

Suicide Ideation and Its Associated Factors among Men in Selected Compounds of Lusaka, Zambia

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Abstract

Background: Globally, it is estimated that more than 800,000 individuals die by suicide each year, making suicide one of the biggest causes of death worldwide. Additionally, suicide kills far more males than women, more so in developing regions that are characterized by economic distress due to low income. Although the number of suicide cases has been seen to increase from 2013 to date, limited studies provide information on the factors influencing the trend. Therefore, this study aimed at investigating the prevalence of suicidal ideation and factors associated with suicide in males in selected compounds of Lusaka. **Methods:** The study used an analytical quantitative cross-sectional study design that involved 367 men in Mtendere and Kaunda Square townships in Lusaka district, Zambia. A structured questionnaire was used to collect data from participants, which was analyzed using Statistical Package for Social Sciences (SPSS) version 26.0. The Chi-square, Fisher's exact test and Wilcoxon rank sum tests were used to test relationships among variables at a five percent level of significance. Ethical approval and clearance was obtained from the National Health Research Authority. **Results:** Participants had a median age of 29 years (IQR, 27 - 32 years), 216 (58.9%) were single and 278 (75.8%) attained tertiary education. Under a quarter, 75 (20.4%) reported suicide ideations, and 97 (26.4%) reported low social support. For most participants, 347 (94.7%) experienced at least one stressful life event, and 359 (97.8%) experienced severe levels of stress. Under half, 170 (46.3%) were alcohol dependent, while 54 (14.7%) used alcohol harmfully. Suicide ideation was significantly associated with marital status ($p < 0.0001$), education level ($p < 0.0001$), social support ($p < 0.0001$), stressful events ($p = 0.018$), alcohol abuse ($p < 0.0001$) and availability of support organizations ($p < 0.0001$). Age

($p = 0.329$), religion ($p = 1.000$), and stress level ($p = 1.000$) were not associated with suicide ideation in the study. **Conclusion:** Suicide ideation is relatively high among men in Mtendere and Kaunda Square townships, mainly influenced by marital status, education level, social support, stressful events alcohol abuse. Efforts must be channeled towards suicide awareness campaigns, and establishment of supportive environments in health facilities which can make it easy for men to open up about their struggles.

Keywords

Suicide Ideation, Social Support, Substance Abuse

1. Introduction

Suicide is defined as a fatal injurious act with some evidence that the individual intended to die [1]. Each year, more than 700,000 individuals die by suicide in the world. Suicide was the second biggest cause of death worldwide in 2016 accounting for (1.4%) of all fatalities (WHO, 2019). Significant amount of literature also indicates that severe depression is a known risk factor for suicide, yet worldwide men's suicide rates continue to outnumber reported rates of men's depression. A qualitative study provides insights on how masculine roles, identities and relations mediate depression-related suicidal ideation in a cohort of 38 men in Canada, ranging in the age from 24 to 50 years old [2].

Rates of suicide vary greatly between countries, with the greatest burdens in developing countries. Many more men than women die by suicide. Although suicide rates in elderly people have fallen in many countries, those in young people have risen. Most people who die by suicide have psychiatric disorders, notably mood, substance related, anxiety, psychotic and personality disorders, with comorbidity being common [3]. Some literature focused on the frequency of association between some psychiatric conditions, such as depression and alcohol abuse and some aspect of suicidality, in particular communication of suicide intent. Compared to non-indigenous suicides, it had lower odds of being diagnosed with unipolar depression, seeking treatment for psychiatric conditions or leaving a suicide note. Indigenous suicides had greater odds of verbally communicating suicide intent and having a history of alcohol and substance abuse. The magnitude of these differences is remarkable [4].

Further, some literature revealed that the ecological association between unemployment and parasuicide rates among males in Edinburg over the period 1968-82 was positive and highly significant. Throughout the period, the parasuicide rate among the unemployed was nearly always more than 10 times higher than that among the employed. The long term unemployed were at much higher risk than those out of work for lesser periods, although the impact of recent job loss was marked. Population attributable risk has shown a tendency to rise in line with the upward trend in the unemployment rate, despite the decline in rel-

ative risk over the period. The findings were considered consistent with the view that unemployment increases parasuicide rates [5].

Additionally literature indicates that suicide rates across the decade rose monotonically in men aged 45 - 64 years. There were small post recession increases in the proportion of suicides in men in higher management/professional or self employed occupation. During the economic recession, men aged 35 - 44 years old increased in suicide rates mirrored recession related unemployment [6].

