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Prevalence of Anxiety and Depression among Iraqi Employees

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ABSTRACT

Background: Mental health issues are a growing concern worldwide, particularly in Iraq where decades of conflict have left lasting effects on individuals and communities. Despite this, limited research has been conducted to understand the mental health status of Iraqi employees.

Objective: To determine the prevalence of anxiety and depression among Iraqi employees and identify factors associated with these conditions.

Methods: A cross-sectional online survey of 823 adult employees in Iraq was conducted from February 2023 to August2024. The Depression Anxiety Stress Scales (DASS-21) were used to measure anxiety and depression levels. Statistical analysis was performed to examine the relationships between various risk factors and mental health outcomes

Results: The findings indicate that 43.5% of Iraqi employees experience anxiety, with moderate levels reported among the majority (49%). Depression was found in 28.7%, with mild levels reported among 42.4% of participants. Significantly higher risk differences were observed for females compared to males regarding anxiety (16.2%), and for single individuals compared to married individuals regarding depression (9.9%). Additionally, a 7.5%lower risk of depression was associated with having children. Being a business owner was significantly associated with a 15.6% higher risk of having anxiety compared to government employees. Notably, geographical variations were observed, with the highest prevalence of anxiety reported in Baghdad (55.2%) and lowest in Mosul (26.6%).

Conclusion: The study highlights the need for mental health support services among Iraqi employees, particularly addressing the higher risk factors identified. Interventions targeting female employees, single individuals, business owners and those without children may be effective in reducing anxiety and depression.

Keywords: Anxiety, Depression, Iraqi Employees, DASS scale, Mental Health

INTRODUCTION

Anxiety is an emotional state marked by feelings of unease, apprehension, and physical symptoms such as elevated blood pressure(1).According to 2019 data, approximately 301 million individuals worldwide are living with an anxiety disorder. This includes nearly 58 million children and adolescents who experience these conditions(2).While anxiety and fear are often used interchangeably, they have distinct characteristics. Anxiety is a forward-looking response to perceived threats, typically long-lasting and focused on vague concerns. In contrast, fear is a present-focused, short-term reaction to specific and identifiable dangers(1).

Depression is a common mental health disorder characterized by persistent feelings of sadness, loss of interest in activities, and diminished pleasure in life(3).According to estimates, approximately 3.8% of the global population experiences depression. This translates to around 5% of adults worldwide (4% among men and 6% among women) and a higher prevalence of 5.7% among adults over 60 years old. Notably, this widespread condition affects an estimated 280 million people globally(2).

Globally, depression ranks as the 11th leading cause of Disability Adjusted Life Years (DALYs), a measure of health loss due to various conditions. Notably, in the Middle East region, depression is ranked as the 3rd leading cause of DALYs, highlighting its significant impact on the population's quality of life and health outcomes(4).

While there is a wealth of global data on mental health, most research focuses on developed countries in Western societies. In contrast, little is known about mental health trends in less affluent nations(5).Historically, mental health care in Iraq has been concentrated in urban areas and hospital settings, leaving many rural communities without access. The country's psychiatric care ratio has also declined significantly over time, from

1 psychiatrist per 300,000 people before 2003 to just 1 per million, indicating a severe shortage of mental health professionals(6).According to the Iraq Mental Health Survey, anxiety disorders are the most prevalent mental health condition, affecting 13.8% of the population, while major depressive disorder is the leading individual mental health issue, impacting 7.2%(7).A study surveyed 300 healthcare workers in Kerbala governorate's hospitals and primary healthcare centers (PHCs) in which A staggering 85% of respondents reported symptoms of depression(8). Another study aimed to estimate the prevalence of common mental health disorders among548 adults in the Kurdistan Region found high levels of depression (45%) and anxiety (47%)(9).
Unlike previous research in Iraq that primarily focused on anxiety and depression among students, this study aims to investigate anxiety and depression specifically among working professionals, namely Iraqi employees.

METHODOLOGY

Study design

This study employed a cross-sectional survey design to determine the prevalence of anxiety and depression among Iraqi employees.

Study setting and period

The study was conducted in Iraq over the period ofFebruary12th2023 to August 12th2024. The survey was administered online using google form to reach a wider audience of Iraqi employees working in various sectors across the country.

Study sample and sampling method

A total of 823 participants were recruited for this study using a convenience sampling method. Participants were selected based on their availability and willingness to participate in the online survey.

Inclusion Criteria

Participants were included in the study if they met the following criteria:

1. Participants must have worked as employees (full-time or part-time)
2. Participants must have been 18 years of age or older
3. Participants must have agreed to participate in the online survey
4. Participants must have fully completed the questionnaire

Exclusion Criteria

Participants were excluded from the study if they did not meet the above inclusion criteria.

