

Prevalence of Suicidal Thoughts among a Sample from Baghdad

Ameel Alshawi^{1*}, Riyadh Lafta² and Ahmed Al-Nuaimi³

¹College of Medicine, Mustansiriyah University, Iraq

²University of Washington, Seattle, WA, USA

³Department of Community Medicine, College of Medicine, Baghdad University, Jadriyah, Baghdad, Iraq

*Corresponding author: Ameel Alshawi, College of Medicine, Mustansiriyah University, Iraq, Tel: +251-910-35-25-15; E-mail: ameelalshawi@gmail.com

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Abstract

Background: The Iraqi people witnessed and are still witnessing the painful and terrible consequences of mass violence and military operations which are reflected on their general life condition.

Objective: To estimate the prevalence of suicidal thoughts among a sample from Baghdad city and highlight some of the probably associated factors.

Methods: This cross-sectional study was conducted in Baghdad city during the period from January 2013 through January 2014. A multistage sampling technique was adopted to choose 13 primary health care centres and eight colleges from three universities in Baghdad. The questionnaire included some demographic variables, history of alcohol drinking and of sedative, narcotic, and psychotic drug usage. Suicidal thoughts were measured via a modified item 9 of Patient Health Questionnaire (PHQ-9).

Results: Suicidal thoughts were reported in 155 (15.5%) of the participants, 4.2% reported alcohol drinking and 4.8% had a history of using sedative drugs. the prevalence of suicidal thoughts is higher among females (19.31%) compared to males (10.36%).

Conclusions: suicidal thoughts are not uncommon in the Iraqi population as a consequence of the continuous and accelerating situation of violence that they are experiencing; these thoughts are strongly related to female gender (especially housewives), low level of education and drug usage.

Keywords: Suicidal thoughts; Prevalence; Baghdad; Iraq

Introduction

Suicide is a global phenomenon in all regions of the world; 75% of global suicide occurred in low- and middle-income countries in 2012. Suicide accounted for 1.4% of all deaths worldwide, making it the 15th leading cause of death in 2012 [1]. Studies have indicated that people are more likely to have suicidal thoughts when they are depressed and have physical symptoms concomitantly [2].

Suicidal thoughts are considered as a subtype of suicidal behaviour, which also includes: attempted suicides-also called "Para-Suicide" or "deliberate self-injury" and completed suicides, all fall under the category of self-directed violence [3].

Mental disorders (particularly depression and alcohol use disorders) are a major risk factor for suicide in Europe and North America; however, in Asian countries impulsiveness plays an important role, generally suicide is a complex matter with psychological, social, biological, cultural and environmental factors [4].

Iraq and violence: For more than three decades, the Iraqi nation as a whole has been suffering from wars, sanctions and urban violence [4,5].

The Iraqi people witnessed and are still witnessing the painful and terrible consequences of car bombing, mass violence, and military

operations [6]. However, few reports demonstrated the effect of exposure to wars and conflicts on the mental health of Iraqi population [7,8]. A survey conducted by the International Organization for Migration found that there are more than 177000 internally displaced families because of direct threats to life (61%), generalized violence (47%), and fear (40%). An estimated one million of Iraq's displaced persons were without adequate access to shelter and food, and 300000 are without access to clean water [9]. These stressful conditions make people more vulnerable to psychological problems, PTSD and suicidal thoughts. Studies on suicide in Iraq and other Arab countries are scarce. The objective of this study is to estimate the prevalence of suicidal thoughts among a sample of adults in Baghdad and highlight some of the associated factors.

Methods

This cross sectional study was conducted in Baghdad city; the centre of Baghdad (the capital of Iraq) during the period from January 2013 through January 2014. The target population age between 18-59 years. The source of data collection was from:

Primary health care centres (PHCCs)

A multistage random sampling technique was used. Baghdad is divided into 16 health sectors, out of these; five sectors were chosen by a simple random technique, the total number of PHCCs in these five

sectors was 60 with a mean number of 12; three PHCCs were chosen from each large sector (contains more than 12 PHCCs) and two from each small sector (with less than 12 PHCCs) through a simple random sampling to achieve equity of choosing PHCCs according to the density of its distribution. So, 13 PHCCs from the two main sides of Baghdad city were collected that represent central and peripheral sectors. Each PHCC was visited for 2-3 weeks to collect data from daily attendants, through a systematic random sampling technique by including every fourth one.

