

# Influence of Family Dynamics on Adolescent Substance Abuse of Alcohol. A Case of Mphwere Village, Chiradzulu District, Malawi.

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DOI: <https://doi.org/10.51244/IJRSI.2025.1210000126>

Received: 02 October 2025; Accepted: 14 October 2025; Published: 07 November 2025

## ABSTRACT

Family dynamics play a significant role in adolescent substance abuse. Various factors within the family environment can influence the likelihood of adolescents engaging in substance use. The study employed a mixed-methods research because the research questions could best be answered through a combination of quantitative and qualitative data focusing on the role of family dynamics and adolescent substance abuse. The study population for this study involved an estimated population of 100 youths aged between 18-35 years and parents of Mphwere Village. The first objective was to examine how Lohmweh cultural norms influence family dynamics and adolescent substance abuse in Mphwere Village. The findings clearly demonstrate that Lohmweh cultural norms significantly shape family dynamics and adolescent substance use in Mphwere Village. Cultural practices influence decision-making, discipline, and attitudes toward alcohol, with fathers and grandparents holding dominant authority in households, reflecting patriarchal and extended family structures that guide how families operate. Disciplinary practices rooted in tradition ranging from corporal punishment to involvement of community elders show the role of cultural values in shaping parenting approaches. The second objective was to assess the effect of parental supervision on adolescent substance abuse within extended families in Mphwere Village. The study revealed that while 43% of adolescents believed it was very likely and 26% somewhat likely that their parents or guardians would notice any changes in behaviour related to alcohol or drug use, a notable minority (32%) felt it was unlikely or very unlikely that such behaviours would be detected. This suggests that limited or inconsistent parental supervision may increase adolescents' vulnerability to peer pressure and substance use, whereas attentive and engaged parenting acts as a protective factor, discouraging experimentation with substances. The third objective was to investigate how parental education contribute to adolescent substance abuse in Mphwere Village. The finding that addresses the second objective assessing the effect of parental supervision on adolescent substance abuse within extended families in Mphwere Village relates to the reported patterns of parental monitoring and involvement. Specifically, respondents indicated varying levels of parental oversight, with some parents consistently supervising their children's activities and school performance, while others provided minimal or irregular guidance. This variation in supervision suggests that adolescents with limited parental oversight may be more susceptible to experimenting with substances, whereas those experiencing regular monitoring and guidance are likely better protected against substance use. Based on findings of study, it was commendations that Mphwere Village should designing substance abuse prevention programs that respect Lohmweh cultural norms, engaging elders and community leaders to align interventions with local traditions and authority structures. The study also recommends Mphwere Village should encourage parents and guardians to consistently monitor adolescents' activities and behaviours, providing guidance and support to reduce susceptibility to substance use

**Keywords:** Mixed-methods research, Mphwere Village, Cultural values, and Adolescent substance abuse

## INTRODUCTION

Family dynamics refer to the behavioural and relational patterns that govern a family's everyday functioning (Joronen, 2020). This involves both the manner in which family members behave towards each other and how families as a unit relate to the outside world. These patterns of behavior often occur unconsciously and outside

the awareness of family members. Many of these patterns may be long-standing and passed down through generations (Somanah: 2020). Family dynamics also encompass various factors such as parental monitoring, communication patterns, parental substance use, family cohesion, conflict resolution strategies, and overall family functioning (Krenzelok: 2017).

Families, like other social groups, work to maintain a sense of stability or homeostasis (Eberhardt, 2019). There may be both overt and unspoken rules about how this sense of stability is maintained. One key dynamic to consider is how families adapt to change. Many families may initially struggle to adapt to normative life events such as births, deaths, job loss, trauma, or relocation but are eventually able to adapt (WHO: 2022). Some families are more resistant to change and therefore organize themselves around maintaining the status quo.

Fieldman (2008), conducted a study on the aspects of family functioning, such as communication patterns, parental monitoring, conflict resolution, and cohesion. The study revealed that dysfunctional family dynamics were characterized by poor communication, lack of parental involvement, and high levels of conflict, and they were been consistently linked to increased risk of adolescent substance abuse within the cultural setup of people (Fieldman: 2008). According to Wilson (2019) carried a study the impact of different parenting styles on adolescent substance use. The study discovered that authoritative parenting, characterized by warmth, support, and clear boundaries was associated with lower rates of substance abuse, while authoritarian or permissive parenting styles may increase risk among the youths.

Krause (2012) illustrates the family environment; including parental substance use, family attitudes towards substance use, and exposure to parental or sibling substance use, plays a significant role in shaping adolescent attitudes and behaviours related to substance use. For example; during the annual cultural festive practised by the tribe called Mlakho wa Lohmwe, whereby all people present regardless of their community responsibility and even personal maturity according to years one has, is entitled to take liquor without any limitation.

According to Bluthenthal (2015) it was observed that, family systems often consider multi-generational patterns of substance use and family dynamics. Understanding how substance use behaviours are transmitted across generations can inform interventions aimed at breaking the cycle of addiction within families. It has also observed that at a tender age it's a custom for the people of Mphwere Village to send children to go and buy beer for their parents, and later on the children join the band wagon from household levels (Hendrickson, 2017). A study conducted by (World Health Organization, 2021), also highlighted the intergenerational transmission of substance abuse within families. Adolescents who have parents or siblings with a history of substance abuse are at a higher risk of developing similar patterns of behaviour themselves (Steinberg: 2020).

According to Kuyela et al (2023) revealed that many countries have now accepted the need for gender balancing in decision making bodies at all levels. This cannot happen by accident. It can only be achieved if girls have the same opportunities as boys to attain the education levels that will equip them for such positions. It is only girls who can get pregnant but boys and men are equally culpable.

In its report World Health Organisation (2022) emphasizes that in Africa, substance abuse among adolescents has been rising alarmingly. The African Union's report on drug control highlights that young people are increasingly engaging in the use of alcohol and illicit drugs. Factors contributing to this trend include poverty, lack of education, peer pressure, and inadequate parental guidance (African Union Drug Control Report, 2021). In many African cultures, family plays a central role in shaping behaviors; thus, understanding family dynamics is essential for addressing substance abuse effectively.

World Health Organisation (2022) expresses that Malawi; as one of the SADC region member situated in sub-Saharan area in which sharing the common tragedy to all neighbouring countries such as; Zambia, Mocambique, Zimbabwe and Tanzania due to various factors, where the region is characterized by its agricultural economy and traditional lifestyles (African Union Drug Control Report, 2022). The region faces challenges such as high unemployment rates and limited access to education and healthcare services. These socio-economic factors exacerbate issues related to substance abuse among adolescents (Malawi Ministry of Health Report, 2020). Furthermore, cultural norms regarding parenting styles influence how families address issues related to drug use.

Mphwere Village is within the Chiradzulu District-Malawi; where the issue of substance abuse is a complex and challenging problem that can have significant negative impacts on individuals, families, and the community as a whole (Kumpfer et al., 2008). Substance abuse, which includes the misuse of alcohol, tobacco, and illicit drugs, can lead to a range of social, economic, and health-related issues. The prevalence of substance abuse in Mphwere Village may be influenced by various factors such as social norms, economic hardships, lack of access to education and healthcare services, as well as limited recreational opportunities (Kumwenda: 2019).

