

Research Paper

Socioeconomic Factors as Determinants of Suicidal Behaviors Among Adults in Nigeria



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Suicidal ideation, Suicide attempt, Socio-economic status, Age

ABSTRACT

Objectives Suicidal behavior is seen in the context of a variety of mental disorders and it is believed that suicide has become a serious issue in both developed and developing countries. This study was done to evaluate the associated factors of suicidal ideation and suicide attempt among Nigerian adults.

Methods The data were collected from Federal Medical Center Birnin Kebbi and the Ministry of Health and Welfare in Kebbi State, a nationally representative sample was recruited using a multi-stage clustering method.

Results Female gender, being divorced/widowed, lower education, and lower-income level were associated with suicidal ideation and suicide attempt (OR=1.56; CI=1.31–1.97, OR=1.91; CI=1.09–3.31). In particular, the effect of age on suicidal ideation presented a reverse pattern based on gender; there was a positive association for men and a negative association for women.

Conclusion This study suggested that low education, low-income level, marital status, and age were predominantly associated with the prevalence of suicidal ideation and suicide attempt in women than men.

1. Introduction

Suicide is derived from “self-murder” as a Latin term. It is a tragic act that expresses the person’s desire to die. A suicide attempt is a behavior that the individual has undertaken with a strong intention to die. Suicide is recognized as the third leading cause of death among adolescents globally. Recent World Health Organization (WHO) publications have suggested that Nigeria has one of the highest rates of suicide in the world with estimated >15 cases per 100,000 population [1]. However, it must be emphasized that this rate was generated using modeling methods for Nigeria and other Low-And-Middle-Income Countries

(LAMICs) because these countries do not routinely collect death records and have no reporting systems to document the causes of death. Suicidal ideation is a strong predictor of suicide in both the general population as well as among adolescents [2]. Compared to high-income countries, studies on the prevalence and determinants of adolescent suicide in LAMICs, including many countries in sub-Saharan Africa, such as Nigeria, are limited. Nevertheless, evidence from several studies shows a significant increase in suicide attempts and suicide-related deaths among adolescents and young adults in Africa, including Nigeria and Ghana [3-5]. In a study examining adolescent suicidal behavior among 32 countries in LAMICs using the Global School-based Health Survey (GSHS), selected countries within sub-Sa-

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haran Africa had a relatively higher prevalence of suicidal behaviors among school-going adolescents, compared to the selected LAMICs from other WHO regions (i.e., USA, Eastern Mediterranean, and South-East Asia, and Western Pacific) involved in the study [3]. In 2012, suicide was the second leading cause of death among adults aged between 15 and 29 years [1]. It is well documented that suicide has a negative impact on society. People who lose their loved ones due to committing suicide are likely to suffer from emotional distress. Suicide may also affect economic performance as it reduces the number of working-age populations in a country [2]. More than two-thirds of suicides worldwide occurred in developing countries in 2012 [1].

The top three developing countries in Asia with the highest suicide rates are Sri Lanka, China, and India, with 23.9, 20.8, and 17.36 cases per 100,000 population, respectively [6]. Malaysia ranks fourth with a prevalence of 13.1 cases per 100,000 population [2]. However, it is claimed that this figure is underestimated. In Malaysia, suicide is illegal because of religion (i.e. Islam); thus, many suicide cases are not reported. Although the rate of suicide in Malaysia is not as high as in other developing countries in Asia, it has increased enormously.

About 800,000 human beings die from suicide each year; in other words, every 40s, one person commits suicide. The WHO has estimated the global annual mortality rate to be 10.7 per 100,000 people, with variations across age groups and countries [2]. Globally, suicides are the second leading cause of premature mortality in people between the ages of 15 and 29 (preceded by traffic accidents) and number three in the 15–44 age group [4]. It is a public health issue that is estimated to contribute more than 2% to the global disease burden by 2020, particularly in countries in sub-Saharan Africa where services are scarce [5].

In Nigeria, few studies on suicidal behavior have been done based on data from hospitals. A six-month prospective suicide attempt study in three hospitals in south-western Nigeria [6] found that 39 out of 23,859 (0.16%) of the patients who had been hospitalized had attempted suicide. Another study looked at the pattern of autopsy findings after 11 years of suicide in another city in southwest Nigeria and reported a suicide rate of 0.4 per 100,000 population with a male-to-female ratio of 3.6 to 1 [7]. Both studies found higher rates in males, that the majority of victims were in their twenties, and that the use of pesticides was the most common method of self-harm. In Nigeria, suicide is a criminal offense punishable by imprisonment (Federal Government of Nigeria, 1958). This would certainly discourage those affected from submitting for assessment or treatment, making it difficult to determine the nature, ex-

tent, or correlation of suicidal behavior in the community. For children and adolescents, who make up almost half of Nigeria's population, there is no specific record or data on their patterns of suicidal ideation or behavior or the number of lives lost because of completed suicide.

