

# Returnee's Depression Epidemiology among Secondary School Students in Tikrit, Iraq after Internal Displacement

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## Abstract

**Introduction:** Rapidly progressive epidemiological and demographic changes have occurred in Iraq and surrounding countries, which cause a big increase in the prevalence of mental diseases and specifically depression. This necessitates careful attention from both clinicians and health policy makers. Depression is the 11th cause of disability all over the world but with elevated prevalence rate in the region of the Middle East. Unfortunately, depression is not sufficiently studied, in Iraq, in spite of rising prevalence of this disorder.

**Subjects and methods:** This a descriptive study with an analytic component carried out on secondary school students in Tikrit district. The study was carried out from 10th January to 14th May 2017. Questionnaires were presented to all students in the schools that day, in the classroom, depending on the help and cooperation of the school's administration and teachers during spare time. The students filled out the questionnaires, after explanation of each item by the researcher, in about 35 minutes and they returned them to the researcher at the end of the session. The study was carried out, and a screening tool the DISC (Diagnostic Interview Schedule for Children) Depression Scale (60) which has been renamed

the Columbia Depression Scale (CDS), which is a paper-and-pencil yes/no questionnaire. The DISC can be presented to adolescents and youths (ages 11 and over). This study included 269 secondary school students who have returned from internal displacement.

**Results:** The study revealed that 64 (23.8%), 26 (9.7%) of returnees were of moderate and high depression score respectively. This means that (33.5%) of returnees had depression. Study revealed that 4 (9.1%), and 6 (13.6%) of males returnees were of moderate and high depression score respectively and 60 (26.7%), and 20 (8.9%) of females returnees were of moderate and high depression score respectively. This means that 80 (35.6%) returnee females versus 10 (22.7%) male returnees suffer from depression.

**Conclusion:** Depression prevalence rate in IDPs who are living in Tikrit city was found to be (33.5%) of returnees, and the rate of depression is higher among returnee females than males.

**Key words:** Returnees' depression in IDP Students in Tikrit, IDP Returnees Depression Epidemiology, in Tikrit schools.

## Introduction

Rapidly progressive epidemiological and demographic changes have occurred in Iraq and surrounding countries, which cause a big increase in the prevalence of mental diseases and specifically depression. This necessitates careful attention from both clinicians and health policy makers (1, 2). Depression is the 11th cause of disability all over the world but with elevated prevalence rate in the Middle East region (3). Unfortunately, depression is not sufficiently studied, in Iraq, in spite of rising prevalence of this disorder (4). According to previous research median yearly and lifetime depression prevalence are 4.7 and 8.9% respectively. Females of low education and with war experience are at higher risk of depression (5-10). Really, there is no data concerning depression prevalence (11). Repeated wars since the early nineties have had a huge effect on Iraq, leading to reduction in the health status of Iraqi people and destruction of mental health services infrastructure (2). There is no available data about the associated morbidity, burden, therapy, and related suicide. Availability of such data is very important in studying the impact of war on the Iraqi population.

## Subjects and methods

Formal administrative approval was granted to conduct the study from the Ministry of Education, Department of Education in Tikrit Education Directorate in order to perform the study in secondary schools in Tikrit city. The study was carried out in the secondary schools in Tikrit District which is located about 200 km north of Baghdad city. Written consent was taken from all students involved in the study. This was a descriptive study with analytic component carried out on secondary schools, students in Tikrit district. The study was carried out from 10th January to 14th May 2017. Questionnaires were presented to all students in the schools that day, in the classroom, depending on the help and cooperation of the school's administration

and teachers during spare time. The students filled out the questionnaires after explanation of each item by the researcher, in about 35 minutes and returned them to the researcher at the end of the session. The study was carried out, using a screening tool, the DISC (Diagnostic Interview Schedule for Children ) Depression Scale (60) which has been renamed the Columbia Depression Scale (CDS), and is a paper-and-pencil yes/no questionnaire. The DISC was presented to adolescents and youths (ages 11 and over). It consists of 22 items that are rated as Yes and No scored as (1) and (0) respectively. The total score is calculated from the score of each of the 22 items. If the result of calculation is 0-6, 7-11, 12-15, 16 and above that means depression was very unlikely, moderately likely, likely and highly likely, respectively. The first group included moderately likely and highly likely which are considered as high risk for depression. To prove that the assessment tool was clear and simple a pilot study was done in the secondary schools in Tikrit. This study includes 269 secondary school students who had returned from internal displacement.

## Results

The study revealed that 64 (23.8%), 26 (9.7%) returnees were of moderate and high depression score respectively as shown in Table 1. This means that (33.5%) of returnees had depression.

