

## Study on Prevalence of Suicidal Ideation and Risk Factors of Suicide Among Industrial Workers (Case Study in West Tehran Industries)

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### Abstract

Suicide is one of the most important and complex issues in today's society, which causes many concerns and discussions at the global level. According to the statistics of Iran's police force, an average of 4183 people committed suicide between 2014 and 2018. Studies have shown that various factors contribute to the increase in suicide rates among workers. Considering the importance of the subject, in the present study, we examined suicidal thoughts among industrial workers in west Tehran. In this study, 120 workers working in industries in west Tehran were selected by simple random sampling method. Data collection was done using a semi-structured interview and the Beck Scale for Suicidal Thoughts (BSS) as well as a researcher-made questionnaire related to social, economic and political problems. According to the results of this study, economic problems have a significant relationship with suicidal thoughts. The results of this study showed that the Beck scale score for 28.4% of workers in the condition of suicidal thoughts is low to high and the need for intervention in this field is fully felt. Also, most of the suicides are currently done by decision and due to economic problems. According to the results of this study, the discussion of improving the economic situation will be the main way to reduce the desire to commit suicide among the workers, but due to the lack of authority and control of the employers in improving the economic situation and the impact of making major political and economic decisions in this regard, It is suggested that in the short term, psychological interventions in the environment of industrial companies, especially the use of psychological experts in the form of regular weekly meetings and holding private counseling sessions in industries, should be given special attention.

**Keywords:** Beck Scale, Suicide, Industrial Worker.

### Introduction

The suicide situation is one of the most important and complex issues in today's society, which causes many concerns and discussions at the global level. Suicide is a process in which a person ends his life in such a way that it has gradually become one of the most important causes of death worldwide. According to the statistics of Iran's police force, between 2015 and 2019, an average of 4,183 people committed suicide in Iran, according to which the suicide mortality rate is 5.1 per 100,000 people. In addition, studies have shown that various factors contribute to the increase in suicide rates among workers. Research shows that shift work stress increases the likelihood of sleep disorders and insomnia, which can lead to fatigue, restlessness, and anxiety, depression, and mood swings. Long working hours or irregular shifts can make it difficult to adjust to social activities outside of the workplace routine. These conditions put pressure on personal relationships and cause feelings of isolation and despair. Considering the importance of the issue, in the present study we will investigate suicidal thoughts in industrial workers in West Tehran.

### Material and method

In this study, 120 workers who met the inclusion criteria were selected after random sampling among the workers working in West Tehran industries. Data collection was done using a semi-structured interview and Beck Scale for Suicide Ideation, as well as a researcher-made questionnaire related to social, economic and political problems. There are five questions in Beck's suicidal ideation test, which are called screening questions. If the answers indicate an active or passive suicidal tendency, then the subject should continue with the next 14 questions. Also, BSS is a combination of three factors: desire to die, preparation for suicide, and desire for actual suicide. It should be noted that the questionnaire used in this study is the Persian version of the Beck questionnaire, which has already been validated and its reliability has been confirmed. The Beck questionnaire was given to the people along with the economic, social and cultural cause's questionnaire, and the information obtained from the people, including demographic information and answers to the questionnaires, was entered into the Excel version 22 software. Chi-square and logistic regression tests were used to check the hypotheses. According to the type of study, a significance level of 0.05 was considered in this study.

**Results**

In this study, a total of 120 samples were taken, out of a total of 120 workers, 80% (96 people) were men, and 20% (24 people) were women. According to the demographic questionnaire, 66% of people were married and 34% were single. Also, only 2 A percentage of the workers mentioned a history of psychiatric treatment or a history of suicide attempt. The minimum age of the workers was 21 years and the maximum were 53 years. In total, according to Beck's suicidal thoughts questionnaire, 71.6.% of the workers did not have any suicidal thoughts and

28.4% of The workers expressed low to severe suicidal thoughts. Based on the findings and the supplementary questionnaire, economic problems have had a significant relationship with suicidal thoughts, which is shown in the table below. These findings suggest that economic conditions and job security concerns contribute significantly to the growing trend of suicide among workers in the manufacturing sector. Furthermore, the study revealed a positive correlation between educational level and suicide.

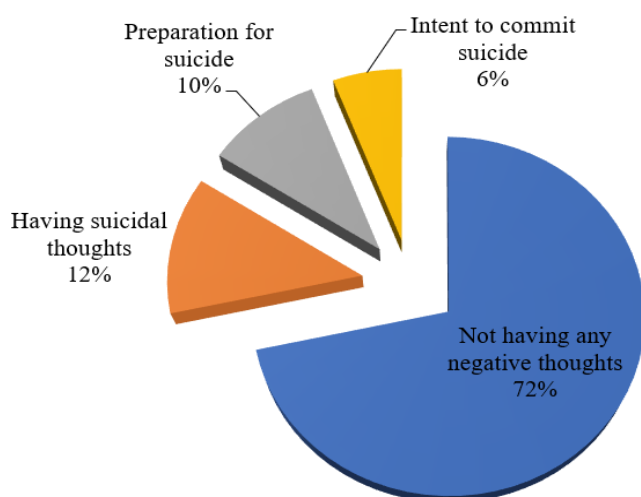
**Table 1:** Correlation between demographic characteristics and suicidal thoughts.

Variable	Category	N (Percent %)	Beck's suicidal ideation		P
			positive	negative	
Gender	Male	96 (80)	27	69	0.432
	Female	24 (20)	7	17	
Educations	Preliminary	11 (10.1)	2	9	0.14
	High school diploma	43 (35.8)	11	32	
	University	65 (54.1)	21	44	
Marital status	Single	41 (34.2)	23	18	0.0013
	Married	79 (65.8)	11	68	
Monthly family income	< 10000000 Rials.	78 (65)	23	55	0.000
	10000000 to 20000000 Rials.	26 (21.6)	9	17	
	> 20000000 Rials.	16 (13.3)	2	14	

The details of Beck's questionnaire analysis in connection with thinking about suicide, readiness for suicide and action are stated in the following table based on percentage.

**Table 2:** Beck's suicidal ideation score status.

Beck's suicidal ideation	N	(Percent %)
Not having any negative thoughts	86	71.6
Having suicidal thoughts	15	12.5
Preparation for suicide	12	10
Intent to commit suicide	7	.59
Total	120	100



**Figure 1:** Beck's suicidal ideation diagram.

**Conclusion**

The results of this study showed that the score of the Beck scale for 28.4% of the workers in the condition of suicidal thoughts is low to high risk and the need to intervene in this field is fully felt. Also, most of the suicides are done as a decision at the moment and due to economic problems and it is more among married male workers than other groups, the results of this study

are completely consistent with other studies. Previous studies also state that the Great Recession was associated with an increase in suicides, especially in countries with weaker social support systems. In addition, studies have shown that periods of financial crisis historically lead to significant increases in suicide rates in affected countries, and aggregated data on national suicide rates show strong positive and inverse

correlations with GDP per capita in most years. According to the results of this study, The discussion of improving the economic situation will be the main way to reduce the desire to commit suicide among workers, but due to the lack of authority and control of employers in improving the economic situation and the impact of macro political and economic decisions on this issue, it is suggested that in the short term, psychological interventions in the environment special attention should be given to industrial companies, especially using psychological experts in the form of regular weekly meetings and holding private counseling sessions in industries can be a good way to work in the current conditions of the country.

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