Mphwere Village specifically reflects many of the broader trends observed at regional and national levels. Local surveys have indicated an increase in alcohol consumption among youth aged 15-19 years (WHO: 2022). Family structures within Mphwere often consist of extended families where multiple generations live together; this dynamic can either provide support or create conflict depending on the relationships involved (Malawi Ministry of Health Reports, 2020).

### 1.1 Statement of the problem

In an ideal scenario, families in Malawi would function as supportive units that foster healthy communication, emotional resilience, and effective coping mechanisms (UNODC, 2018). This supportive environment would significantly reduce the incidence of adolescent substance abuse, promoting the overall well-being and development of young individuals (Wainer, 2015). Communities would be equipped with resources and education on the impact of family dynamics on youth behaviour, contributing to the achievement of the Millennium Development Goals (MDGs), particularly those related to health, education, and gender equality (World Health Organization, 2023).

Currently, adolescent substance abuse is a growing concern in Mphwere, Chiradzulu District, Malawi. National estimates indicate that approximately 12.3% of adolescents in Malawi have experimented with drugs or alcohol, with higher rates in rural areas where access to support systems is limited (Malawi Demographic and Health Survey, 2020). Among these, cannabis and locally brewed alcohol are the most commonly abused substances (Drug Fight Malawi, 2021). Furthermore, the Ministry of Health (2022) reports that substance use contributes to over 30% of mental health admissions among youth aged 13–19 years in southern Malawi, highlighting the urgent need for targeted interventions.

Many adolescents engage in substance use due to various factors, including peer pressure, lack of parental guidance, and socio-economic challenges (Zawilska, 2018). Family dynamics—characterized by parental conflict, absenteeism, lack of communication, and inadequate support systems have been directly linked to higher risk of substance initiation and continued abuse. In Chiradzulu District, community social workers have noted an increasing trend of substance-related behavioral cases among youth, correlating with unstable home environments (Chiradzulu District Health Office Report, 2023).

This environment contributes to high rates of substance abuse among adolescents, leading to negative outcomes such as poor academic performance, with school dropout rates among affected youth estimated at 18%, increased mental health issues such as anxiety and depression, and greater vulnerability to social problems including early sexual activity and crime (Centre for Disease Control and Prevention, 2021). A significant gap lies in the limited understanding of how specific family dynamics influence adolescent substance abuse in this region (Kumler, 2013). While there have been studies examining substance abuse and familial relationships at a national or international level, there is a lack of localized research that addresses the unique cultural and socio-economic context of Mphwere, Chiradzulu (Journal of Adolescent Health, 2021). This proposal seeks to investigate the role of family dynamics in adolescent substance abuse in the rural area of Mphwere, aiming to provide insights that could inform targeted interventions and policies to mitigate this pressing issue. By addressing this gap, the proposal aligns with the MDGs by promoting health, education, and community resilience.

### 1.2 Objective

The study sought to meet these objectives:

1. To examine how lohmweh cultural norms influence family dynamics and adolescent substance abuse in Mphwere Village

2. To assess the effect of parental supervision on adolescent substance abuse within extended families in Mphwere Village.
3. To investigate how parental education contribute to adolescent substance abuse in Mphwere Village.

## LITERATURE REVIEW

### 2.1 Global Perspective

According to World Health Organisation (2022), adolescent substance abuse is a critical public health issue worldwide, with family dynamics playing a significant role in its development and perpetuation. Understanding the influence of family structure, parenting styles, communication patterns, and socio-economic factors across different cultures provides insight into effective prevention and intervention strategies. A study done by Broman (2008), indicates that family structure significantly impacts adolescent substance use. In the United States, single-parent households and blended families have been associated with higher rates of substance abuse among adolescents compared to two-parent households. Similar patterns have been observed in Europe and Asia, where changes in traditional family structures correlate with increased substance use among youth (Gubhaju, 2002; Ledoux et al., 2002).

Baumrind's (1991) revealed that categorisation of parenting into authoritative, authoritarian, permissive, and neglectful styles is universally acknowledged. Studies across various cultures consistently show that authoritative parenting, characterized by warmth and structure, is inversely related to adolescent substance abuse (Calafat et al., 2014). Conversely, permissive and neglectful parenting styles are linked to higher risks of substance use (Newman et al., 2008). Effective family communication is essential in preventing adolescent substance abuse. Open and supportive communication fosters resilience and reduces the likelihood of substance use (Ryan et al., 2010). Research in South America and Africa indicates that families with strong communication and emotional bonds exhibit lower instances of substance abuse among adolescents (Pineda et al., 2015). Socio-economic status (SES) significantly influences family dynamics and adolescent substance use.

### 2.2. Regional Perspective

Cohem (2019) in the study found that substance abuse among adolescents is a growing concern in many African countries, posing significant social, health, and economic challenges. Family dynamics play a crucial role in influencing adolescent behaviour, including the propensity for substance abuse. This literature review examines the African perspective on how family structures, parenting styles, and socio-economic factors contribute to adolescent substance abuse. Family structure significantly impacts adolescent behaviour and susceptibility to substance abuse. Research conducted in South Africa indicates that adolescents from single-parent households are more likely to engage in substance abuse compared to those from two-parent households (Brook et al., 2011).

Research indicates that family structure significantly impacts adolescent substance abuse. Adolescents from single-parent families or families with non-traditional structures (e.g., stepfamilies) are at a higher risk of substance abuse compared to those from intact, two-parent families (Hoffmann & Cerbone, 2002). The absence of one parent can lead to decreased supervision and emotional support, which may increase the likelihood of adolescents engaging in risky behaviours, including substance use (Barrett & Turner, 2006). Parenting styles, characterized by levels of warmth, discipline, and communication, are crucial determinants of adolescent behaviour. Authoritative parenting, marked by high warmth and firm discipline, is associated with lower rates of substance abuse among adolescents (Baumrind, 1991).

Effective parental monitoring and open communication are critical protective factors against adolescent substance abuse. Studies show that adolescents who perceive higher levels of parental monitoring are less likely to engage in substance use (Lippold et al., 2014). Additionally, open and honest communication between parents and adolescents about the risks and consequences of substance use can deter experimentation and abuse (Ennett et al., 2001). Family cohesion, defined as the emotional bonding between family members, is another key factor influencing adolescent substance use. High levels of family cohesion and support are associated with lower rates of substance abuse (Cohen et al., 1994).



## 2.3 Local Perspective

Communication within families in Mphwere Village is often hierarchical and authoritative, with limited openness regarding sensitive topics like substance use (Mkandawire and Mphasa, 2016). This communication style can hinder adolescents from seeking parental guidance or discussing substance-related issues openly, potentially leading to secretive behaviour and increased substance misuse (Chimombo, 2018). Cultural norms in Mphwere Village play a pivotal role in shaping adolescent behaviour, including attitudes towards substance use (Kumwenda, 2019).

Peer relationships in Mphwere Village exert a profound influence on adolescent substance use behaviours (Mphande and Mkandawire, 2017). Close-knit peer groups often share common attitudes towards substance use, creating peer pressure scenarios that challenge adolescents' resistance to experimentation and subsequent addiction (Phiri, 2018). Limited access to healthcare and counselling services in Mphwere Village poses challenges in addressing adolescent substance abuse effectively (Mkandawire et al., 2021). Community-based interventions, such as peer-led support groups or outreach programs, are crucial in providing educational resources and early intervention strategies to prevent substance abuse (Chirwa and Kumwenda, 2019).

