

## Suicidal ideation among a group of depressed outpatients

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### Abstract

**Background and objective:** Suicide is a common problem worldwide; the suicidal ideation is a predictor of suicide. This study aimed to shed light on the demographic as well as clinical risk factors for suicidal ideation among depressed outpatients.

**Methods:** A total of 100 depressed patients who visited the psychiatric outpatient department of Hawler Teaching Hospital from August 2015 to January 2016 were assessed for the suicidal ideation and risk factors of suicidal ideation by adopting standardized diagnostic and symptoms rating scales.

**Results:** Suicidal ideation was present in 64% of patients; significant predictors for suicidal ideations were previous suicide attempt, the severity of depression and hopelessness.

**Conclusion:** Suicidal ideation is highly prevalent among psychiatric outpatients with major depression. Those patients discovered to have risk factors are in great need of help to prevent future suicide.

**Keywords:** Suicidal ideation; Depression; Risk factors

### Introduction

Suicide is a complicated health problem and is a leading cause of death in the world and carrying high mortality rates.<sup>1</sup> Suicidal ideation is a predictor of committing suicide in the general society.<sup>2</sup> Suicide ideation contains huge variety of expressions, from death wishes to thinking about plans to commit suicide.<sup>3</sup> McAuliffe stressed on the clinical utility of suicidal ideation as a sign for the assessment of risk factors and its prevention.<sup>4</sup> Depressive disorders were found to be one of the commonest diagnoses in a sample of patients who tried to attempt or completed suicide.<sup>5</sup> Precise basic data on the prevalence and risk factors for suicide and its immediate precursors: suicidal ideation, plans, and attempts, are not available in many countries in the world, especially those that are less developed.<sup>6</sup> Many psychosocial risk factors have also been reported to be significantly associated with suicide such as marital separation, unemployment, poor socio-economic status, living alone, early parental deprivation, a recent migration,

history of suicidal behavior in the family, psychopathology, physical illness and presence of stressful life events.<sup>7</sup> Suicidal ideation was roughly three times higher in a person reporting daily depressed mood even after controlling for covariates such as mood disorder.<sup>8</sup> Depression and hopelessness form a significant composite predictor of suicide ideation.<sup>9</sup> The present study aimed to examine both the rate and the risk factors of suicidal ideation among a group of depressed outpatients and to know the relation between the severities of depression, hopelessness with suicidal ideation.

### Methods

This article presents data of a study of the prevalence of suicidal ideation & risk factors of suicidal ideation among depressed outpatients. The study population was selected from the adult psychiatric outpatients in Hawler Psychiatric Teaching Hospital in Erbil City. A total of 130 patients with a clinical diagnosis of a depressive disorder were

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recruitment within the study period of August 2015 to January 2016. Eligible subjects included psychiatric outpatients between the ages of 18 to 85 years that were diagnosed with depressive disorder according to DSM-5. Exclusion criteria included the patient not giving consent, the presence of comorbid alcohol and substance misuse, except nicotine, as well as comorbid neuromedical conditions. We excluded 30 patients of which ten did not complete the interview questions, 15 patients were not included because of disabling neuromedical conditions and five showed substance dependency. For the study, a written official permission has been taken from Hawler Psychiatric Teaching Hospital in Erbil City as well as patient's informed consent. Ethical approval was obtained from the 'Research Ethics Committee' of the College of Medicine, Hawler Medical University. Informed consent had been obtained, stressing on the anonymity of individuals as well as a detailed explanation of the purpose of the study for participants. The author did the interviews in a private room. Subjects were given assurance of confidentiality. The following data on socio-demographic and clinical factors were gathered during the clinical interview: Age, gender, educational state, occupation, marital state, socioeconomic state, past history of depression, past history of suicidal attempts, family history of depression and suicide. For the purpose of diagnosis, the researcher relied on the Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> ed., Text Revised criteria for the diagnosis of depression.<sup>10</sup> The Beck Depression Inventory (BDI) was used to assess the severity of depression. The BDI is a 21-item self-report instrument used to assess the severity of depression in adults. Each of the 21 symptoms is represented by four statements reflecting increasing levels of severity, and each item is rated from 0 to 3. The scoring done by summing the 21 ratings and the total score ranges from 0 to 63.<sup>11</sup>

Beck's hopelessness scale was used to assess hopelessness. The BHS consists of 20 true-false statements made to assess the level of positive and negative beliefs about the future. We get scores by summing the keyed responses of pessimism for each of the 20 items. The total scores of Beck hopelessness scale ranges from 0 to 20.<sup>12</sup> We used the Social Readjustment Rating Scale (SRRS) to assess the magnitude of life event changes within the past 12 months.<sup>13</sup> The Scale for Suicidal Ideation (SSI) an interviewer-administered rating scale, was used by the researcher to assess the severity of suicidal ideation. The scale of suicidal ideation consists of 19 items which can be used to assess a patient's suicidal intentions. It can also be used to check a patient's response to interventions over time. The total score for the 19 items is calculated. The minimum score is 0 and the maximum score is 38. Higher scores indicate greater suicidal ideation. In this study, suicidal ideation refers to patients who have scores more than 6 in the Scale for suicidal ideation.<sup>14</sup>

### Statistical analysis

Data were analyzed using the statistical package for the social sciences (SPSS, version 19). Chi square test of association was used to compare between proportions. When the expected count of more than 20% of the cells of the table was less than 5, Fisher's exact test was used. A P value of ≤0.05 was considered statistically significant.