In addition, globally the majority of deaths by suicide occurred in low and middle income countries (79%), where most of the world's population lives. Regarding age, more than half (52.1%) of global suicides occurred before the age of 45 years. Most adolescents who died by suicide were from low and middle income countries where nearly 90% of the adolescents live [7]. In South-East Asia, the suicide death rate is 15.6 per 100,000 people, while it is just 5.6 per 100,000 in the Eastern Mediterranean. The average suicide death rate in Europe is 14.1 per 100,000, which is significantly higher than the global average of 10.7 per 100,000. From 3.3 per 100,000 in Azerbaijan to 32.7 per 100,000 in Lithuania, there is a significant difference between the European nations. Generally speaking, the Mediterranean countries have the lowest rates of suicide mortality, followed by Western and Northern Europe, which are close to the European average. Eastern and Central Europe has the highest rates according to the World Health Organisation special report [7].

Some literature further revealed that official cases of suicide in the world amounted to 782 thousand in the year 2008 according to the WHO estimate, which is 1.4% of total mortality and 15% of injury mortality. The suicide rate for the world as a whole is estimated at 11.6 per 100,000 inhabitants. The male-female ratio of suicide is estimated the highest in the European region and the lowest in the Eastern Meditterean region. Among males the highest suicide rate in the 15 - 29 age group is in the SE Asian region, in the 45 - 59 age group in the European males and for ages above 60 in the Western Pacific region. Lithuania has a highest suicide rate in of 34.1 per 100,000 inhabitants.

Over a five-year period (1967-1971), records of all suicides and open verdicts in Lusaka, Zambia, were examined. The following suicide rates were discovered (per 100,000 people per year): 7.4 for all races; 11.3 for all men; 3.0 for all women; 6.9 for all residents who are African; 11.2 for all men; 2.2 for all women; 12.8 for all Africans who are above 14 years old; 20.9 for all residents who are European; 20.7 for all men; 21.0 for all women. In Africa, the male-to-female ratio was 5:1. The suicide prevalence rates increased from 26 percent to 48 percent between 2013 and 2017 in Lusaka, Zambia [8].

In addition, it was revealed that more males than females, aged 35 were reported to have committed suicide due to marital disputes between 2013 and 2019 in Zambia. The Eastern province of Zambia recorded the highest suicide cases. It was revealed that hanging and insecticide were the most commonly used methods of killing oneself [9].

Further, the Zambia Counselling Council (2016) also observed that, the num-

ber of suicide cases in the country had increased, unfortunately the factors associated with this increase were not clearly known. Further, there is paucity of data on how far the common causes of suicide as seen elsewhere are pertinent to contemporary Zambia. Scant academic attention has been hitherto given to questions such as whether there are more specific trends and patterns in suicidal behavior in the local context at present. The increase in the number of suicide cases in Zambia is worrying hence this study.

2. Methods and Measures

2.1. Research Design

This study used an analytical quantitative cross-sectional study design. An analytical cross-sectional study is a type of quantitative, non-experimental research design. These studies seek to gather data from a group of subjects at only one point in time. The purpose is to measure the association between an exposure and a disease, condition or outcome within a defined population. Cross-sectional studies often utilize surveys or questionnaires to gather data from participants.

2.2. Study Setting

Mtendere and Kaunda Square were the two selected compounds in Zambia's Lusaka province. The research targeted males above the age of 18 years. The main social economic activities in the selected compounds include running barber-shops, selling in grocery shops, and building selling stands for traders. The main social amenities in the selected compounds include local recreational parks, places of worship, and schools which provided education to the young people in the areas. With regards to health; counseling services are free to the men in both selected compounds as well as youth-friendly corners which are mainly used to create a safe space for young people in the selected areas.

2.3. Target Population

The target population of this study was men aged at least 18 years living in Mtendere and Kaunda Square, Lusaka, Zambia.

2.4. Sample Selection

The study used a multistage sampling technique to select participants. Two compounds were randomly selected from Lusaka. Then, using a random number generator, 49 men aged 18 years and above were selected from each of the selected compounds, giving a total sample size of 199 men.

2.4.1. Inclusion Criteria

Males aged 18 years and above and residents of Mtendere and Kaunda Square, Lusaka, Zambia.

2.4.2. Exclusion Criteria

Males who had history of severe mental illness (e.g., schizophrenia, bipolar dis-

order) and those who were currently undergoing treatment for mental illness or physical illness at the time of study.

2.5. Sample Size

Taro Yamane's formula was used to determine the sample size as follows:

$$n = N / \left(1 + N(e)^2 \right)$$

where; N is the population size, e is the margin error and n is the sample size.

Mtendere

$$\begin{aligned} n &= 382 / \left(1 + 382(0.05)^2 \right) \\ &= 195.396 \\ &= 199 \end{aligned}$$

Kaunda square

$$\begin{aligned} n &= 290 / \left(1 + 290(0.05)^2 \right) \\ &= 168.115 \\ &= 168 \end{aligned}$$

2.6. Measures

A semi structured questionnaire was used to collect data. Respondents who were able to write were given the questionnaire to complete on their own and those who were not able to read and were interviewed.