Although suicide can be prevented if appropriate measures are taken, the suicide rate is still alarmingly high in today's society. This is because the factors that can affect suicidal behavior are not well understood. Therefore, several studies have been conducted on suicidal behavior determinants in the United States [8], Eastern Europe [9], China [10], Korea [11], and other countries [12]. Previous studies have found positive relationships between suicide and low-income level, younger age, female gender, unmarried status and low education [10, 11, 13], and poor health status [14].

However, it should be noted that there are no comprehensive studies on socio-economic factors as a risk factor for suicidal behavior in Nigeria. Accordingly, the objective of the present study was to assess the socio-economic factors that influence suicidal behavior in Nigeria.

2. Methods

Study population

The present study was based on the data from the Federal Medical Center, Birnin Kebbi, and the Ministry of Health and Welfare, Kebbi State. Three registered nurses were trained by the clinical psychologist on how to conduct an interview. The health interviews and health examinations were carried out in mobile examination centers. To select a representative sample, a multi-stage clustering sampling based on the administrative district, place of residence, and residential property (apartment or other than an apartment) were adopted. Institutionalized individuals, such as those staying at hotels, hostels, and hospitals were excluded from the survey. The total sample size used in the present study was 10141 respondents. All the respondents aged 18 years and above were used in the analysis. All subjects were fully informed about the study protocol and a written informed consent that was signed by the subjects or their legal guardians. The selected individuals were not surveyed if their consent was not obtained. The survey was approved by the Medical Research Ethics Committee of the Ministry of Health of Kebbi State (MREC: 13/001/20).

Measures

Assessment of suicidal behaviors

For the evaluation of suicidal behaviors, a face-to-face interview was conducted by the trained nurses. The dependent variables used in the present study were suicidal ideation and suicide attempt, and the related information on these variables was collected. Suicidal ideation and suicide attempt of the subjects was evaluated by asking the following designed questions: 'Do you think about suicide?' and 'Have you attempted suicide?' The respondents who answered 'yes' to the first question were considered to have suicidal ideation and those who responded 'no' were considered controls. If the respondents answered 'yes' to the second question, they were considered to have a suicide attempt.

Socio-demographic factors

In our study, the independent variables consisted of socio-demographic characteristics (income, age, gender, education, occupation, and marital status). Age was classified into five categories for the evaluation of suicidal ideation (18–29 years, 30–39 years, 40–49 years, 50–59 years, and ≥ 60 years) and four categories for the analysis of suicide attempt (30–39 years, 40–49 years, 50–59 years, or ≥ 60 years) because of the low frequency of events. Marital status was defined as married, single, and unmarried (widowed/divorced, which includes subjects who were divorced, separated, or bereaved). Educational attainment was classified into tertiary (≥ 12 years of schooling), secondary (7–11 years), and primary (< 7 years). The respondents reported their monthly income level [in Nigerian Naira (#)] and it was categorized into quartile groups (low, moderately low, moderate, and upper). Occupational status was reclassified into six subgroups: civil servant, business owners, farmer, housewife, retired, and student, and gender was categorized into male, female, and transgender.

Analysis

Multiple logistic regression models were used to determine the association between socio-demographic and lifestyle variables and suicidal ideation and suicide attempt using Odds Ratios (ORs) and 95% Confidence Intervals (CIs) after adjustment for age, marital status, educational level, occupational status, and income. To test for a linear trend of ordinarily categorized variables, individuals were coded as 0, 1, or 2 considering the category of each variable, and tested for multiple linear regression. All analyses were conducted separately for each gender because the factors that influence suicidal behavior are different in men and women [15]. The term statistically significant refers to a P-value of less than 0.05.