### Results

We studied 100 depressed outpatients. The minimum age of the participants was 18 and the maximum age was 85, with a mean ( $\pm$  SD) of  $33.20 \pm 11.78$  years old. Most of them (42%) were between 25 and 34 years, 81% were females, 75% were married, and 63% were housewives and unemployed. Details of demographic data are shown in Table 1.

**Table 1:** Demographic data of the study sample.

Demographic data	Frequency	Percent
<b>Gender</b>		
Female	81	81
Male	19	19
<b>Age</b>		
18-24	21	21
25-34	42	42
35-44	22	22
45-85	15	15
<b>Marital status</b>		
Single	20	20
Married	75	75
Divorced	5	5
<b>Educational status</b>		
Illiterate	29	29
Primary	27	27
Secondary	19	19
Institute& more	25	25
<b>Occupation</b>		
High rank	4	4
Nonmanual jobs	26	26
Manual workers	7	7
Housewife/unemployed	63	63
<b>Socioeconomic state</b>		
Low	33	33
Medium	35	35
High	32	32
<b>Total</b>	100	100

Among the studied group, 64% of the depressed outpatients have scores more than 6 which considered having moderate to high suicidal ideation. Significant association found between female gender

& suicidal ideation with a ( $P = 0.027$ ). No significant association was found between age group, marital status, occupation and socioeconomic status with suicidal ideation as shown in Table 2.

**Table 2:** Association between socio-demographic data and stress events with suicidal ideation.

Categories		Suicidal ideation Negative <6 scores		Suicidal ideation Positive >6 scores		Total	<i>P</i> value
		No.	%	No.	%		
<b>Age</b>	18-24	3	14.3	18	85.7	21	0.075*
	25-34	15	35.7	27	64.3	42	
	35-44	11	50	11	50	22	
	45-85	7	46.7	8	53.3	15	
<b>Gender</b>	Female	25	30.9	56	69.1	81	0.027*
	Male	11	57.9	8	42.1	19	
<b>Education</b>	Illiterate	8	27.6	21	72.4	29	0.363*
	Primary	12	44.4	15	55.6	27	
	Secondary	5	26.3	14	73.7	19	
	Institute & more	11	44	14	56	25	
<b>Marriage</b>	Single	4	20	16	80	20	0.179**
	Married	31	41.3	44	58.7	75	
	Divorced	1	20	4	80	5	
<b>Occupation</b>	High rank	1	25	3	75	4	0.051**
	Non-Manual jobs	14	53	12	46	26	
	Manual worker	4	57	3	42	7	
	Housewife& unemployed	17	27	46	73	63	
<b>Socioeconomic state</b>	Low	13	39.4	20	60.6	33	0.522*
	Medium	10	28.6	25	71.4	35	
	High	13	40.6	19	59.4	32	
<b>Stressful events</b>	Low	20	40.8	29	59.2	49	0.434*
	Medium	8	26.7	22	73.3	30	
	High	8	38.1	13	61.9	21	
<b>Total</b>		36	36	64	64	100	

\* Pearson Chi – Square

\*\* Fisher's Exact Test

No significant association was found between past history of depression, family history of depression and family history of suicide with suicidal ideation. There was a significant association between past history of suicidal attempt and

suicidal ideation ( $P = 0.006$ ) as shown in Table 3. The severity of depression and hopelessness were significant predictors for moderate to high suicidal ideation ( $P < 0.001$ ) as shown in Table 4.

**Table 3:** Association between past history, family history of depression and suicide with suicidal ideation.

<b>Categories</b>	<b>Suicidal ideation Negative &lt;6scores</b>		<b>Suicidal ideation Positive &gt;6scores</b>		<b>Total</b>	<b>P value</b>
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>		
Past history of Depression	No	10	35.7	18	64.3	0.970*
	Yes	26	36.1	46	63.9	
Past history of Suicide	No	33	43.4	43	56.6	0.006*
	Yes	3	12.5	21	87.5	
Family history of Depression	No	25	36.2	44	63.8	0.943*
	Yes	11	35.5	20	64.5	
Family history of suicide	No	35	38.5	56	61.5	0.151**
	Yes	1	11.1	8	88.9	
Total		36	36	64	64	100