2.7. Data Collection Technique

Before commencing data collection, the researchers introduced themselves to the study respondents and verbal permission obtained. The purpose of the study was explained and assurance of confidentiality made. When the respondents agreed to participate in the study, written consent was obtained. A Self-administered questionnaire was administered to the respondents who were able to read and write, after which they were retrieved. The researchers then conducted semi structured interviews to respondents who were not able read or write.

2.8. Ethical and Cultural Considerations

This research was granted ethical approval by the University of Zambia Biomedical Research Ethics Committee (Ref: 211-08-2023) and the National Health Research Authority of Zambia (Ref: NHRA 00020/26/09/2023) before having contact with respondents. Written permission to conduct the study was obtained from Lusaka City Council, Zambia police and area councilors in Mtendere and Kaunda Square. During the research process, respondents were not subjected to any physical harm as the study did not involve any invasive procedures. Potential risks that could have arisen from asking questions about suicide that might have evoked emotional reactions were explained to the participants. Prior arrangements for counselling and support were made for the anticipated emotion-

al reactions by the participants considering the emotional nature of the topic under study. The respondents answered the questions in a comfortable environment with privacy assured and no public interference. This was done during their free time and within the shortest possible time. The respondents were informed of the nature of the study both orally and in written so that they could make an informed decision regarding their participation.

The researchers also respected the human right of free choice of the participants and the informed consent was obtained from all respondents before collecting data. Anonymity was rendered to all participants and those who wished to withdraw from the research were permitted as it is their right.

2.9. Statistical Analysis

Analysis of data was done using Statistical Package for Social Sciences (SPSS) version 26.0. The Chi-square, Fisher's exact test and Wilcoxon rank sum tests were used to test relationships among variables at a five percent level of significance. P values equal or less than 0.05 were considered statistically significant.

2.10. Theoretical Framework

This study adopted the Social Ecological Model (SEM) to aid in the full exploration of suicidal ideation and its associated factors among men in selected compounds of Lusaka Zambia

2.10.1. Proponents of Social Ecological Framework

This framework was developed by psychologist Urie Bronfenbrenner in the late 1970s, as a way to recognize that individuals affect and are affected by complex range of social influences and nested environmental interactions. This model recognizes that suicidal behavior is influenced by multiple factors comprising individual, interpersonal, community, and societal factors.

2.10.2. Social Ecological Model [10]

The social ecological model uses the multilevel perspective to provide a structured approach to understanding current theories and interventions or prevention efforts for suicide. This framework provides a suitable model for current prevention and intervention for programs to the needs of populations at the individual, interpersonal and societal level. It considers the role of factors such as demographic characteristics, mental health history, and substance use. Interpersonal factors such as relationship problems, social isolation, and perceived social support. Community-level factors such as cultural norms surrounding suicide, access to mental health resources, and neighborhood characteristics. Lastly it highlights the role of societal factors such as poverty, unemployment, and political instability.

3. Results

3.1. Socio-Demographic Characteristics

As shown in **Table 1**, participants had a median age of 29 years (IQR, 27 - 32

years), over half, 216 (58.9%) were single, 278 (75.8%) attained tertiary education and the majority, 359 (97.8%) were Christians.

Table 1. Participant's Socio-demographic characteristics (n = 367).

Characteristic	Category	Frequency (n)	Percent (%)
Age	Median (IQR)	29 (27 - 32)	
Marital status	Single	216	58.9
	Married	121	33.0
	Divorced	22	6.0
	Widowed	8	2.2
Highest education level	Never been to school	17	4.6
	Primary	7	1.9
	Secondary	65	17.7
	Tertiary	278	75.8
Religious affiliation	Christianity	359	97.8
	Islam	8	2.2

3.2. Suicidal Ideation

As shown in **Figure 1**, 75 (20.4%) of the participants had suicidal ideations, while 292 (79.6%) reported no such ideations.

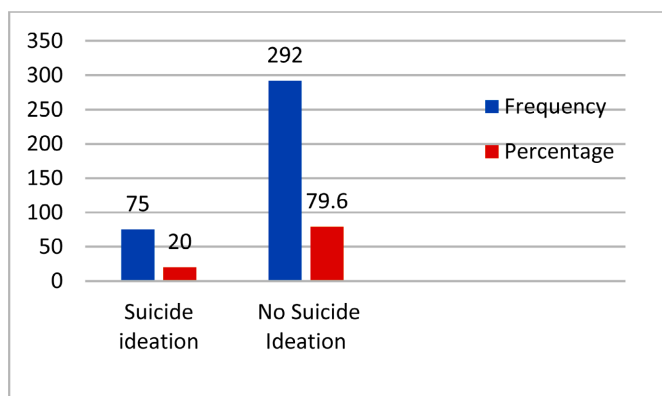


Figure 1. Suicidal ideation among study participants (n = 367).