3. Results

A total of 1429/1503 (95 %) respondents answered questions about suicidal ideation and suicide attempt. The socio-demographic characteristics of the respondents are listed in Tables 1 and 2. Although age showed no linear correlation with suicidal behaviors, age showed a positive correlation ($P < 0.0009$) with suicidal ideation in men; however, it showed a negative correlation with suicidal ideation in women ($P = 0.0645$). Higher age had a negative association with suicide attempts in both men and women ($P < 0.0004$). Compared to the subjects without suicidal actions, those with suicidal ideation (men: $OR = 3.17$; $CI = 1.22-2.23$, women: $OR = 1.56$; $CI = 1.31-1.97$) or suicide attempt (men: $OR = 2.51$; $CI = 1.32-4.65$, women: $OR = 1.91$; $CI = 1.09-3.31$) were more likely to be divorced/widowed, earn low income ($P < 0.0006$ for suicidal ideation in both genders, $p = 0.0510$ for suicide attempt in women, and $p < 0.0003$ for suicidal attempt in men), and be less educated ($p < 0.0005$ for suicidal ideation and suicide attempt in both genders). Unemployed subjects were found to have slightly higher suicidal ideation ($OR = 1.82$; $CI = 1.41-2.34$), but not a suicide attempt. Among the subgroups of occupation, for both genders (Men and Women) had a higher OR for suicide ideation and suicide attempt; however, the CI for men with suicide attempt was high due to limited incident rates.

4. Discussion and Conclusion

Although suicidal ideation and suicide attempts are varied between countries, both are common problems among adolescents. Previous population-based studies have documented a variety of risk factors for suicide [17-28]. Among determinants related to suicide attempts, the association between age and gender and suicide attempts has been evaluated [29]. We found that individuals with lower education levels had higher rates of suicide attempts. Interestingly, these results show that younger age in men and women was associated only with young age group. In a competitive society, education level may reflect the means to obtain a promotion at work.

In our study, younger age was associated with suicidal activity. This was consistent with the findings of Cui et al. [30], yet inconsistent with several studies reporting that the likelihood of suicide attempts decreased in an inverse proportion to age among adolescents [31, 32]. This is in line with the systematic review (2016), which presented that young adult is significant factors for suicide attempts in the Iranian population. In accordance with this study, in another research on 84,850 subjects from 17 countries, one of the effective factors on suicide attempts was younger age [33, 34].

The differences in suicide attempts across age groups may be the result of interactions between sociocultural, psychological, developmental, family, and environmental factors [35]. Age has a profound effect on suicidal behavior. In our gender-stratified model, there was a negative trend between age and suicidal ideation in women, but there was a reverse trend in men.

Gender differences in suicide attempts were not consistent across different regions, especially in the Western Pacific region, where men showed a higher prevalence of suicide attempts than did women, contrary to the conclusions of most studies in developed countries. The prevalence of suicidal ideation and suicide attempts was higher for women than men in the American and Asian countries; however, the rate of the women-to-men ratio in most of the countries was lower than that of high-income countries, which is approximately 2:1 or 3:1 [36, 37]. We found that women are more likely to have suicidal ideation than men, which is consistent with the findings of Qin et al. [14]. Although in all regions of the world (excluding China) and even in Iran, the suicide rate among men is higher than women, a more interesting matter is that women are more likely to suicide almost 3.2 times more than men. Thus, a higher rate of suicides in men compared to women can be a result of reliance upon the official statistics on suicide and ignorance or underestimating many cases of suicide or suicidal tendencies [38].

In the present study, there was a negative correlation between the level of education and prevalence of suicide behaviors, which is consistent with the findings of Song and Lee [12] who found that individuals who attended college were less likely to have suicidal ideation and suicide attempt than their counterparts who had a primary school qualification. Furthermore, in a systematic review conducted by Li et al. [11] on risk factors on suicide attempts among youths in Korea, they found that educational level was negatively linked to suicide attempts. Similarly, in line with this study, a study in Iran showed that the prevalence of suicide was higher in those with lower educational levels [39].

The impact of income on suicidal behavior has been contentious; however, most recent studies have concluded that low income is a risk factor of suicidal behavior [20-22], which is in line with our findings. In addition to household income, other economic aspects, including recent financial difficulties, unemployment, unfavorable psychosocial working conditions, and subjective uncertainty regarding job insecurity are proposed to be highly significant risk factors for suicide [23, 24].

Concerning marital status, in the present study, unmarried women were likely than married people to have suicidal ideation. This is consistent with the findings of Song and Lee [12] who reported that being divorced and widowhood can increase the likelihood of suicidal thoughts and suicide attempts. Similar findings have been reported by Qin et al. [14]. Finally, we found that unemployment in men was associated with suicidal ideation. We assumed that a different subgroup of non-occupied subjects would present a diverse OR for suicidal behavior. Subjects who were unable to work due to health problems had a significantly higher OR for suicidal ideation and suicide attempt compared to white-collar workers. As regards the impact of economic factors on suicidal behavior, additional studies focusing on different aspects of economic status are warranted.