Universities

A multistage random sampling technique was adopted by selecting three universities out of the five that are present in Baghdad through a simple random sampling technique, then some colleges were selected from each university and one grade from each college again by a simple random technique; all students of that stage, who were available at the time of data collection, were included in the sample. Teachers were also included in the sample for they are available, cooperative, and of wide spectrum of age.

Instruments

Study instruments

A well-structured questionnaire was developed by the researchers, translated to Arabic (local language), and validated. The questionnaire inquired about demographic information: age, current education level, marital status, and occupation, history of alcohol drinking and history of sedative, narcotic, psychotic drug usage. Suicidal thoughts were measured via a modified item [9] of Patient Health Questionnaire (PHQ-9) [10] Thoughts that “would be better off dead, or of hurting themselves” in some way during last week. Suicidal thoughts are considered positive when there is history of frequent thoughts. Responses ranged from “not at all” to “most of time 5-7 days.”

The questionnaire was filled through a direct interview with participants after explaining to them the meaning of some questions that might be difficult for them to understand, the time of the interview ranged between 10-15 minutes.

Ethical issue

This is a very sensitive issue (considering the Iraqi culture), The questionnaire form was anonymous and self-administered to avoid causing any embarrassment to the respondents. The researcher explained to the respondents the aim and concept of the research, assuring them that the information inquired in the questionnaire will be kept strictly confidential, restricted exclusively to the researchers, and will not be used for other than research purposes. The subjects were given the choice to participate or not. The interview was conducted in a separate place to achieve privacy.

Data Analysis

Data entry followed by descriptive and analytic statistics were performed using the Statistical Package for Social Science (SPSS-version 21). Chi square was used to measure the association between variables. P value of less than 0.05 was considered as a cut-off point for statistical significance.

Results

A total of 1040 subjects were surveyed and 1000 were responded making a response rate of 96.2 %. The respondents' age ranged from 18 to 59 years with a mean of 32.08 ± 11.169 , females constituted a higher proportion (58.3%) of the study sample, 603 (60.4%) of the participants had University/Diploma as highest level of education, 59.3% of them were married, other demographic characteristics are summarized in Table 1. In respect to substance usage; 4.2% reported alcohol drinking and 4.8% had a history of using sedative drugs (Table 2).

	N=1000	N	%
1	Gender		
	Female	583	58.3
	Male	417	41.7
	Total	1000	100
2	Age group (years)		
	18-29	498	49.9
	30-39	227	22.7
	40-49	177	17.7
	50-59	96	9.6
	Total	998*	100
3	Highest level of education		
	Primary school	135	13.5
	Intermediate	127	12.7

	Secondary	122	12.2
	University/Diploma	603	60.4
	Post graduate	12	1.2
	Total	999*	100
4	Marital status		
	Single	362	36.5
	Married	588	59.3
	Divorced	12	1.2
	Widowed	29	2.9
	Total	991*	100
5	Occupation of participants		
	Governmental employee	327	32.8
	Non-Governmental employee	6	0.6
	Private work	118	11.8
	Student	317	31.8
	Housewife	210	21
	Unemployed	10	1
	Retired	10	1
	Total	998*	100
*Missed/unanswered questions were neglected.			

Table 1: Socio-demographic characteristics of the study sample.

	N=1000	N	%
1	Alcohol drinking habit		
	Never drank alcohol	949	95.8
	Ever drank alcohol	42	4.2
	Total	991	100
2	Being on sedative drugs		
	No	837	95.2
	Yes	42	4.8
	Total	879*	100
*Missed/unanswered questions were neglected.			

Table 2: Frequency distribution of substances usage.

Thoughts that they would be better dead, or hurting themselves in some way were reported in 155 (15.5%) of the participants (Table 3).

As shown in Table 4 the prevalence of suicidal thoughts is higher among females (19.31%) compared to males (10.36%) with a

statistically significant association between gender and suicidal thoughts ($P < 0.0001$). No significant association was found between suicidal thoughts and age or marital status of the participants.

Thoughts	Frequency	%
None or little thoughts	840	84
Have frequent thoughts of death	155	15.5
Total	995	99.5

Table 3: Frequency of thoughts of death among the participants.

Regarding level of education; the prevalence of suicidal thoughts is significantly higher among those with primary school education (22.96%) compared to other categories of education. There is also a statistically significant association between occupation and frequency of suicidal thoughts, the housewives registered the highest prevalence of such thoughts (23.33%).

