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# JOURNAL OF CLINICAL AND DIAGNOSTIC RESEARCH

# How to cite this article:

SAIFI A, MANSOURIAN AR. DRUGS AND SUICIDE BY YOUNG ADULTS (GORGAN-NORTHERN IRAN). Journal of Clinical and Diagnostic Research [serial online] 2010 April [cited: 2010 April 5]; 4:2253-2256.

### Available from

http://www.jcdr.net/back\_issues.asp?issn=0973-709x&year=2010 &month= April &volume=4&issue=2&page=2253-2256 &id=586

# **ORIGINAL ARTICLE**

# **Drugs And Suicide By Young Adults (Gorgan- Northern Iran)**

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#### **ABSTRACT**

**Objective**: Suicide is the leading cause of premature death world-Wide. This research project was designed to establish the role played by drugs to commit suicide among teenager and young adults in Gorgan- in northern Iran.

**Methods.** This investigation was a descriptive study and the patients consisted of all acute poisoned subjects referred to the emergency department of Gorgan Main General hospital during one year duration. The data was gathered using a questionnaire which was filled for each patient at the time of admission.

**Results:** The findings of this investigations showed that 61.3% of all acute poisoning happened by drugs and drug were used by 72.1% to commit suicide with the age group of 14-19 years with highest prevalence.

**Conclusion**: Young adults of 14-19 years are the age group with highest incidence of committing suicide and drugs with 72.1% are the main substance for attempting suicide.

**Key Words**: Drugs, Poisoning, Suicide, young adults, Northern Iran.

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#### Introduction

Suicide is the main reason of mortality and Premature death among young adults.

Various attempts have been made by adolescents and young under 25 years of age to commit suicide [1],[2].

Drugs are among the key chemical substances used to attempt suicide, particularly when they are taken as

antidepressant medicines. This risk is even much greater when the drugs are taken for anxiety and various other mental problems, not related with depression. Adults on antidepressant drugs are at more than 5 fold higher risk to attempt suicide as compared to patients given sugar tablets [5], about 2 fold increased risk to attempt suicide with all antiepileptic drugs [3],[5].. In addition to those patients who have painful disorders, finally either might end- up with suicide attempt or with increased risk of suicidal behavior [3]. The drugs used for suicide are not just antiepileptic drugs, but other drugs prescribed as antihypertensive[4] sedative [6] and for other disorders[3],[5] are also risk factors for premature death attempt especially by committing suicide particularly among adolescents and young adults.

On the basis of these facts, the present research project was designed to investigate

whether committing suicide among young adults, has any relation with consuming drugs in, Gorgan located in the northern Iran.

#### Material And Methods

This research project was a cross-sectional descriptive study. The sample population belong to all of the acute poisoned people who were referred to emergency department of the main general hospital in Gorgan, during 2002. 75patients suffering from acute poisoning referred to the emergency department. The data for this research project was obtained from the demographic questionnaires which was filled for each patient at the time of admission in the Hospital by trained nurses. Our main concern in this study was to establish whether drugs are the main substance to commit suicide among young adults. Regardless of what particular type of disorder they might have but as whole our Patients who committed suicide suffered from some form of depression and anxiety.

#### Results

This study showed that 49.2% of those with acute poisoning belong to the 14- 19 years of age groups. The age group 40-49 had the lowest incidence of morbidity. The preuniversity adolescents and young adults, had the highest rate of attempting suicide. The result of this study indicated that 74.9% of all acute poisoned belonged to the people committing suicide which is some how similar with other studies. The main substance caused the poisoning were drugs, pesticides, opioids ,[Table/Fig 1]; in this study we found that drugs are the main cause of committing suicide [Table/Fig 2] among young adults, in our sample population.

(Table/Fig 1)Poisons Causing The Acute Toxification

Poison	Number of poisoned	Percentage (%)
Drugs	46	61.3
Pesticides	23	30.6
Opoids	6	8.0

#### (Table/Fig 2)Chemical Substances Used To Commit Suicide

Drugs	Pesticides	Opoids
72.1%	22.7%	5.2%

Our findings demonstrated that drugs are the main cause for acute poisoning (61.3%) followed by pesticides and opioids 30.6% and 8% respectively .As it is presented in (Table 2) drugs, pesticides, opioids , are the main substances used to commit suicide, with the ratios of 72.1% , 22.7% and 5.2% respectively.

## Discussion

In this study we found that the age group of 14-19 years, are vulnerable subjects with the highest rate of poisoning. Drugs with 61.3% are the main chemical causing the poisoning followed by pesticides with 30.6% of all acute poisoning. Other studies indicated that drugs are the main substances to commit suicide [8],[9].

Our investigation also demonstrate that drugs are the key factor to attempt suicide. In present study it was demonstrated that drugs with 72.1% were used to commit suicide followed by pesticide with 22.7% These findings are nearly similar with the results of studies[1],[10],[11],[12],[13],[18]. In this study we found that the age group of 14-19 year which include teenagers and adolescent are facing a critical phase to commit and attempt suicide.

Other studies shown that drugs are the key substances for most of all acute poisoning leading to death [13],[14].Patients on CNS drugs should be routinely checked up and evaluated for the prescribed drugs .Other studies recommend that patients with disorder such as epilepsy are to be assessed for depression, anxiety and suicidal behavior [3],[15]. Other reports also indicated the use of sedative and hypnotic drugs in suicide[6].Attempting suicide even with antihypertensive drugs were also reported. The mortality rate of antihypertensive drugs

were reported to be 1.5% [4]. Some other study indicated that suicide closely correlated with psychiatric disorders, those patients with depression face the 30 fold increase in suicidal attempt [16].

Contradictory to this latter report, is a study in Sweden which indicated the low level of antidepressant drugs for patients who subsequently committed suicide [17] This latter report which contradict the formers is a significant alarm, as how to approach this very critical scenario .In another separate report presented in 13-States of USA during 2007, drug played an important role for poisoning of suicide victims [18], similar findings also have been reported; by other research [7],[19], which highlights the significant role is played by various form of drugs to commit suicide.

#### Conclusion

- 1. Teenagers and young adults are age risk to commit suicide.
- 2. Drugs are the keys substance to be used for attempting suicide.
- Literature review in this study indicated that various forms of drugs, such as antihypertensive and antidepressants and many others are key factors to attempt suicide.
- 4. On the basis of above facts careful consideration should be applied when drugs are prescribed for young adults.

# Acknowledgment

The Author sincerely thank the research Department of Gorgan University of Medical science for financial support and Mr Maddah of the emergency department of 5th Azar Hospital for his Cooperation in this research project.

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