This study suggested that low education level was predominantly associated with the prevalence of suicidal ideation and suicide attempt in women than men. Occupation, however, was positively associated with suicidal ideation and suicide attempt in both men and women. The low-income level was found with a high prevalence of suicidal ideation and suicide attempt among women than men. Also, marital status in women was associated with suicidal ideation. Age is presumed to be the risk factor for suicidal ideation and suicide attempt among women.

Limitations

Several limitations of the present study should be considered. First, suicidal ideation and suicide attempt were self-reported, which might not reflect the true prevalence. Although studies have suggested the acceptable reliability and validity of self-reported suicidal behaviors among adolescents in rich countries [39], seemingly the measures have not been tested in LAMICs. Secondly, because of the nature of the cross-sectional design, which precludes any inferences regarding causation, factors are difficult to fully explain (i.e., the possibility of reverse causality remains). Finally, we were unable to distinguish the severity of suicidal ideation and suicide attempts among participants in the present study. Further studies focusing on individuals with completed suicide and mental health problems are needed. Exploring factors related to suicide will aid in the planning of public health strategies and the monitoring of policy changes and prevention efforts.

Table 1. Adjusted odds ratios of suicidal ideation and suicide attempt according to socio-economic variables in men with and without suicidal behavior

Socio-economic Variables	%						
	Suicidal Ideation			Suicide Attempt			
	SI	C	OR	SA	C	OR	
Age (year) ^Y	18-29	14.1	19.3	Ref.	23.2	32.2	Ref.
	30-39	19.5	21.6	1.69(1.51-2.62)	29.3	36.5	1.71(0.91-3.53)
	40-49	23.7	21.9	2.11(1.71-3.12)	19.1	14.6	1.52(0.98-3.61)
	50-59	23.3	18.7	2.52(1.92-3.23)	28.5	16.7	1.07(0.47-2.46)
	≥ 60	19.4	18.5	1.72(1.21-2.54)			
P			<0.0009			0.9672	
Marital status	Married	64.6	70.3	Ref.	62.1	73.0	Ref.
	Single	9.5	24.7	1.78(1.33-2.54)	19.9	23.4	1.72(0.77-4.42)
	Unmarried ^Z	25.9	5.0	1.67(1.36-2.24)	18.0	13.6	2.24(1.22-4.55)
P-value			0.0606			0.0920	
Income	Low	23.7	13.0	Ref.	32.9	22.9	Ref.
	Moderate low	28.3	25.4	1.21(0.65-1.01)	26.1	22.1	0.52(0.31-0.85)
	Moderate	23.9	31.5	0.92(0.56-0.98)	31.4	33.0	0.42(0.24-0.80)
	Upper	24.1	30.1	0.72(0.51-0.81)	9.6	22.0	0.44(0.22-0.91)
P-value			<0.0006			0.0510	
Education	Primary	42.8	33.1	0.62(0.52-0.83)	41.2	39.2	0.62(0.55-2.33)
	Secondary	11.2	38.1	0.52(0.42-0.62)	27.8	31.8	0.49(0.41-1.23)
	Tertiary	46.0	28.8	0.48(0.39-0.59)	31.0	29.0	0.32(0.29-0.93)
P			<0.0001			<0.0001	
Occupation	Civil Servant	11.6	10.3	Ref.	12.8	22.2	Ref.
	Business	12.7	14.7	1.16(0.84-1.47)	19.0	18.5	1.22(0.54-2.54)
	Farmer	12.9	19.0	1.32(1.03-1.69)	21.7	16.5	0.56(0.34-1.23)
	Housewife	39.1	20.4	1.78(1.37-2.55)	22.3	22.8	1.34(0.53-2.45)
	Retired	10.7	21.6	2.26(1.68-3.42)	13.5	11.0	1.01(0.80-2.43)
	Student	13.0	14.0	1.17(0.89-1.79)	10.7	9.0	1.25(0.30-1.25)
P			0.0670			0.0657	

SI: Those with suicidal ideation (n=1429 cases).

SA: Those with suicide attempt (n=322 cases) was case.

C: Those with suicidal ideation (control) (n=535cases).

OR (Odds Ratio): Multiple logistic regression analyses adjusted for age, marital status, education, occupation, and household income.

Y: Age was categorized into the age groups of 30–39, 40–49, 50-59, and ≥60 years.

