcohol abuse amongst youth. The study found out that children are exposed to alcohol at an early age because some parents take their children with to shebeens, with a high likelihood of them providing their children with alcohol. It was also learned from the findings of the study that homebrewed alcohol was more prevalent in shebeens located in the villages surrounding Oshikango.

### 5.1 Recommendations

Findings of the study confirmed that proximity and density of alcohol outlets such as shebeens play a role as a contributing factor of alcohol consumption and alcohol related behaviors which can have a negative effect on the long-term personal development and community development in societies where alcohol is highly consumed. It is therefore suggested that more studies be undertaken by researchers on different aspects of this phenomenon to acquire and avail more knowledge and insight for policy makers and other stakeholders.

- The study recommends that, the government of Namibia, Southern African countries and other international countries should not allow alcohol outlets to operate in close proximity of schools, churches and homesteads.
- The shebeen monitoring system should be strengthened to control and avoid mushrooming of shebeen within communities.
- Community leaders should not avail land to people who want to set up alcohol outlets that are in close proximity of schools, churches and homesteads.
- The study recommends Social Workers to conduct more community awareness campaigns on the effects of alcohol mostly homebrewed alcohol.
- Due to the negative effects of tombo, the study recommends that tombo should also be recognized as an alcoholic beverage and should therefore be included in the Namibian Liquor Act 6 of 1998.

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## Competing Interests Statement

The authors declare that there are no competing or potential conflicts of interest.

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