3.3. Existence of Social Support

As shown in **Table 2** below, most participants reported having a special person around when in need 254 (63.9%), with whom they could share joys and sorrows 270 (73.4%), who cared about their feelings 254 (66.8%) and who was their real source of comfort 255 (69.5%). Participants also reported getting emotional help and support from family 260 (70.8%), having a family willing to help with decisions 254 (69.2%), talking about their problems with friends 196 (53.5%), and receiving help from friends 204 (55.6%).

Table 2. Existence of social support among participants (n = 367).

	Strongly disagree n (%)	Disagree n (%)	Neutral n (%)	Agree n (%)	Strongly agree n (%)
There is a special person who is around when I am in need	25 (6.8)	14 (3.8)	74 (20.2)	158 (43.1)	96 (26.2)
There is a special person with whom I can share joys and sorrows	37 (10.1)	17 (4.6)	43 (11.7)	177 (48.2)	93 (25.3)
My family really tries to help me	15 (4.1)	16 (4.4)	55 (15.0)	208 (56.7)	73 (19.9)
I get the emotional help & support I need from my family	6 (1.6)	22 (6.0)	79 (21.5)	196 (53.4)	64 (17.4)
I have a special person who is a real source of comfort to me	29 (7.9)	15 (4.1)	68 (18.5)	169 (46.1)	86 (23.4)
My friends really try to help me	18 (4.9)	42 (11.4)	103 (28.1)	167 (45.5)	37 (10.1)
I can count on my friends when things go wrong	25 (6.8)	40 (10.9)	111 (30.3)	161 (43.9)	30 (8.2)
I can talk about my problems with my family	5 (1.4)	19 (5.2)	82 (22.3)	204 (55.6)	57 (15.5)
I have friends with whom I can share my joys and sorrows	11 (3.0)	22 (6.0)	88 (25.0)	196 (53.4)	50 (13.6)
There is a special person in my life who cares about my feelings	33 (9.0)	33 (9.0)	45 (12.3)	178 (47.8)	76 (20.8)
My family is willing to help me make decisions	10 (2.7)	27 (7.4)	76 (20.7)	204 (55.6)	50 (13.6)
I can talk about my problems with my friends	18 (4.9)	33 (9.0)	120 (32.7)	165 (45.0)	31 (8.5)

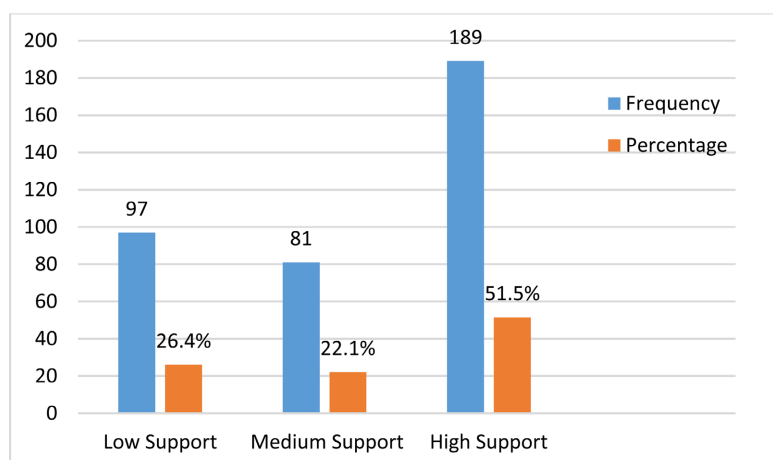
**Figure 2.** Levels of social support experienced among participants (n = 367).

Figure 2 shows that around half, 189 (51.5%) of the participants experienced high social support, whereas 81 (22.1%) and 97 (26.4%) had medium and low social support respectively.

3.4. Experiences of Stress and Stressful Events in the Past Month

As shown in **Table 3**, most participants reported that sometimes they got upset because of something that happened unexpectedly 223 (60.8%), were unable to control the important things in life 215 (58.6%), felt nervous and stressed 189 (51.5%), felt that things were going one's way 175 (47.7%), they could not cope with all the things that they had to do 219 (59.7%), able to control irritations in life 158 (43.1%), felt on top of things 173 (47.1%), and felt difficulties were piling up so high that they could not overcome them 187 (51%). Most of the participants, 223 (60.8%) were angered by things outside their control fairly often.

Table 3. Experiences of stress and stressful events in the past month (n = 367).