Z: Divorced, separated, or widowed

Table 2. Adjusted odds ratios of suicidal ideation and suicide attempt according to socio-economic variables in women with and without suicidal behavior

Socio-economic Variables	%						
	Suicidal Ideation			Suicide Attempt			
	SI	C	OR	SA	C	OR	
Age (year) ^Y	18-29	16.1	15.3	Ref.	24.2	32.9	Ref.
	30-39	17.5	26.6	0.89(0.53-2.51)	30.3	32.2	1.65(0.88-3.43)
	40-49	22.7	21.9	1.19(1.51-2.82)	15.1	18.6	1.52(0.75-3.41)
	50-59	24.3	15.7	1.72(1.78-2.91)	30.4	16.3	1.01(0.47-2.46)
	≥60	19.4	21.5	1.63(1.34-2.54)			
P-value			0.0645			<0.0004	
Marital status	Married	74.5	71.3	Ref.	68.2	72.0	Ref.
	Single	10.5	21.5	1.28(1.23-2.63)	20.8	24.2	1.62(0.72-4.52)
	Unmarried ^Z	15.0	6.2	1.31(1.27-2.43)	11.0	13.8	2.26(1.12-4.45)
P-value			0.0645			0.0731	
Income	Low	28.6	23.3	Ref.	28.4	26.3	Ref.
	Moderate low	38.3	19.2	1.21(0.66-1.21)	22.2	21.7	0.51(0.32-0.95)
	Moderate	23.9	35.5	0.83(0.55-0.96)	41.4	31.0	0.41(0.22-0.88)
	Upper	7.5	22.0	0.71(0.52-0.88)	8.0	21.0	0.45(0.21-0.91)
P-value			<0.0006			0.0510	
Education	Primary	31.8	32.2	0.56(0.50-0.81)	36.5	36.4	0.54(0.54-2.23)
	Secondary	42.2	39.1	0.52(0.41-0.61)	33.5	34.6	0.44(0.42-1.33)
	Tertiary	26.0	28.7	0.46(0.40-0.56)	30.0	29.0	0.35(0.30-0.95)
P-value			<0.0005			<0.0005	
Occupation	Civil Servant	13.4	11.2	Ref.	16.3	21.4	Ref.
	Business	12.6	15.8	1.14(0.82-1.77)	15.0	18.3	1.12(0.52-2.52)
	Farmer	12.9	20.0	1.33(1.02-1.79)	24.7	19.5	0.54(0.32-1.23)
	Housewife	29.3	22.6	1.79(1.38-2.65)	23.6	24.8	1.35(0.54-2.46)
	Retired	21.7	21.6	2.29(1.69-3.72)	14.5	14.0	1.03(0.81-2.44)
	Student	10.1	30.4	1.19(0.89-1.89)	5.9	2.0	1.25(0.30-1.25)
P			0.0707			0.0707	

SI: Those with suicidal ideation (n=1429 cases).

SA: Those with suicide attempt (n=322 cases) was cases.

C: Those with suicidal ideation (control) (n=535cases).

OR (Odds Ratio): Multiple logistic regression analyses adjusted for age, marital status, education, occupation, and household income.

Y: Age was categorized into the age groups of 30–39, 40–49, 50–59, and ≥60 years.

Z: Divorced, separated, or widowed

Ethical Considerations

Compliance with ethical guidelines

All ethical principles are considered in this article. The participants were informed about the purpose of the research and its implementation stages. They were also assured about the confidentiality of their information and were free to leave the study whenever they wished, and if desired, the research results would be available to them.

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Authors contributions

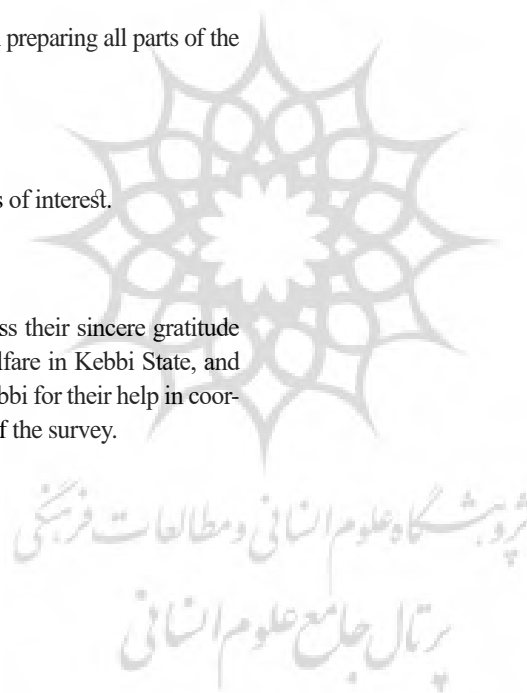
All authors contributed equally in preparing all parts of the research

Conflicts of interest

The authors declared no conflicts of interest.