\* Pearson Chi-Square

\*\* Fisher's Exact Test

**Table 4:** Association between severity of depression and hopelessness with suicidal ideation

<b>Categories</b>	<b>Suicidal ideation Negative&lt;6 scores</b>		<b>Suicidal ideation Positive&gt;6 scores</b>		<b>Total</b>	<b>P value</b>
	<b>No.</b>	<b>%</b>	<b>No.</b>	<b>%</b>		
Severity of Depression	Mild	3	100	0	0	<0.001**
	Moderate	18	72	7	28	
	Severe	13	31	29	69	
	Extreme	2	6.7	28	93.3	
Severity of Hopelessness	Mild	13	81.3	3	18.8	<0.001*
	Moderate	17	42.5	23	57.5	
	Severe	6	13.6	38	86.4	
Total		36	36	64	64	100

\* Pearson Chi-Square

\*\* Fisher's Exact Test

## Discussion

To our knowledge, this is the first study has been done in Erbil City about the prevalence and risk factors of suicidal ideation among depressed outpatients. There were high rates of suicidal ideation among studied group. Among demographic factors, only female gender associated with suicidal ideation. Other findings of the study indicate that the strongest predictors of suicidal ideation among patients with major depression are the history of suicide attempt, the severity of depression and hopelessness. A high proportion (64%) of the studied samples had suicidal ideation. This higher figure compared to 58% in Sokero et al.'s study,<sup>15</sup> which consisted of a mixed group of inpatients and outpatients, is probably reflective to the severity of depression and hopelessness among our sample group. This finding needs future assessment and study of compliance of patients with drugs. Our results are slightly lower than study has been done among depressed inpatients in Malaysia<sup>16</sup> were 75% of them have suicidal ideation, is probably reflective of the greater severity of depression among cases need hospitalization than depressed outpatients. Our study showed that past history of suicidal attempt significantly associated with suicidal ideation with ( $P = 0.006$ ). Our study results are in agreement with that reported by Oquendo et al.,<sup>17</sup> as well as to the study done among psychiatric outpatients in Ethiopia.<sup>18</sup> A total of 24% of our studied depressed patients reported a past history of suicidal attempt(s), for which 87.5% showed current moderate to high suicidal ideation. This finding was in agreement with all other previous relevant studies.<sup>16,19,20</sup> This emphasizes the importance of obtaining a thorough past psychiatric history for the purpose of evaluating the risk of suicide. Hopelessness found to be significantly associated with suicidal ideation ( $P < 0.001$ ). The predictive value of hopelessness in terms of eventual suicide has been shown by Beck et al.<sup>21</sup> Previous

researchers also found hopelessness as predictors for suicide.<sup>21</sup> There was general agreement between our findings and previous literature in regard to the association between hopelessness and high suicidal ideation.<sup>15,19,22</sup> These results are particularly significant because hopelessness is a set of beliefs that can be specifically detected and changed through treatment. In fact, recent research has indicated that patients whose hopelessness doesn't change with psychiatric treatment may be more likely to commit suicide.<sup>23</sup> A high proportion (69%) of those with severe depression had moderate to severe suicidal ideation and 93.3% of those with extreme depression had moderate to severe suicidal ideation. There was a significant relationship between severity of depression and suicidal ideation with a ( $P < 0.001$ ). These results are in agreement with previous researches.<sup>15,17,24</sup> Studies in developed countries suggest >90% of those who commit suicide have a diagnosable mental disorder and >60% have a mood disorder in particular.<sup>26</sup> So detection and evaluation of depression severity are of particular importance of recognizing cases at risk of suicide. We must pay great attention to our results as the majority of outpatient samples have sever to extreme depression who considered high risk group. These results indicate that may be our patients consulted psychiatrist late or they have poor compliance to drugs. Evaluating depression severity and hopelessness might provide clinicians with a better indication of the level of risk for suicidal ideation. In terms of sociodemographic variables, only female gender was associated with suicidal ideation with a ( $P = 0.02$ ); these results were in agreement with previous studies.<sup>26, 27</sup> We didn't find an association with other sociodemographic factors like age, employment, education and marital status. Our results are in agreement with a study done by Van Gastel et al.<sup>19</sup> These results are inconsistent with a cross-national study

done by Nock et al.<sup>27</sup> were they find an association with these demographic factors. However, to get a more comprehensive result in this area, a study with a larger sample should be conducted to get more precise results about demographic factors & suicidal ideation. The limitations of this study include the inability to get detailed history about previous episodes of depression and suicidal attempts. Due to the relatively small sample size, this study couldn't detect other risk factors for suicidal ideation. Future prospective studies needed to study demographic and other factors.

### Conclusion

Suicidal ideation among psychiatric outpatients with depression is markedly prevalent. Female gender, past history of the suicidal attempt, the severity of depression and hopelessness are associated with current suicidal ideation. These findings suggest that in addition to obtaining a detailed history of previous suicidal behavior, clinicians should pay attention to several factors in identifying patients at higher risk so that they can be monitored more closely. These factors include assessment of suicidal ideation, the severity of depression and hopelessness. An awareness of the rate and risk factors for suicidal ideation may assist in preventing future suicide.

### Conflicts of interest

The author reports no conflicts of interest.

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