	Almost never n (%)	Sometimes n (%)	Fairly often n (%)	Very often n (%)
Being upset because of something that happened unexpectedly	12 (3.3)	223 (60.8)	72 (19.6)	60 (16.4)
Felt unable to control the important things in life	22 (6.0)	215 (58.6)	89 (24.3)	41 (11.2)
Felt nervous and stressed	19 (5.2)	189 (51.5)	111 (30.3)	48 (13.1)
Felt confident about one's ability to handle personal problems	11 (3.0)	97 (26.4)	122 (33.2)	137 (37.3)
Felt that things were going one's way	24 (6.5)	175 (47.7)	105 (28.6)	63 (17.2)
Found that you could not cope with all the things that you had to do	29 (7.9)	219 (59.7)	64 (17.4)	55 (15.0)
Being able to control irritations in one's life	4 (1.1)	158 (43.1)	107 (29.2)	98 (26.7)
Felt on top of things	61 (16.6)	173 (47.1)	64 (17.4)	69 (18.8)
Been angered because of things that happened that were outside of one's control	17 (4.6)	73 (19.9)	223 (60.8)	54 (14.7)
Felt difficulties were piling up so high that one could not overcome them	54 (14.7)	187 (51.0)	90 (24.5)	36 (9.8)

Figure 3 shows that most participants, 347 (94.7%) experienced at least one stressful life event, and the majority, 359 (97.8%) experienced severe levels of stress.

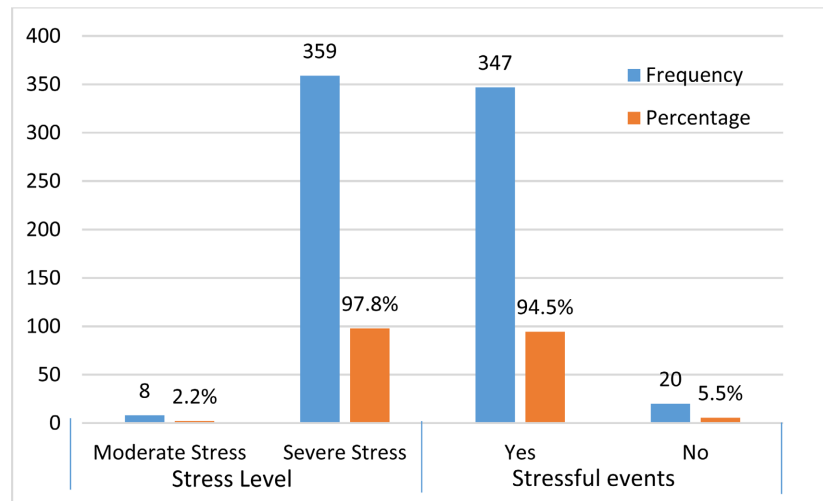


Figure 3. Experiences of stress and stressful events (n = 367).

3.5. Substance Abuse

Table 4 shows that in the past year, most participants reported that they were never unable to stop drinking once started 222 (61.3%), never failed to do what was normally expected because of drinking 255 (70.4%), never often needed a drink in the morning to get going after a heavy drinking session 263 (72.2%), never had a feeling of guilt or remorse after drinking in the past year 207 (56.4%) and were never unable to remember what happened the night before because of drinking 244 (67%). Over a quarter, 98 (26.7%) of the participants had someone else or themselves been injured as a result of their drinking, whereas the majority, 271 (82.9%) reported having had no one concerned about their drinking or suggested that they cutting down.

Table 4. Substance abuse among participants (n = 367).

Characteristic	Category	Frequency (n)	Percent (%)
Frequency of having a drink containing alcohol	Never	162	44.1
	Monthly	123	33.5
	Weekly	48	13.1
	Daily	34	9.3
Often had six or more drinks on one occasion	Never	178	48.5
	Monthly	108	29.4
	Weekly	63	17.2
	Daily	18	4.9
Often found that one was unable to stop drinking once started in the past year	Never	222	61.3
	Monthly	85	23.5
	Weekly	42	11.6
	Daily	13	3.6

Continued

Often failed to do what was normally expected because of drinking in the past year	Never	255	70.4
	Monthly	79	21.8
	Weekly	3	0.8
	Daily	25	6.9
Often needed a drink in the morning to get going after a heavy drinking session in the past year	Never	263	72.2
	Monthly	81	22.2
	Weekly	2	0.6
	Daily	18	4.9
Often had a feeling of guilt or remorse after drinking in the past year	Never	207	56.4
	Monthly	95	25.9
	Weekly	39	10.6
	Daily	26	7.1
Ever been unable to remember what happened the night before because of drinking	Never	244	67.0
	Monthly	93	25.6
	Weekly	10	2.7
	Daily	17	4.7
Ever or someone else been injured as a result of one's drinking in the past year	Yes	98	26.7
	No	269	73.3
Has a relative friend, or health worker been concerned about one's drinking or suggested cutting down, in the past year	Yes	56	17.1
	No	271	82.9