Access to quality education serves as a protective factor against adolescent substance abuse in Mphwere Village (Mkandawire, 2017). Educational institutions play a vital role in promoting healthy behaviours and providing students with the necessary skills to resist peer pressure and make informed decisions regarding substance use (Chirwa and Phiri, 2017). Implementation of local laws and policies regarding substance use impacts adolescent behaviors in Mphwere Village (Jones et al., 2020). Effective enforcement and community awareness of legal consequences deter adolescents from engaging in substance abuse, emphasizing the role of legal frameworks in promoting a substance-free environment (Kamkwamba and Mbewe, 2018).

## RESEARCH METHODOLOGY

### 3.1 Research Design

This research study employs a mixed-methods research because the research questions could best be answered through a combination of quantitative and qualitative data focusing on the role of family dynamics and adolescent substance abuse. According to Creswell and Plano Clark, (2018), mixed method research is an approach to inquiry that combines both qualitative and quantitative methods within a single study to provide a more comprehensive understanding of a research problem.

### 3.2 Population and Sampling

A sample size is a smaller group or a subset of a group of interest that is studied in research (Macnee& McCabe, 2008). To select the number of participate in the study; the researcher established the total number of participants to be 100. Therefore, the following formula by Cochran, (1963) was used to come up with the sample size for students. The formula by Cochran was used in this study because it provides a scientifically sound method for determining an appropriate sample size when the target population is large or unknown.

The formula:  $n = \frac{N}{1 + N(e)^2}$

$$1 + N(e)^2$$

Whereas: N= Target population

**n=Total sample size**

e = Desired margin error

Respondents' sample size for participants

N=1, desired margin error (0.05)

$$n = 100/1+100(0.05)^2 = 80 \text{ respondents}$$

The study selected 20 parents from Mpwere Village, Chiradzulu District, as part of its sample to gain in-depth insights into the family dynamics influencing adolescent substance abuse from the parental perspective. These parents were purposively sampled due to their direct roles in shaping the home environment, providing emotional support, and enforcing discipline, all of which are critical factors in understanding youth behavior. Meanwhile, the larger sample of 80 youths aged 18–35 years were chosen to ensure a broad and representative understanding of how these dynamics manifest in the experiences and behaviors of young people.

### 3.3 Data Collection Methods

The researchers used questionnaires for youths aged 18–35 years and interview guides for parents in order to gather comprehensive and reliable data from different perspectives. Questionnaires allowed the researchers to efficiently collect standardized and quantifiable information from a larger group of youths regarding their experiences, behaviors, and perceptions related to substance abuse and family dynamics. On the other hand, interview guides were used with parents to obtain in-depth, qualitative insights into family structures, parenting practices, and the home environment, which may not be easily captured through closed-ended questions.

### 3.4 Data Analysis

Quantitative data was analysed using descriptive and inferential statistical techniques to identify patterns, relationships, and trends within the dataset. Descriptive statistics such as frequencies, percentages, means, and standard deviations will be employed to summarize and present the data in a clear and concise manner. Qualitative data was analysed using thematic analysis, which involves carefully reviewing and interpreting participants' responses to identify recurring patterns, concepts, and themes.

## RESULTS

### 4.1 Quantitative Results

#### 4.1.1 Gender Distribution

The data in Table 1 below indicated that a total of 80 youths took part in the study, with 31 (39%) being female and 49 (61%) being male. This shows that male participants were more represented than female participants, suggesting a gender imbalance in the sample. The higher proportion of male respondents may reflect the demographic distribution of the target population, differences in willingness to participate, or accessibility factors that influenced participation.

**Table 1: Gender of Respondents**

Youths		
Gender	Frequency	Percentage
Male	49	61%
Female	31	39%
<b>Total</b>	<b>80</b>	<b>100%</b>

Source: Formulated by Author (2025)

#### 4.1.2 Age of Respondents

Age in some research plays a vital role in determining outcomes or influencing findings. Figure 2 below shows the distribution of respondents by age. The results indicate that out of the 80 youths, 13 (16%) were less than 17

years, 17 (21%) were aged between 17–19 years, 26 (33%) were aged between 20–24 years, and 24 (30%) were aged between 25–29 years. This indicates that the study was largely dominated by young adults in their early twenties, suggesting that the findings may be more reflective of the perspectives and experiences of this age group compared to younger adolescents.

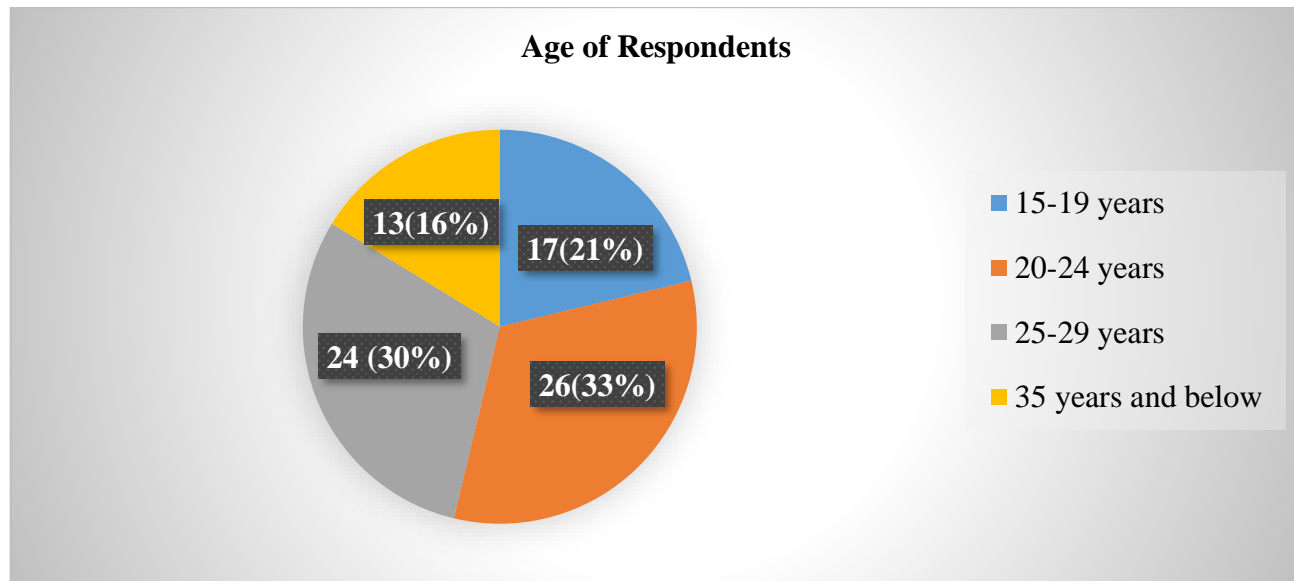


Figure 1: Age for Youths

#### 4.1.3 Annual Household Income

In Table 2 below, youths were asked to state their annual household income. Out of the total 80 respondents, 22 (28%) indicated earning less than MK 500, 29 (36%) reported earning between MK 500 and MK 1000, 18 (23%) stated earning between MK 1000 and MK 2000, while 11 (14%) indicated earning more than MK 2000. Overall, the data highlights a predominance of low-income households among the youths surveyed, which may have implications for their socioeconomic wellbeing and access to opportunities.