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مقاله پژوهشی:

عوامل اقتصادی-اجتماعی به عنوان عوامل تعیین کننده رفتارهای خودکشی در بزرگسالان در نیجریه

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چکیده

اهداف: رفتارهای خودکشی در انواع اختلالات روانی دیده می‌شود و اعتقاد بر این است که خودکشی در کشورهای توسعه‌یافته و در حال توسعه به یک مسئله جدی تبدیل شده است. این مطالعه به منظور بررسی عوامل مرتبط با افکار و اقدام به خودکشی در بزرگسالان نیجریه انجام شد. **مواد و روش‌ها:** داده‌ها از مرکز پزشکی فدرال بیرنن کبی و وزارت بهداشت و رفاه در ایالت کبی جمع‌آوری شد. یک نمونه به نمایندگی از کل جمعیت کشور اخذ شد و با استفاده از روش خوشه‌بندی چند مرحله‌ای به‌کار گرفته شد. **یافته‌ها:** جنسیت زن، مطلقه بودن، پیوه شدن، تحصیلات و سطح درآمد پایین با افکار و اقدام به خودکشی مرتبط بود. همچنین، تأثیر سن بر افکار خودکشی یک الگوی معکوس بر اساس جنسیت ارائه می‌دهد. رابطه مثبتی در مردان و رابطه منفی در زنان وجود داشت. **نتیجه‌گیری:** این مطالعه نشان داد که تحصیلات و سطح درآمد پایین، وضعیت تاهل، و سن با شیوع افکار و اقدام به خودکشی در زنان نسبت به مردان ارتباط بیشتری دارد.

تاریخ دریافت: ۰۴ مرداد ۱۳۹۹

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تاریخ انتشار: ۱۰ تیر ۱۴۰۰

کلیدواژه‌ها:

افکار خودکشی، اقدام به خودکشی، وضعیت اقتصادی-اجتماعی، سن

مقدمه

خودکشی در جهان را دارد [۱]. البته، باید تاکید کرد که این نرخ با استفاده از روش‌های مدل‌سازی برای نیجریه و دیگر کشورهای «لامیک» - «کشورهای با درآمد کم و متوسط»^۲ - به دست آمده است، زیرا این کشورها به طور معمول سوابق مرگ و میر را جمع‌آوری نمی‌کنند و هیچ سیستم ثبت برای مستندسازی علل مرگ ندارند.

افکار خودکشی پیش‌بینی کننده قوی خودکشی هم در جمعیت عمومی و هم در نوجوانان است [۲]. در مقایسه با کشورهای پردرآمد، مطالعات در مورد شیوع و عوامل تعیین کننده

خودکشی^۱ اصطلاحی است لاتین به معنی "کشتن خود". خودکشی عملی غم‌انگیز است که تمایل فرد به مرگ را نشان می‌دهد. ارتکاب به خودکشی رفتاری است که فرد با قصد قاطع برای مرگ انجام می‌دهد. خودکشی به عنوان سومین علت اصلی مرگ و میر در بین نوجوانان در سطح جهان شناخته شده است. نشریات اخیر سازمان بهداشت جهانی^۲ نشان داده است که نیجریه، با برآورد بیش از ۱۵ مورد در هر ۱۰۰,۰۰۰ نفر، بیشترین میزان

1. Suicide

2. WHO

3. LAMIC

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یافته‌ها

در مجموع، ۱۴۲۹ (۹۵ درصد) نفر از ۱۵۰۳ نفر، به سوالات مربوط به افکار و اقدام به خودکشی پاسخ دادند. اگرچه سن هیچ ارتباط خطی با رفتارهای خودکشی نداشت، اما با افکار خودکشی در مردان همبستگی مثبت ($P < ۰/۰۰۰۹$) را نشان داد؛ اما افکار خودکشی در زنان یک رابطه منفی را نشان داد ($P = ۰/۰۶۴۵$).