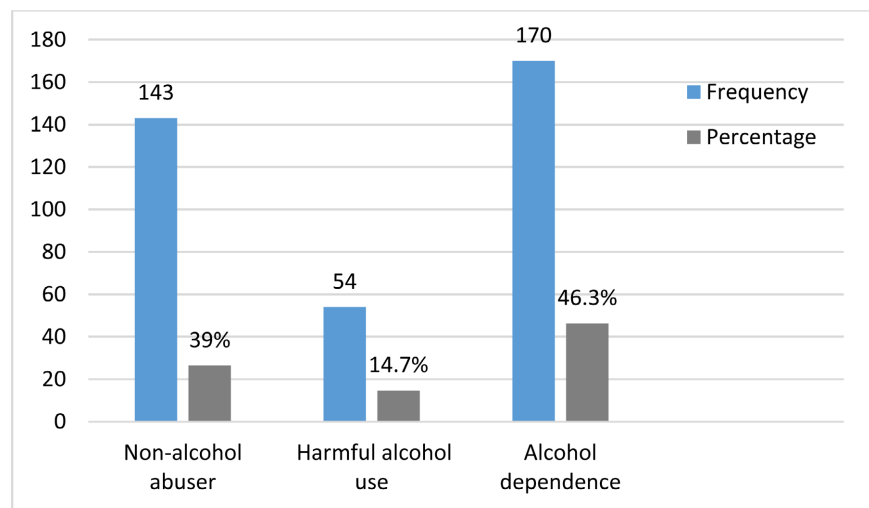


Figure 4. Reported overall substance abuse among participants (n = 367).

As shown in **Figure 4** above, 170 (46.3%) of the participants had alcohol dependence, 54 (14.7%) were harmful users of alcohol while over a third, 143

(39%) were non-alcohol abusers.

Table 5 shows that most participants, 308 (83.9%) reported that there were no organizations dealing with suicide in their area, and 298 (82.8%) indicated that there were no suicide awareness programs in their area. About one-third of the participants estimated suicide rates to be average 116 (32%) or high 116 (32%), and most suggested counseling 80 (21.9%), sensitizations 112 (30.7%), and economic empowerment 78 (21.4%) as suicide mitigation measures.

Table 5. Availability of suicide prevention measures (n = 367).

Characteristic	Category	Frequency (n)	Percent (%)
Availability of any organizations that deal with suicide cases	Yes	59	16.1
	No	308	83.9
Type of organizations that deal with suicide cases	NGO	4	6.9
	Government institutions	48	81.4
	Religious organizations	7	11.9
Availability of awareness programs on suicide	Yes	62	17.2
	No	298	82.8
Opinion on rates of suicide cases	Low	74	20.4
	Average	116	32.0
	High	116	32.0
	Very high	56	15.5
Interventions to curb suicide acts in Lusaka	Counselling	80	21.9
	Financial literacy	4	1.1
	Sensitizations	112	30.7
	economic empowerment	78	21.4
	Support organizations	9	2.5
	Rehabilitation facilities	46	12.6
	Don't know	36	9.9

3.6. Associations between Variables

Table 6 shows that suicide ideation was significantly associated with marital status ($p < 0.0001$), education level ($p < 0.0001$), social support ($p < 0.0001$), stressful events ($p = 0.018$), alcohol abuse ($p < 0.0001$) and availability of organizations dealing with suicide ($p < 0.0001$). Age ($p = 0.329$), religion ($p = 1.000$), and stress level ($p = 1.000$) were not significantly associated with suicide ideation in the study.

4. Discussion of Findings

4.1. Social Demographic Characteristics

Results showed that most of the participants in the current study were relatively

Table 6. Factors associated with suicide ideation among study participants.