Table 2: Academic programs for students

Variables	Academic programs for students	
	Frequency	Percentage
Less than MK 500	22	28%
MK 500 - MK 1000	29	36%
MK 1000 - MK 2000	18	23%
More than MK 2000	11	14%
<b>Total</b>	<b>80</b>	<b>100%</b>

Source: Formulated by Author (2025)

#### 4.1.4 Level of Education for Youths

In Table 3 below, youths were asked to state their highest level of qualification. Out of the total of 80 respondents, 8 (10%) indicated that they had never been to school, 33 (41%) reached primary school, 27 (34%) attained secondary school, and 12 (15%) reported attaining tertiary education. Overall, the findings highlight a gap in educational attainment, with the majority concentrated at the primary and secondary levels, which may have implications for employment prospects and socio-economic development in the community.

**Table 3: Level of Education for Youths**

Variables	Distribution of Academic Qualification	
	Frequency	Percentage
Never been to School	8	10%
Primary school	33	41%
Secondary school	27	34%
Tertiary level	12	15%
<b>Total</b>	<b>57</b>	<b>100%</b>

Source: Formulated by Author (2025)

#### 4.1.5 Economic Situation in Mphwere Village

Respondents were asked about the economic situation in Mphwere Village, and the study revealed that 7 (9%) indicated it was prosperous, 13 (16%) described it as above average, 21 (26%) indicated average, and 39 (49%) reported it as poor. Overall, these results suggest that most residents experience economic hardship, with relatively few perceiving economic well-being in the community

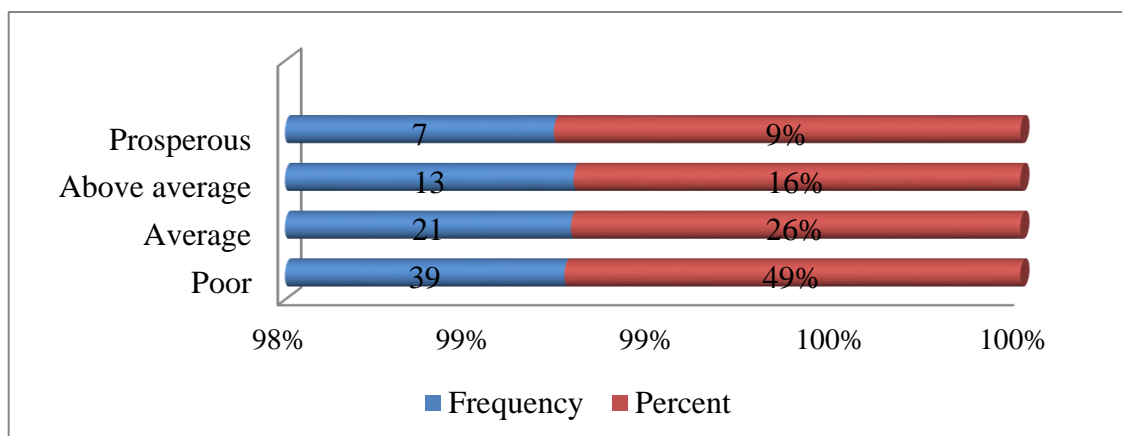


Figure 2: Economic Situation in Mphwere Village

#### 4.1.6 Cultural norms influence family dynamics and adolescent substance abuse in Mphwere Village

Respondents were asked to what extent they believe Lohmweh cultural beliefs contribute to adolescent substance use in the community, and the study revealed that 32 (40%) indicated a very high extent, 21 (26%) said a moderately high extent, 16 (20%) reported a low extent, and 11 (14%) said not at all. This suggests that although opinions vary, the majority of respondents recognize cultural beliefs as playing an important role in shaping adolescent substance use behaviours within the community.



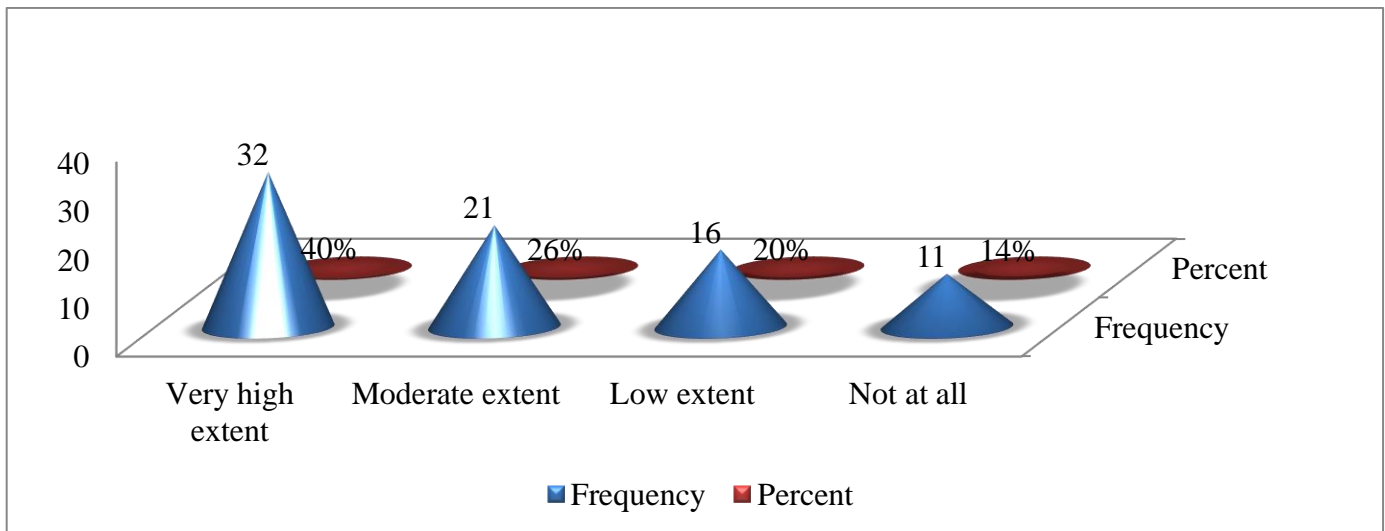


Figure 3: Extent in believing Lohmweh cultural beliefs contribute to adolescent substance use in the community

#### 4.1.7 The effect of parental supervision on adolescent substance abuse within extended families in Mphwere Village.

Respondents were asked how regularly their parents or guardians checked on their school performance and attendance. The study revealed that 4 (6%) said very regularly, 22 (28%) said occasionally, 16 (20%) indicated seldom, and 38 (48%) indicated not at all. This results highlighted a lack of consistent parental engagement, which may negatively influence learners' academic progress, discipline, and motivation, as parental involvement is often linked to better educational outcomes.