بحث

اگرچه افکار و اقدام به خودکشی در کشورها متفاوت است، اما هر دو از مشکلات رایج نوجوانان هستند. مطالعات قبلی مبتنی بر جمعیت، عوامل مختلفی را برای خودکشی نشان داده است [۲۸-۱۷]. در میان عوامل تعیین‌کننده مربوط به اقدام به خودکشی، ارتباط بین سن و جنسیت و اقدام به خودکشی مورد ارزیابی قرار گرفته است [۲۹]. نتایج پژوهش نشان داد که افرادی با سطح تحصیلات پایین‌تر، درصد بالاتری از اقدام به خودکشی داشتند. جالب است که این نتایج نشان می‌دهند که سن کمتر در مردان و زنان تنها با گروه سنی جوان مرتبط بوده است. در یک جامعه رقابتی، سطح تحصیلات ممکن است منعکس‌کننده ابزارهای ارتقای شغلی در محل کار باشد.

نتایج پژوهش نشان داد سن با فعالیت خودکشی کمتر همراه بود. این با یافته‌های آمس و همکاران [۳۰] همراستا بود، اما با چندین مطالعه دیگر که گزارش دادند که احتمال اقدام به خودکشی در نسبت معکوس با سن در نوجوانان کاهش یافته است همراستا نبود [۳۱، ۳۲]. این نتیجه با «مرور سیستماتیک» (۲۰۱۶) مطابقت دارد که نشان داد افراد جوان در ایران عوامل مهمی برای اقدام به خودکشی هستند. در تحقیقی دیگر بر روی ۸۴۸۵۰ نفر از ۱۷ کشور جهان، یکی از عوامل مؤثر در اقدام به خودکشی، سن کم بوده است [۳۳، ۳۴].

تفاوت در اقدام به خودکشی در گروه‌های سنی ممکن است ناشی از تعامل بین عوامل اجتماعی-فرهنگی، روانی، رشد، خانواده، و محیط باشد [۳۵]. سن بر رفتارهای خودکشی تأثیر عمیقی دارد. در مدل طبقه‌بندی شده جنسیتی در این پژوهش، بین سن و افکار خودکشی در زنان یک روند منفی وجود داشت، اما در مردان یک روند معکوس وجود داشت.

تفاوت جنسیتی در اقدام به خودکشی در مناطق مختلف، به ویژه در منطقه غربی اقیانوس آرام که در آن مردان برخلاف نتایج اکثر مطالعات در کشورهای توسعه‌یافته شیوع بیشتری از خودکشی نسبت به زنان را به خود اختصاص دادند، یکسان نبود. شیوع افکار خودکشی و اقدام به خودکشی برای زنان در کشورهای آمریکایی و آسیایی بیشتر از مردان بود. با این حال، نرخ نسبت زن به مرد در اکثر کشورها کمتر از کشورهای با درآمد بالا بود که تقریباً ۱/۲ یا ۱/۳ است [۳۶، ۳۷].

خودکشی نوجوانان در لامیک‌ها، از جمله بسیاری از کشورهای جنوبی صحرای آفریقا، مانند نیجریه، محدود است. با این وجود، شواهد حاصل از مطالعات متعدد افزایش چشمگیر اقدام و مرگ‌ومیر ناشی از خودکشی در بین نوجوانان و جوانان در آفریقا، از جمله نیجریه و غنا را نشان می‌دهد [۵-۳].

در نیجریه، مطالعات کمی در مورد رفتارهای خودکشی بر اساس داده‌های بیمارستان انجام شده است. یک مطالعه شش‌ماهه اقدام به خودکشی در سه بیمارستان در جنوب غربی نیجریه نشان داد که از ۲۳،۸۵۹ (۱۶ درصد) بیماری که در بیمارستان بستری شده بودند ۳۹ نفر اقدام به خودکشی کرده بودند [۶]. مطالعه دیگری به بررسی الگوی یافته‌های کالبد شکافی پس از ۱۱ سال خودکشی در شهر دیگری در جنوب غربی نیجریه پرداخت و میزان خودکشی ۰/۴ را در هر ۱۰۰،۰۰۰ نفر با نسبت مرد به زن ۳/۶ به ۱ گزارش کرد [۷]. با این حال، باید توجه داشت که هیچ مطالعه جامعی در مورد عوامل اجتماعی-اقتصادی به عنوان یک عامل خطر برای رفتارهای خودکشی در نیجریه صورت نگرفته است. بر این اساس، هدف از این مطالعه ارزیابی عوامل اقتصادی اجتماعی است که بر رفتارهای خودکشی در نیجریه تأثیر می‌گذارد.