Variables	Category	Suicide ideation		Sig.
		Yes, n (%)	No, n (%)	
Age in years	Median (IQR)	29 (26 - 32)	29 (27 - 32)	0.329 ^W
Marital status	Divorced	19 (86.4)	3 (13.6)	<0.0001 ^F
	Married	17 (14.1)	104 (85.9)	
	Single	34 (15.7)	182 (84.3)	
	Widowed	5 (62.5)	3 (37.5)	
Highest education level	None	17 (100)	0 (0.0)	<0.0001 ^F
	Primary	0 (0.0)	7 (100)	
	Secondary	22 (33.9)	43 (66.1)	
	Tertiary	36 (13.0)	242 (87.0)	
Religion	Christianity	74 (20.6)	285 (79.4)	1.000 ^F
	Islam	1 (12.5)	7 (87.5)	
Social support	Low	33 (34.0)	64 (66.0)	<0.0001 ^C
	Medium	15 (18.5)	66 (81.5)	
	High	27 (14.3)	162 (85.7)	
Stress level	Moderate	1 (12.5)	7 (87.5)	1.000 ^F
	Severe	74 (20.6)	285 (79.4)	
Experience of stressful events	Yes	75 (21.6)	272 (78.4)	0.018 ^F
	No	0 (0.0)	20 (100)	
Alcohol abuse	Non-abuser	13 (9.1)	130 (90.9)	<0.0001 ^C
	Harmful use	4 (7.4)	50 (92.6)	
	Dependence	58 (34.1)	112 (65.9)	
Availability of organizations dealing with suicide	No	73 (23.7)	235 (76.3)	<0.0001 ^C
	Yes	2 (3.4)	57 (96.6)	

C = Chi-square test, F = Fisher's exact test, W = Wilcoxon rank sum test.

young (average age = 29 years) largely single, mostly Christians, and attainment of tertiary education was commonly reported (**Table 3**). The distribution of age in the current study is in line with Dendup *et al.* (2020) [11] who also showed that most of their participants were relatively young. The marital status picture observed in the current study did not reflect the Zambia Demographic and Health Survey (ZDHS) report. Given that the current study was conducted only in men, the sample may not have represented the marital status of all gender structures in the country, hence the discrepancy. On the other hand, the distribution of religious affiliation and education attainment among men in the study aligned with the country's demographics according to the ZDHS report of 2018. In this

report, it was revealed that education attainment is relatively high among men compared to women in the country. Some statistics showed that 8% of women have no formal education, compared with only 4% of men with formal education. In addition, 43% of women and 50% of men have attended or completed secondary school. Higher education is relatively rare, only 6% of women and 8% of men have attended or completed a higher education. The free education policy and the declaration of Zambia as a Christian nation could account for the high levels of education and Christianity observed in the study.

4.2. Prevalence of Suicide Ideation

In the current study, the prevalence of reported suicide ideation is estimated at around twenty percent (**Figure 1**). This prevalence is relatively high compared to studies in other settings and therefore raises concern about the mental health of men in the target settings. For instance, the prevalence of suicide ideation in the current study is much higher than that reported in Nepal (13.5%), Malaysia (14.9%), Bangladeshi (13.8%), Ghana (15.2%), and 6% in Malawi [12] [13] [14] [15]. The discrepancy in the prevalences observed could indicate that suicide ideation is generally higher in Mtendere and Kaunda Square compared to other global and regional settings. This would therefore call for necessary measures to mitigate the trend in the two townships. On the other hand, the discrepancies could be a result of variations in various aspects of the studies such as the target populations, study settings, sampling techniques, and sample sizes used.

It was noted that studies in selected settings reported suicide ideation prevalences that were comparable to the current study's findings. In this regard, a study in South Africa revealed that the prevalence of suicidal ideation was 24.5 percent, another study in Ethiopia showed that the prevalence of suicidal ideation was around 23.7 percent, and in Nigeria, the prevalence of suicidal ideation was reported at 21.6 percent [16] [17] [18]. These studies therefore agree with the current study and appear to provide evidence suggesting that the prevalence of suicide ideation could vary between settings. Additionally, the prevalence of suicide ideation in the current study aligns with the opinion of most participants (average to high) when asked about the rates of suicide in their respective townships (**Table 5**). To reduce the prevalence of suicide ideation and consequently suicide rates, the government could focus its interventions on sensitization and economic empowerment of men in the target jurisdictions because these were the common measures suggested interventions to curb suicide acts in the study.

4.3. Factors Associated with Suicide Ideation

The current study showed that several factors significantly affected suicide ideation tendencies among study participants. These factors included socio-demographic characteristics, social support, stressful events, alcohol abuse, and the availability of organizations dealing with suicide in the target townships (**Table 6**). Regarding socio-demographics, findings revealed that suicide ideation was significantly

associated with marital status and education level (**Table 6**). It was noted that higher proportions of divorced men and those with a secondary level education reported suicide ideation tendencies compared to their counterparts. This could indicate mental health challenges that divorced men could be experiencing that might drive them into such ideations. On the other hand, women with only secondary level education could have economic challenges due to their limitations in finding lucrative jobs, which could affect their mental health and consequently prone to suicidal ideation tendencies. Significant associations between suicide ideation and marital status and education level were also reported in a cross-sectional study in Malawi [19]. On the contrary, no significant association was reported between these factors in men in Bhutan [11]. These differences could be due the different target groups, in that the current study only targeted men while the other targeted both genders. Despite these discrepancies, evidence from the current study provides possible action points in mitigating suicide ideation and suicide rates in the two townships.