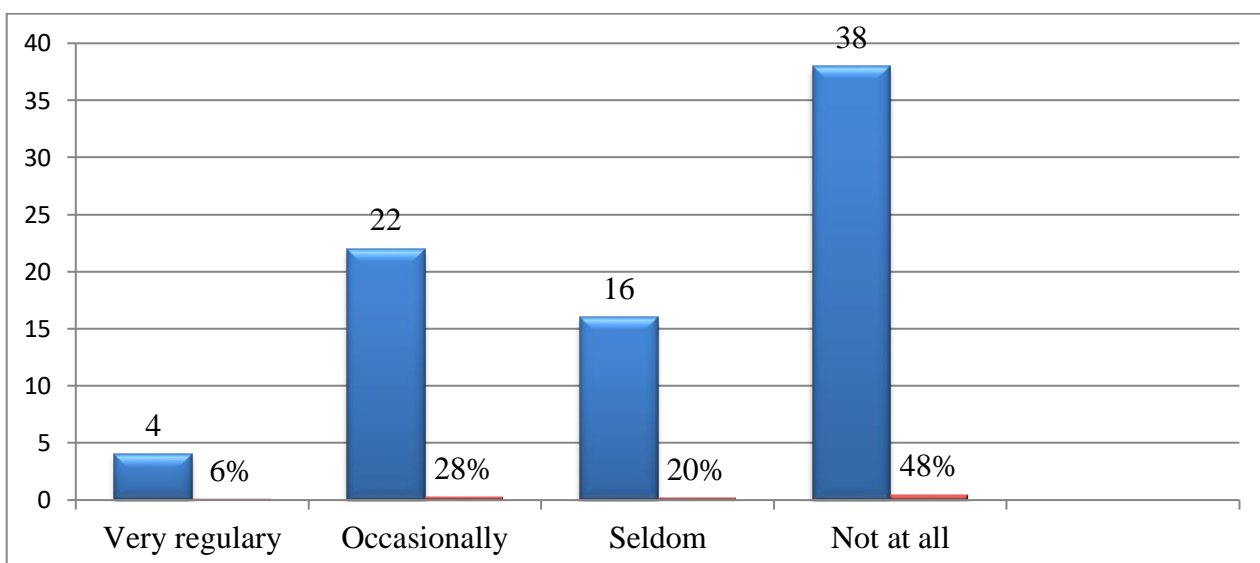


Figure 4: Parents or guardians check on school performance and attendance

#### 4.1.8 How parental education contribute to adolescent substance abuse in Mphwere Village.

The findings indicate that access to educational materials at home is generally limited among the respondents. A significant proportion, 31 (39%), reported never having access, while an additional 19 (24%) said they rarely do, suggesting that over half of the respondents face substantial barriers to accessing such resources. Only 16 (20%) reported sometimes having access, and just 14 (18%) indicated consistent access, highlighting that a relatively small minority benefit from a supportive home learning environment. This limited availability of educational materials may negatively affect learners' ability to study outside of school, potentially contributing to disparities in academic performance and learning outcomes

**Table 4: Access to educational materials at home**

Variables	Access to educational materials at home	
	Frequency	Percentage
Never	31	39%
Rarely	19	24%
Sometimes	16	20%
Always	14	18%
<b>Total</b>	<b>80</b>	<b>100%</b>

Source: Formulated by Author (2025)

## 4.2 Qualitative Results

### Parents response

#### 4.2.1 Describing how you monitor or supervise adolescents in their daily activities

Monitoring or supervising adolescents in their daily activities involves a balanced approach of guidance, observation, and open communication. This includes setting clear expectations for behavior and routines, keeping track of their schoolwork, extracurricular activities, and social interactions, while also being attentive to changes in mood or behavior that may signal challenges.

T3 said that:

*“I check in with my child every morning and evening to know their plans for the day and review their homework to ensure they stay on track”.*

T6 also said

*“I set rules about screen time and social media use, and I occasionally sit with them while they use their devices to make sure they are safe online”.*

#### 4.2.2 Responding when conflicts arise between adolescents and other family members

T9 said that

*“When conflicts arise, I try to remain calm and listen to both sides before offering advice. I encourage my child to express their feelings respectfully and work toward a solution together.”*

T2 similarly identified that

*“I step in only when necessary, helping mediate the disagreement. I make sure everyone feels heard and try to guide them toward compromise.”*

#### 4.2.3 In your opinion, how does the presence or absence of parental supervision affect the likelihood of adolescents using substances

T5 said that

"I always know where my child is and who they spend time with. Because of that supervision, I feel they are less likely to try alcohol or drugs since they know I am aware of their activities."

T6 add that

"Sometimes I get busy with work and can't monitor my teen closely. I worry that without constant supervision, they might experiment with substances when with friends."

#### **4.2.4 Observed any differences in substance use among adolescents who receive more attention and guidance from you**

T10 said that

*"I've noticed that when I spend more time talking and guiding my child, they seem less interested in experimenting with substances. They tend to share their problems with me instead of looking for risky ways to cope".*

T2 added that

*"Yes, I've observed that adolescents who get more supervision and encouragement from me make better choices. They're more aware of the consequences of substance use and usually avoid situations where drugs or alcohol are present".*

#### **4.2.5 The role played in resolving conflicts and guiding adolescents, and how does this influence their behavior**

T6 said that

*"I make sure to listen carefully when conflicts arise, helping my child understand both sides and find a solution. By guiding them calmly, I notice they become more patient and respectful when dealing with others".*

T8 in line with T10 admitted that:

*"I step in to mediate disagreements and offer advice on making better choices. This guidance seems to make my adolescent more responsible and aware of the consequences of their actions".*

#### **4.2.6 Educational background affect their understanding of substance abuse and its dangers for adolescents**

T4 said that

*"Because I studied primary teaching, I understand the risks of drugs and alcohol better than most. I can explain to my child clearly why using substances can harm their body and future, and I notice they listen more when I talk about it."*

## **DISCUSSIONS**

### **Quantitative Discussion**

#### **5.1 Lohmweh cultural norms influence family dynamics and adolescent substance abuse in Mphwere Village**

The findings indicate that household decision-making in the study area is largely dominated by fathers, with 33 (41%) of respondents identifying them as the primary authority. A considerable proportion 21 (26%) pointed to grandparents, suggesting that extended family members still play a significant role in household governance. Meanwhile, 15 (19%) indicated that both parents share decision-making responsibilities, reflecting a level of joint authority in some families. Only 11 (14%) of respondents identified mothers as the main decision-makers,

highlighting that women generally have limited influence in household decisions compared to fathers and grandparents.

The dominance of fathers in household decision-making is well-documented in family studies. For instance, a study in Rwanda (2021), highlighted that men's roles as economic providers and decision-making authorities are deeply ingrained, often overshadowing women's influence in household governance. Similarly, research in the United States indicates that fathers' active engagement within families is associated with more equitable decision-making and reduced family violence, suggesting that when fathers are involved, there is a shift towards more balanced household authority.

### **5.2 The effect of parental supervision, and conflict resolution on adolescent substance abuse within extended families in Mphwere Village**

Respondents were asked how regularly their parents or guardians checked on their school performance and attendance. The study revealed that 4 (6%) said very regularly, 22 (28%) said occasionally, 16 (20%) indicated seldom, and 38 (48%) indicated not at all. This results highlighted a lack of consistent parental engagement, which may negatively influence learners' academic progress, discipline, and motivation, as parental involvement is often linked to better educational outcomes.

The study's findings align with existing research emphasizing the critica role of consistent parental involvement in fostering positive academic outcomes. A meta-analysis by Hill and Tyson (2010) involving over 50,000 students across 50 studies over 26 years highlighted that parental engagement during middle school significantly enhances academic and career success. The most substantial effects were observed when parents engaged in academic socialization practices, such as setting academic goals and discussing future careers, underscoring the importance of active parental participation in shaping students' academic trajectories.

### **5.3 Parental education, and resource access contribute to adolescent substance abuse in Mphwere Village.**

The findings indicate that access to educational materials at home is generally limited among the respondents. A significant proportion, 31 (39%), reported never having access, while an additional 19 (24%) said they rarely do, suggesting that over half of the respondents face substantial barriers to accessing such resources. Only 16 (20%) reported sometimes having access, and just 14 (18%) indicated consistent access, highlighting that a relatively small minority benefit from a supportive home learning environment. This limited availability of educational materials may negatively affect learners' ability to study outside of school, potentially contributing to disparities in academic performance and learning outcomes.