Thoughts of Death							
		Total	None or little thought	%	frequent thoughts of death	%	P* value
Gender	Female	580	468	80.69	112	19.31	0
	Male	415	372	89.64	43	10.36	
Age group (years)	18-29	497	416	83.7	81	16.3	0.578
	30-39	226	190	84.07	36	15.93	
	40-49	176	148	84.09	28	15.91	
	50-59	94	84	89.36	10	10.64	
Marital status	Single	362	309	85.36	53	14.64	0.579
	Married	585	493	84.27	92	15.73	
	Divorced	11	8	72.73	3	27.27	
	Widowed	29	23	79.31	6	20.69	
Educational Primary level		104	77.4	31	22.96	0.035	
	Intermediate	126	103	81.75	23	18.25	
	Secondary	120	105	87.5	15	12.5	
	University/Diploma	601	516	85.86	85	14.14	
	Post graduate	12	12	100	0	0	
Occupation	Governmental employee	322	283	87.89	39	12.11	0.005
	Non-Governmental employee						
	Private work	118	105	88.98	13	11.02	
	Student	317	264	83.28	53	16.72	
	Housewife	210	161	76.67	49	23.33	
	Unemployed	10	10	100	0	0	
	Retired	10	10	100	0	0	
*P value of Chi square test							

Table 4: Relation of thoughts of death to demographic variables.

Table 5 revealed a statistically significant association between suicidal thoughts and history of drug usage ($P < 0.0001$), but not with history of alcohol drinking.

		Thoughts of death					
		Total	None or infrequent thoughts	%	Frequent thoughts of death	%	P* Value
Alcohol drinking habit	Never drank alcohol	944	800	84.75	144	15.25	0.27
	Ever drank alcohol	42	33	78.57	9	21.43	
Being on addictive drugs	No	835	717	85.87	118	14.13	0.003
	Yes	41	27	65.85	14	34.15	

*P value of Chi square test.

Table 5: Relation of suicidal thoughts to substances usage.

Discussion

Health outcomes in Iraq generally were the poorest among the region, and well below the levels found in comparable income countries [11]. Iraqis have witnessed a depletion of social capital, which led to social deprivation in most sectors of the society [12].

In the current study; females constituted a higher proportion of the sample at the time of data collection, this could be attributed to the general condition of the country which led to some demographical changes as violence was a leading cause of death in men during the period following 2003 invasion [13]. In addition to the continuous abroad migration of males especially from Baghdad [14], many reasons were there particularly security problems.

Frequencies of alcohol drinking (4.2%) and of drug usage (4.8) among the participants are higher than what was reported in Iraqi Mental Health Survey (IMHS) (0.7% and 0.2% respectively) [15] this might be attributed to the differences in the methods, questionnaires and in the sampling techniques; however, there is a sort of underestimation in the prevalence of substance abuse among the Iraqi population as researches that dig for that are scarce and limited [16], besides, reporting such information is considered as a sensitive issue in the Iraqi culture.

Thoughts that “they would be better dead or hurting themselves in some way” were reported in 15.5%, this gives a hint about the level of deterioration in the psychological conditions and general frustration/depression that is affecting the Iraqi individuals after repeated and continuous accumulation of stress during the last decades. This finding is higher than what was reported among household heading women in Baghdad (8.6%) [17].

Females have more thoughts of suicide compared to males, this finding is consistent with what was reported in the literature as females are more predisposed for mental health problems [18] and being a female is considered as one of the internal characteristics of vulnerability factors for adverse effect of trauma exposure [19,20]. Many studies have pointed out a strong relationship between gender and mental illness, with female gender being more vulnerable and more likely to admit having mental illness, yet more reluctant to seek help from mental health professionals [21]. Regarding the occupation; housewives registered the highest frequency, this might be attributed to the fact that a high quota of women in Iraq is housewives, besides; many women suffered a triple burden of fear, difficult security and

economic condition in addition to frequent loss of a husband or a son, this makes them more vulnerable to have suicidal thoughts [22].

A non-significant association was found between suicidal thoughts and history of alcohol drinking while a positive association was found with drug usage, many factors could be playing a role in drug usage such as effect of peer relationships - it is well known that peers, especially friends, play an important role in adolescents' psychosocial development; peers may affect adolescents' behaviours and emotions through socialization processes, a phenomenon more generally referred to as peer influence [23]. Literatures revealed that stressful social events have an important role in suicide [24].

It can be concluded from this study that suicidal thoughts are not uncommon in the Iraqi population as a consequence of the continuous and accelerating situation of violence that they are experiencing, these thoughts are strongly related to female gender (especially housewives), low level of education and drug usage. Yet; we think that there is an element of underestimation (due to underreporting) as this issue is highly sensitive in our culture and could be considered as a religious or social stigma.

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