The study revealed that 4 (9.1%), and 6 (13.6%) of males returnees were of moderate and high depression score respectively and 60 (26.7%), and 20 (8.9%) of females returnees were of moderate and high depression score respectively as shown in Table 2. This means that 80 (35.6%) returnee females versus 10 (22.7%) male returnees suffer from depression.

Suicidal ideation was reported in 34 (12.6%), and suicidal attempt reported in 142 (53%) of returnees.

**Table 1: Depression score among returnees**

Depression score	Returnees No. (%)
Weak	86 (32%)
Mild	93 (34.6%)
Moderate	64 (23.8%)
High	26 (9.7%)
Total	269 (100%)

**Table 2. Depression scores in returnees according to gender**

Depression score	Males Returnees No (%)	Females Returnees No (%)
Weak	27 (61.4%)	59 (26.2%)
Mild	7 (15.9%)	86 (38.2%)
Moderate	4 (9.1%)	60 (26.7%)
High	6 (13.6%)	20 (8.9%)
Total	44 (100%)	225 (100%)

## Discussion

Depression is prevalent among people displaced because of large-scale political war and conflicts (12). Iraq suffered from occupation and invasion of a terrorist organization of some Iraqi governorates in 2014, which caused millions of the population to be displaced to other nearby normal cities. This displacement of the mass population suddenly saw them without houses and incomes and either living in a miserable situation in the cities or in camps. This was an extra burden on Iraqis who have lived for decades, in a vicious circle of sanctions, wars, and displacement which influences all life, and health aspects of children, women, and adolescents (13-14). Psychological and mental disorders frequently occur gradually as a result of interaction of multiple factors such as; conflicts and violence, continuous stress, environmental factors and internal psychogenic factors that contain Internalizing Items (fear of new situations, sadness, self underestimation, hopelessness, unhappiness, many worries, and experiencing less fun); and Externalizing factors (unnecessary risky behaviors, ignoring rules, misunderstanding feelings of others, fights with other children, teasing others, blaming others for troubles, refusing to share) (14, 15). Severe deficiencies in mental and psychological health care services remains a persistent problem in Iraq (13, 14, 15, 16,17).

This study's results found that (33.5%) of returnees had depression and this agrees with Alkhafaji A.M. et al who found a statistically significant relation in the depression rate in IDPS which was 34.5% in comparison to 16.4% in their matched control group (18). In this study, the sample was from returnee secondary school students after internal displacement whose age was 12-18 years. This is supported by Noori and Janet who found that higher than one third of their sample was aged 18-27 years and stated that immigrants were of young ages (15-24 years old) (13, 14, 19). Also Joseph and Cristina found that 24% of their study group of immigrants were aged between 16-25 years and 33% were 26-35 years (13, 20).

Being young person IDP secondary school students are included in this group under risk of depression which is supported by Alkhafaji AM et al who found that the majority of depressive patients were of high educational level (47%0. This was explained by Beiser M who found that young and educated persons were a target for violence, terror and experiencing more events of loss(21). The results of the current study agree with a study on Turkish immigrants, which revealed a prevalence rate of depression of 36.1% in females, and 27.9% in males (22). This is higher than Mirela Grgić who found that 17.9% of displaced children aged 12-15 manifested clinically significant depression (23).

This study's results are lower than Kinzie et al who found that 50% of Cambodian refugee children 6-12 years of age developed a depressive disorder after 4 years of displacement (24). The difference may be due to our sample being returnees after internal displacement and the Kinzie et al sample was Cambodian refugees who had greatly affected personality disorder. Harvard USA

program in Refugee Trauma found two thirds had disabling depression among Bosnian refugees (25).

This study revealed that suicidal ideation was reported in (13%), and suicidal attempt reported in (53%) of returnees. Recently Iraq has suffered from increased rate of suicides especially among younger age groups. Social, political, economic, conflicts which characterize the Iraqi community may explain this rise. Terrorism and armed invasion and occupation of Iraqi cities obliged a mass population to leave their houses and towns for internal displacement. According to Abbas MJ et al, the suicide rate per 100,000 Iraqi population in 2015 was 1.09 and in 2016 1.31, which is lower than both the global suicide rate (11.4/100 000 population) and the Eastern Mediterranean rate (6.4/100 000 population) (26, 27). It is worth noting that WHO figures for this region have been questioned. Suicide in Iraq is still stigmatized, although not illegal, and under-reporting is still possible (28). The high level of suicidal attempts and suicide ideation is supported by a persistent vicious circle of political conflict, unemployment, poverty, miserable years of displacement, bad present conditions, vague future concepts. Internal displacement separates families and destroys the social cohesion. This study results disagree with Abbas MJ et al who stated the low rate of suicide in Iraq (26).

## Conclusion

Depression prevalence rate in IDPs who are living in Tikrit city was found to be 33.5% of returnees, and the rate of depression is higher among female returnees than male.

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