Furthermore, findings showed that social support, experiencing stressful events, alcohol abuse, and the availability of organizations dealing with suicide in one's township were among the factors that significantly influenced suicide ideation tendencies among study participants (**Table 6**). Results showed that more men who reported low social support, those who experienced stressful events, men with alcohol dependence and those who reported unavailability of suicide support organizations had suicide ideation compared to their counterparts. These findings were in line with findings in Bhutan, Ethiopia and Nigeria that showed high likelihood of suicide ideation among individuals who were substance abuser, and those with poor social support [11] [17] [18]. Similar to the current findings, other studies in Ghana and Malawi also showed that psychological distress and alcohol use were risk factors for suicidal ideation [14] [19]. These findings provide evidence of the negative effects of substance abuse and stress on mental health, which results in negative ideations such as suicide. Additionally, the significant effect of lack of organizations against suicide cannot be ignored as such organizations are vital in providing services that could enhance early screening, detection and management of suicidal behavior and associated mental health problems among men and the general population. This could consequently lead to mental wellness, which could mitigate suicide ideation risk.

5. Implications of Findings to Nursing

5.1. Nursing Practice

Given that suicide ideation was relatively high in the study, nurses should engage in mental health assessment and giving mental health counselling to men seeking routine healthcare. Furthermore, nurses need to intensify their efforts in sensitizing the public on mental health, and to constantly emphasize the importance and benefits of seeking mental health services. This might lead to improved mental health and consequently reduce suicide ideation and actual sui-

cide rates.

5.2. Nursing Administration

The prevalence of suicide ideation observed in the study calls for the nursing administration to work towards the establishment of strategies that to scale-up mental health education, and promoting healthy behaviours. Furthermore, to ensure effective promotion of mental health, management should consider integrating the mental health services into routine health services in order to improve access and uptake among men.

5.3. Nursing Education

Given the high number of men experiencing stressful events and severe stress, there is need to include a comprehensive component on assessment of stress and management and suicide ideations in the mental health nursing training curriculum. This will help nursing students acquire adequate knowledge on suicide ideation and stress assessment and thus enable them provide health education and counselling.

5.4. Nursing Research

This study provides critical evidence on suicide ideation and associated factors in two townships in Lusaka district. Therefore, future nursing research should be conducted in other urban and rural settings in order to for a large evince base for decision making.

5.5. Recommendations

Based on the prevalence of suicide ideation observed among men in Mtendere and Kaunda Square townships, it is recommended that health facilities in these townships enhance the provision of mental health services through integration of mental health assessments and counselling services into routine health care. Moreover, provision of counselling was suggested by most participants as a way to mitigate suicide acts in the district.

There is need for government and supporting partners to establish suicide support organizations in the target townships to enhance access to mental health services among men in the district. This could enhance mental wellness and consequently a reduction in suicide ideation tendencies among men and the general population.

Based on suggestions made by study participants, there is need to sensitize the public on mental health by tailoring efforts to suicide ideation and suicide acts, and on where individuals who need mental health and rehabilitation services could access the services. Additionally, economic empowerment of men through job creation and skills development was commonly suggested as suicide ideation mitigation measure.

Alcohol abuse is another factor that significantly contributed to suicide idea-

tion in men. Therefore, government should consider regulating alcohol use in the townships, but also encourage stakeholders to establish alcohol support groups and sensitization programs that discourage harmful use of alcohol.

Given that social support significantly contributed to suicide ideation, establishment of family support groups in Mtendere and Kaunda Square townships is encouraged.

Other interventions against suicide in the townships should consider marital status, education attainment, and experience of stressful events, as these factors significantly contributed to suicide ideation among men in the current study.

5.6. Conclusion

In Mtendere and Kaunda Square townships, Lusaka, Zambia, suicide ideation tendencies are relatively high among men, with most men experiencing relatively low levels of social support, severe stress levels and alcohol dependence. Marital status, highest education level, social support, experience of stressful events, alcohol abuse and availability of support organizations are among the main factors influencing suicide ideation among men in the townships. It is therefore necessary that, awareness campaigns, support organizations and rehabilitation facilities are established, and mental health services are enhanced in health facilities in Mtendere and Kaunda Square townships. Additionally, empowering men economically should as well be considered among priority measures to address suicide trends in the district.

6. Limitation of the Study

This study is not without limitations. Firstly, this study was conducted only in Mtendere and Kaunda Square townships. Therefore, the findings may not represent the entire population of men in Lusaka district; hence the findings cannot be generalized to the whole district and country. Secondly, this study relied on self-reported information from men, and as such may suffer from recall bias. However, the study provides scientific evidence on which decisions to mitigate suicide ideations can be based.

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Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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