روش

جمعیت مورد مطالعه

مطالعه حاضر بر اساس داده‌های «مرکز پزشکی فدرال» در بیرنین کبی^۴ و وزارت بهداشت و رفاه ایالت کبی بود. یک روان‌شناس بالینی، سه پرستار پروانه‌دار را در مورد نحوه انجام مصاحبه آموزش داد. مصاحبه‌ها و معاینات بهداشتی در مراکز معاینه سیار انجام شد. نمونه‌گیری خوشه‌ای چند مرحله‌ای بر اساس منطقه اداری، محل سکونت، و املاک مسکونی (آپارتمان یا غیره) برای انتخاب نمونه نماینده در نظر گرفته شد. افراد سازمانی، مانند کسانی که در هتل‌ها، خوابگاه‌ها، و بیمارستان‌ها اقامت داشتند، از این نظرسنجی حذف شدند. حجم کل نمونه مورد استفاده در مطالعه حاضر ۱۰۱۴۱ بود که از پاسخ‌دهندگان ۱۸ سال به بالا در تجزیه و تحلیل استفاده شد. همه افراد از پروتکل مطالعه کاملاً مطلع شدند و رضایت کتبی آگاهانه از آنان یا سرپرستان قانونی آنها اخذ شد. کمیته اخلاق تحقیقات پزشکی نظرسنجی وزارت بهداشت استان کبی (MREC: ۲۰/۰۰۱/۱۳) این مطالعه را تأیید کرد. برای جمع‌آوری داده‌ها از پرسشنامه‌های ارزیابی رفتارهای خودکشی و عوامل اجتماعی-جمعیتی شناختی استفاده شد.

4. Birnin Kebbi

بنابر اظهار نویسندگان این مقاله تعارض منافع ندارد.

تقدیر و تشکر

نویسندگان از وزارت بهداشت و رفاه در ایالت کبی و مرکز پزشکی فدرال بیرنین کبی برای کمک آنها در هماهنگی و اجرای نظرسنجی قدردانی می‌کنند.

در مطالعه حاضر، بین سطح تحصیلات و شیوع رفتارهای خودکشی همبستگی منفی وجود دارد که با یافته‌های لی و همکاران [۱۱] مطابقت دارد، که نشان می‌داد افرادی که در دانشگاه تحصیل می‌کردند، نسبت به هم‌تایان خود که دارای مدارک ابتدایی بودند، کمتر احتمال داشت خودکشی یا اقدام به خودکشی کنند.

تأثیر درآمد بر رفتار خودکشی مورد اختلاف بوده است. با این حال، اکثر مطالعات اخیر به این نتیجه رسیده‌اند که درآمد کم یک عامل خطر برای رفتارهای خودکشی است [۲۰-۲۲].

در مورد وضعیت تأهل، در مطالعه حاضر، زنان مجرد بیشتر از افراد متأهل به خودکشی فکر کرده‌اند. این با یافته‌های لی و همکاران [۱۱] مطابقت دارد که گزارش کرده‌اند که طلاق و بیوه شدن می‌تواند احتمال افکار خودکشی و اقدام به خودکشی را افزایش دهد.

نتیجه‌گیری

این مطالعه نشان داد که سطح تحصیلات پایین با شیوع افکار خودکشی و اقدام به خودکشی در زنان نسبت به مردان ارتباط دارد. اما شغل با افکار خودکشی و اقدام به خودکشی در مردان و زنان رابطه مثبت داشت. نسبت سطح پایین درآمد در مردان شیوع بالاتری از افکار خودکشی و اقدام به خودکشی داشت. همچنین، وضعیت تأهل در زنان با افکار خودکشی همراه بود. فرض بر این است که سن عامل خطر افکار خودکشی و اقدام به خودکشی در زنان است.

ملاحظات اخلاقی

پیروی از اخلاق پژوهش

اصول اخلاقی تماماً در این مقاله رعایت شده است. شرکت‌کنندگان اجازه داشتند هر زمان که مایل بودند از پژوهش خارج شوند. همچنین همه شرکت‌کنندگان در جریان روند پژوهش بودند. اطلاعات آن‌ها محرمانه نگه داشته شد.

حامی مالی

این تحقیق هیچ‌گونه کمک مالی از سازمان‌های تأمین مالی در بخش‌های عمومی، تجاری یا غیرانتفاعی دریافت نکرد.

مشارکت نویسندگان

تمام نویسندگان در طراحی، اجرا و نگارش همه بخش‌های پژوهش حاضر مشارکت داشته‌اند.

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