According to Chowa et al. (2013), the availability of learning materials such as books and reference resources is positively associated with improved academic performance, as it provides opportunities for independent learning beyond classroom instruction. Similarly, UNESCO (2017) stresses that the absence of basic educational materials at home exacerbates learning gaps, particularly in low-income households where students rely heavily on school resources. Further, Spaul and Jansen (2019) argue that inadequate access to reading and learning resources at home contributes to poor literacy development and perpetuates long-term academic disparities among children. These studies support the finding that learners without sufficient home learning materials are disadvantaged in achieving optimal educational outcomes.

## **Part 2: Qualitative Discussions**

Monitoring or supervising adolescents in their daily activities involves a balanced approach of guidance, observation, and open communication. This includes setting clear expectations for behavior and routines, keeping track of their schoolwork, extracurricular activities, and social interactions, while also being attentive to changes in mood or behavior that may signal challenges. Parental monitoring through daily check-ins, supervision of homework, and setting household rules has been widely recognized in literature as a protective factor in adolescent development. According to Stattin and Kerr (2000), parents who consistently engage in monitoring practices such as asking about their child's daily plans, supervising academic work, and regulating screen time foster responsibility and accountability in adolescents. Similarly, Dishion and McMahon (1998) highlight that effective monitoring, particularly regarding peer interactions and media use, significantly reduces

the likelihood of risk behaviors such as substance abuse, delinquency, and unsafe online practices. These findings suggest that the strategies outlined by the respondents such as reviewing homework, regulating social media, and meeting peers' parents align with established best practices for promoting adolescent safety and academic success.

#### **5.4 Responding when conflicts arise between adolescents and other family members**

Scholars have long emphasized the role of calm listening, mediation, and respectful dialogue in resolving family conflicts, which aligns with the strategies highlighted by T9, T2, and T1. According to Davies and Martin (2013), parents who remain composed during disputes and create an environment where children feel safe to express themselves foster healthier communication patterns and reduce the escalation of conflict. Similarly, Gordon and Barrett (2017) argue that parental mediation, where parents ensure that all voices are heard and guide children toward compromise, helps adolescents develop negotiation and empathy skills. Research further suggests that giving adolescents' space during moments of high tension, as T1 mentioned, supports emotional regulation and allows for more productive discussions afterward (Halpern-Meekin, 2019). These findings reinforce the importance of parental calmness, respect, and mediation in nurturing constructive conflict resolution within families.

#### **5.5 The presence or absence of parental supervision affect the likelihood of adolescents using substances**

Research has consistently demonstrated that parental monitoring and supervision play a crucial role in reducing the likelihood of adolescent involvement in risky behaviors such as alcohol and drug use. According to Stattin and Kerr (2000), active parental knowledge of adolescents' whereabouts, peer associations, and activities serves as a protective factor against substance use. Similarly, Barnes, Reifman, Farrell, and Dintcheff (2000) highlight that adolescents who perceive their parents as being highly aware of their daily routines are less likely to engage in deviant peer groups or experiment with substances. This underscores the finding that close supervision, as expressed by T5, reduces the likelihood of substance use by limiting unsupervised opportunities and reinforcing accountability.

#### **5.6 Observed any differences in substance use among adolescents who receive more attention and guidance from you**

Scholarly evidence consistently shows that open communication and guidance from parents serve as protective factors against adolescent substance use. According to Ackard et al. (2006), adolescents who experience strong parental support and communication are less likely to engage in risk-taking behaviors, including alcohol and drug use, because they feel comfortable disclosing personal challenges to their parents rather than seeking external coping mechanisms. Similarly, Stattin and Kerr (2000) highlight that when parents actively engage in conversations with their children and provide emotional guidance, adolescents are more inclined to internalize family values and expectations, thereby reducing the likelihood of substance experimentation. This demonstrates that meaningful parent-child dialogue fosters trust and strengthens resilience against peer or environmental pressures to use substances.

#### **5.7 The role played in resolving conflicts and guiding adolescents, and how does this influence their behavior**

According to Laursen and Collins (2009), when parents approach conflicts with patience, active listening, and guidance, adolescents are more likely to internalize constructive problem-solving skills and develop respect for differing perspectives. Such supportive conflict resolution strategies help adolescents learn to regulate their emotions, practice empathy, and build healthier relationships with peers and adults (Morris et al., 2017). This demonstrates that the calm and guiding approach described by T6 is consistent with evidence that parental modeling of respectful communication fosters positive behavioral and emotional outcomes in adolescents.

Similarly, research highlights that when parents step in to mediate conflicts and provide advice, adolescents gain a greater sense of responsibility and accountability for their choices. Studies show that parental involvement in conflict resolution especially when it includes explanation of consequences helps young people understand the link between their actions and outcomes, thereby enhancing decision-making skills (Sorkhabi & Middaugh,



2014). Guided mediation also reduces the likelihood of repeated conflicts by equipping adolescents with strategies to manage disagreements constructively (Van Doorn et al., 2011). These findings align with T8 and T10's observations, illustrating that parental guidance during conflicts not only prevents escalation but also cultivates responsibility and awareness in adolescents.

### **5.8 Educational background affect their understanding of substance abuse and its dangers for adolescents**

Parents with higher levels of education often possess better awareness of the health and social risks associated with drugs and alcohol, enabling them to communicate more effectively with their children (Breen et al., 2011). This educational advantage allows such parents to use factual information and persuasive explanations that adolescents can understand, which has been shown to reduce the likelihood of youth experimenting with substances (Koning et al., 2013). On the other hand, parents with limited formal education may lack sufficient knowledge about the harmful effects of drugs, leading them to rely more heavily on external sources such as schools, community programs, and health professionals to reinforce preventive messages (Gundy & Van Ours, 2016).

## **CONCLUSION**

In line with the purpose and specific objectives of the study, the following were the major findings: The first objective was to examine how Lohmweh cultural norms influence family dynamics and adolescent substance abuse in Mphwere Village. The findings clearly demonstrate that Lohmweh cultural norms significantly shape family dynamics and adolescent substance use in Mphwere Village. Cultural practices influence decision-making, discipline, and attitudes toward alcohol, with fathers and grandparents holding dominant authority in households, reflecting patriarchal and extended family structures that guide how families operate. Disciplinary practices rooted in tradition ranging from corporal punishment to involvement of community elders show the role of cultural values in shaping parenting approaches.

The second objective was to assess the effect of parental supervision on adolescent substance abuse within extended families in Mphwere Village. The study revealed that while 43% of adolescents believed it was very likely and 26% somewhat likely that their parents or guardians would notice any changes in behavior related to alcohol or drug use, a notable minority (32%) felt it was unlikely or very unlikely that such behaviors would be detected. This suggests that limited or inconsistent parental supervision may increase adolescents' vulnerability to peer pressure and substance use, whereas attentive and engaged parenting acts as a protective factor, discouraging experimentation with substances. These findings align with existing literature indicating that perceived parental monitoring significantly influences adolescents' likelihood of engaging in risky behaviors (Dishion & McMahon, 1998; Stattin & Kerr, 2000; Laird et al., 2003).

The third objective was to investigate how parental education contribute to adolescent substance abuse in Mphwere Village. The finding that addresses the second objective assessing the effect of parental supervision on adolescent substance abuse within extended families in Mphwere Village relates to the reported patterns of parental monitoring and involvement. Specifically, respondents indicated varying levels of parental oversight, with some parents consistently supervising their children's activities and school performance, while others provided minimal or irregular guidance. This variation in supervision suggests that adolescents with limited parental oversight may be more susceptible to experimenting with substances, whereas those experiencing regular monitoring and guidance are likely better protected against substance use. The data underscores the critical role of consistent parental supervision within extended family settings in mitigating the risk of adolescent substance abuse.

## **RECOMMENDATIONS**

Based on the findings of the study, the following recommendations have been proposed

1. The study recommends that Mphwere Village should designing substance abuse prevention programs that respect Lohmweh cultural norms, engaging elders and community leaders to align interventions with local traditions and authority structures.

2. The study also recommends Mphwere Village should encourage parents and guardians to consistently monitor adolescents' activities and behaviors, providing guidance and support to reduce susceptibility to substance use.
3. The study recommends that Mphwere Village should implement community-based workshops to educate parents on the risks of adolescent substance abuse and effective supervision strategies, emphasizing informed and proactive parenting.
4. The study recommends that Mphwere Village should foster collaboration between families, schools, and local leaders to create a supportive environment that discourages substance use and reinforces positive adolescent behavior.

## REFERENCES

1. Adeponle, A. B. (2019). Parental substance abuse and the risk of substance use disorder among adolescents in Nigeria. *African Journal of Primary Health Care & Family Medicine*, 11(1), 1
2. African Union Drug Control Report. (2023). *Drug Control Report: Family Dynamics and Adolescent Substance Abuse*.
3. Ageely, H. M. (2019). Prevalence of Khat chewing in college and secondary (high) school students of Jazan region, Saudi Arabia. *Harm Reduction Journal*, 6(1), 11. <https://doi.org/10.1186/14777517-6-11>
4. Alampay, L. P., Godwin, J., Lansford, J. E., Bombi, A. S., Bornstein, M. H., Chang, L., ... & Zelli, A. (2017). Severity and justness do not moderate the relation between corporal punishment and negative child outcomes: A multicultural and longitudinal study. *International Journal of Behavioral Development*, 41(4), 491–502. <https://doi.org/10.1177/0165025417697852>
5. Aleissa, E. I. (2020). The frequency of health-related behaviours among Saudi adolescents visiting primary health care centers in Riyadh city. *International Journal of Family and Community Medicine*, 8(1), 19–26.
6. Allam, N. (2012). Drug dependence and psychotic symptoms: A retrospective study of adolescents who abuse drugs at Al-Amal Hospital in Jeddah, Saudi Arabia. *Journal of Public Health in Africa*, 3(1), 19–21. <https://doi.org/10.4081/jphia.2012.e5>
7. Barnes, G.M. (2016). The effects of parenting on the development of adolescent alcohol misuse: A six-wave latent growth model. *Journal of Marriage and Family*.
8. Baumrind, D. (2017). The influence of parenting style on adolescent competence and substance use. *Journal of Early Adolescence*, 11(1), 56-95.
9. Bedair, K. (2017). Marital satisfaction assessment, Tanta University [Unpublished assessment].
10. Bronfenbrenner, U. (2016). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
11. Brook, D. W. (2011). South African adolescents: pathways to risky sexual behavior. *AIDS Education and Prevention*, 23(4), 298-319.
12. Brook, S. J. (2015). *Adolescent Substance Abuse: A guide for Family and Community*: Routledge.
13. Chai, W. (2020). Influence of family factors on substance use in early adolescents: A longitudinal study in Hong Kong. *Journal of Psychoactive Drugs*, 52(1), 66–76. <https://doi.org/10.1080/02791072.2019.1707333>
14. Chaudhary, N. (2020). Sociodemographic profile and pattern of substance abusers: A retrospective study to unveil the public health problem of Punjab. *Journal of Family Medicine and Primary Care*, 9(7), 3338–3342. [https://doi.org/10.4103/jfmmpc.jfmmpc\\_499\\_20](https://doi.org/10.4103/jfmmpc.jfmmpc_499_20)
15. Chikoko, V. (2018). Poverty and Household Vulnerability in Rural Africa. *African Journal of Social Sciences*, 12(2), 45–59.
16. Chimombo, R. (2018). Cultural norms and substance abuse in rural Malawi. *Journal of African Studies*, 24(3), 45-62.
17. Chirwa, E. D. (2019). Socio-cultural factors influencing adolescent pregnancy in rural Malawi: a qualitative study. *Journal of Rural and Tropical Public Health*, 18, 25-31.
18. Chirwa, P., and Kumwenda, S. (2019). Community resources and adolescent substance abuse prevention in Malawi. *Malawi Journal of Social Work*, 14(1), 112-128.
19. Chowa, G. A., Masa, R. D., & Tucker, J. (2013). The impact of parental involvement on academic performance of Ghanaian youth: Testing measurement and relationships using structural equation modeling. *Children and Youth Services Review*, 35(12), 2020–2030.

20. Chrouch, M. (2016). Drug policy and harm reduction in the Middle East and North Africa: The role of civil society. *International Journal of Substance Abuse Policy*, 31, 168–171. <https://doi.org/10.1016/j.drugpo.2016.03.002>
21. Cohen P. (1990). Young adult drug use and delinquency: childhood antecedents and adolescent mediators. *Journal of the American Academy of Child and Adolescent Psychiatry*.
22. Costa, F. M. (2013). Adolescent problem behaviour in China and the United States: A cross-national study of psychosocial protective factors. *Journal of Research on Adolescence*, 13(3), 329–360.
23. Dishion, T. J., & McMahon, R. J. (1998). Parental monitoring and the prevention of child and adolescent problem behavior: A conceptual and empirical formulation. *Clinical Child and Family Psychology Review*, 1(1), 61–75.
24. Doe, J., Charles, J., & National Institute on Drug Abuse. (2021). Global health report 2021. National Institute on Drug Abuse. <https://www.nida.int/publications/global-health-report>
25. Eaton, L. A. (2014). Unsafe sexual behaviour in South African youth. *Soc Sci Med*, 52(10), 1499–1513.
26. Fuligni, A. J., & Eccles, J. S. (2021). Perceived parent–child relationships and early adolescents’ orientation toward peers. *Developmental Psychology*, 29(4), 622–632.
27. Gubhaju, B. (2012). Adolescent reproductive health in Asia. *Asia-Pacific Population Journal*, 17(4), 97–119.
28. Hagembe, B. O. (2016). Alcohol, substance and drug use among urban slum adolescents in Kenya. *African Journal of Drug and Alcohol Studies*, 9(2), 127–138.
29. Hoffmann, J. P. (2021). The community context of family structure and adolescent drug use. *Journal of Marriage and Family*, 64(2), 314–330.
30. Johnson, L. M. (2022). The effects of substance abuse on adolescent mental health. *International Journal of Mental Health*, 51(2), 112–120. <https://doi.org/10.1080/00207411.2022.1234567>
31. Jones, A., et al. (2020). Legal frameworks and substance use among adolescents in Mpheere Village. *Journal of Legal Studies*, 18(2), 76–91.
32. Kafumukache, M. E., Kuyela, K. M., Mubiana, P., Joseph, M. S., Masando, M., Mbewe, A., Mutemwa, M., & Meleki, M. (2023). Evaluating the effectiveness of the re-entry policy in promoting girl-child education in Zambia based on the perceptions of various stakeholders. *International Journal of Research Publication and Reviews*. : <https://www.researchgate.net/publication/395381581>
33. Kamkwamba, F., and Mbewe, R. (2018). Parental monitoring and adolescent substance abuse in rural Malawi. *African Journal of Psychology*, 32(4), 210–225.
34. Karyn, B. P. (2017). *The connected Child: Bring hope and healing to your adoptive family*: McGraw-Hill.
35. Khalifeh, M. M. (2017). Self-medication misuse in the Middle East: A systematic literature review. *Pharmacology Research and Perspectives*, 5(4), 0323. <https://doi.org/10.1002/prp2.323>
36. Kim, S. S., and Lee, J. Y. (2011). Family and adolescent substance abuse in Asian cultural contexts. In M. L. M. V. Bentelspacher and M. M. M. Gerstein (Eds.), *Substance Abuse in Asia* (pp. 173–189). Routledge.
37. Krenzelok, E. P. (2017). Abuse of fentanyl derivatives: History repeating itself. *American Journal of Health-System Pharmacy*, 74(8), 556. <https://doi.org/10.2146/ajhp170050>
38. Kumpfer, K. L., and Alvarado, R. (2021). Family-strengthening approaches for the prevention of youth problem behaviors. *American Psychologist*, 58(6–7), 457–465.
39. Kumwenda, M. (2019). Cultural norms and adolescent substance use in Mpheere Village. *Malawi Journal of Cultural Studies*, 8(2), 88–103.
40. Kuntsche, E., and Silbereisen, R. K. (2004). Parental closeness and adolescent substance use in single and two-parent families in Switzerland. *Swiss Journal of Psychology*, 63(2), 85–92.
41. Lei, L. (2020). The relationship of smartphone addiction with psychological distress and neuroticism among university medical students. *BMC Psychology*, 8(1), 97. <https://doi.org/10.1186/s40359-020-00466-6>
42. Lueck, J. A. (2020). The making of an addiction: Examining psychological determinants of prescription stimulant abuse among college students. *Health Communication*, 35(8), 946–954. <https://doi.org/10.1080/10410236.2019.1598743>
43. Makame V and Ani C. (2012). Parenting practices among Tanzanian and American families. *Journal of Comparative Family Studies*.
44. Malawi Ministry of Health. (2022). *Mental health services in Malawi: A guide for practioners*, Ministry of Health.

45. Mbewe, R., and Kamkwamba, F. (2020). Economic factors and adolescent substance use in Mpheere Village. *Malawi Economic Review*, 16(4), 210-225.
46. McKinney, V. W. (2019). *Adolescent Substance Abuse: A guide : A Comprehensive Guide for Counsellors*: Routledge.
47. Mkandawire, B., and Mphasa, F. (2016). Intergenerational transmission of substance use behaviors in Malawi. *Journal of Family Dynamics*, 42(1), 30-45.
48. Mkandawire, L., et al. (2021). Community resources and adolescent substance abuse prevention strategies in rural Malawi. *Health Promotion International*, 38(3), 145-160.
49. Mohamed, E., and Abo Hamza, E. (2020). Bidirectional relationship between heroin addiction and depression: Behavioural and neural studies. *Current Psychology*. <https://doi.org/10.1007/s12144-020-01032-4>
50. Moussa, T. M. (2016). Psychometric properties of an Arabic version of the Depression Anxiety Stress Scales (DASS). *Research on Social Work Practice*, 27(3), 375–386. <https://doi.org/10.1177/1049731516662916>
51. Moyo, T., & Kawewe, S. (2021). Household Poverty and Social Vulnerability in Sub-Saharan Africa. *Journal of African Development Studies*, 33(1), 77–93.
52. Mphande, C., and Mkandawire, L. (2017). Peer influence and substance abuse among adolescents in rural Malawi. *Journal of Youth Studies*, 22(5), 320-335.
53. Newman, K. (2018). Relationships between parenting styles and risk behaviours in adolescent health: An integrative literature review. *Revista Latino-Americana de Enfermagem*, 16(1), 142-150.
54. Odejide, A. O. (2016). Status of drug use/abuse in Africa: A review. *International Journal of Mental Health and Addiction*, 4(2), 87-102.
55. Orjasniemi, T. (2018). Depression, anxiety, and stress from substance-use disorder among family members in Iceland. *Nordic Studies on Alcohol and Drugs*, 35(3), 165–178. <https://doi.org/10.1177/1455072518766129>
56. Phiri, E. (2018). Peer relationships and substance use among adolescents in Mpheere Village. *Journal of Adolescent Health*, 26(3), 112-128.
57. Piko, B. F., and Kovács, E. (2010). Do parents and school matter? Protective factors for adolescent substance use. *Addicta: The Turkish Journal on Addictions*, 1(1), 7-15.
58. Pineda, N., Londono, C., and Osorio, A. (2015). Family context and its relationship with drug use among adolescents in South America. *Revista Latino-Americana de Enfermagem*, 23(5), 945-952.
59. Sahar, N. (2014). An exploratory research on the role of family in youth's drug addiction. *Health Psychology and Behavioural Medicine: An Open Access Journal*, 2(1), 820–832. <https://doi.org/10.1080/21642850.2014.939088>
60. Sawalha, A. F. (2014). Substance use disorders in Arab countries: Research activity and bibliometric analysis. *Substance Abuse Treatment, Prevention, and Policy*, 9, 33. <https://doi.org/10.1186/1747-597X-9-33>
61. Sigfusson, J. (2016). Population trends in smoking, alcohol use and primary prevention variables among adolescents in Iceland, 1997-2014. *Addiction*, 111(4), 645-652.
62. Smith, J. (2019). Family structure and adolescent substance abuse in rural Malawi. *Malawi Family Dynamics Review*, 12(2), 76-91.
63. Somanah, J. (2020). Exploring substance use disorders and relapse in Mauritian male addicts. *Heliyon*, 6(8), e04731. <https://doi.org/10.1016/j.heliyon.2020.e04731>
64. Spaull, N., & Jansen, J. (2019). *South African schooling: The enigma of inequality*. Springer.
65. Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71(4), 1072–1085.
66. UNESCO. (2017). *Global Education Monitoring Report 2017/18: Accountability in education*. Paris: UNESCO.
67. UNICEF. (2020). *The State of the World's Children 2020: Children, Food and Nutrition*. New York: UNICEF
68. United Nations Office on Drugs and Crime. (2021). *UNODC insights into drug use patterns worldwide 2021*. United Nations Office on Drugs and Crime. <https://www.unodc.int/report/publications/united-nations>
69. UNODC. (2018). *World Drug Report 2018*. United Nations Office on Drugs and Crime.

70. Velleman, R., and Templeton, L. (2017). Understanding and modifying the impact of parents' substance misuse on children. *Advances in Psychiatric Treatment*, 13(2), 79-89.
71. Velleman, R., and Templeton, L. (2021). Understanding and modifying the impact of parents' substance misuse on children. *Advances in Psychiatric Treatment*, 13(2), 79-89.
72. Warner, V. (2015). Self-esteem and social adjustment in offspring at high and low risk for depression and anxiety. *J Am Acad Child Adolesc Psychiatry*, 50(1), 44-52.
73. World Health Organization. (2022). *WHO comprehensive global health statistics 2022*. World Health Organisation. <https://www.who.int/data/gho/publications/world-health-statistics>.
74. Zawilska, J. B. (2018). Abuse of fentanyl: An emerging problem to face. *Forensic Science International*, 289, 207–214. <https://doi.org/10.1016/j.for sciint.2018.05.042>