Depression Anxiety Stress Scales - 21

The Depression Anxiety Stress Scales - 21 (DASS-21) is a standardized, 21-item self-report questionnaire designed to assess the severity of psychological distress related to depression, anxiety, and stress in adults and older adolescents aged 17 years and above(10).The depression subscale measures symptoms related to depression, including feelings of sadness, hopelessness, worthlessness, loss of interest, pleasure, or energy.The anxiety subscale assesses symptoms associated with anxiety, such as physical tension, restlessness, fear, and apprehension.

Data collection tool

The online survey was administered using Google Forms, which allowed for easy data collection and management.
The variables of the study were

1. Demographic information such as Age, Gender, Marital Status, Having a child and number of children, Academic achievement
2. Mental health status was assessed for all participants. Anxiety levels were categorized as 'normal' or 'anxious', while depression levels were similarly categorized as 'normal' or 'depressed'. Both classifications were based on scores from the DASS-21 subscales.

Statistical analysis

Descriptive statistics were used to summarize the demographic characteristics of participants. Chi-square tests were used to assess the associations between categorical variablesand examine the relationships between demographic variables, marital status, presence of children, and geographical location on the prevalence of anxiety and depression. The significance level was set at $P< 0.05$ for all analysis.

Ethical Considerations

Participant consent was obtained for voluntary participation, with an option to withdraw at any time. The survey was conducted anonymously to maintain confidentiality and safeguard participant privacy

RESULTS

A total of 823 Iraqi employees participated in the study. The demographic characteristics of the participants are summarized in **Table 4.1.** The gender distribution of the participants showed that 43.6% (n=359) were female, while 56.4% (n=464) were male. The majority of the participants were aged between 25-35 years, accounting for 59.5% (n=490) of the total sample. Participants aged less than 25 years comprised 9.2% (n=76), while those older than 35 years made up 31.2% (n=257).

In terms of marital status, 41.2% (n=339) of the participants were single, and 58.8% (n=484) were married. Over half of the participants (51.5%, n=424) had children, with the remaining 48.5% (n=399) having no children. Regarding the number of children, 48.5% (n=399) had no children, 12.3% (n=101) had one child, 16.0% (n=132) had two children, and 23.2% (n=191) had more than two children.

The academic achievement of the participants varied, with the largest group holding a master's degree (49.7%, n=409). Other levels of academic achievement included PhD holders (13.0%, n=107), bachelor's degree holders (33.2%, n=273), diploma holders (2.3%, n=19), college students (1.5%, n=12), those with secondary education (0.2%, n=2), and primary education (0.1%, n=1).

Table 4.1: Demographic data of study participants (N=823)

Variable	Group	N	%
Gender	Female	359	43.6%
	Male	464	56.4%
Age	<25	76	9.2%
	25-35	490	59.5%
	>35	257	31.2%
Marital Status	Single	339	41.2%
	Married	484	58.8%
Has Child	Yes	424	51.5%
	No	399	48.5%
Number of children	None	399	48.5%
	One Child	101	12.3%
	Two Children	132	16.0%
	>2 Children	191	23.2%
Academic achievement	PhD	107	13.0%
	Master's degree	409	49.7%
	Diploma	19	2.3%
	Bachelor's degree	273	33.2%
	College Student	12	1.5%
	Secondary education	2	0.2%
	Primary Education	1	0.1%

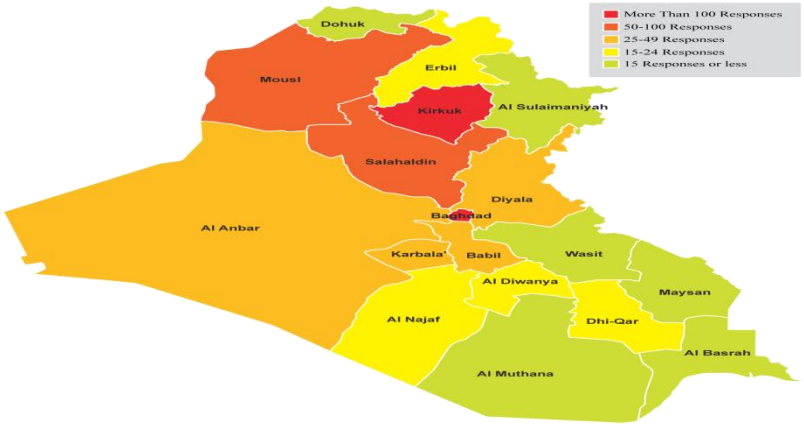

Figure 4.1 demonstrates the geographic distribution of study participants. Most participants were from Baghdad and Kirkuk. The participation in the survey is was mostly saturated by the central governorates from Mosul to Karbala'. In contrast, the participation of the Kurdistan region of Iraq to the north and from the southern governorates was modest.

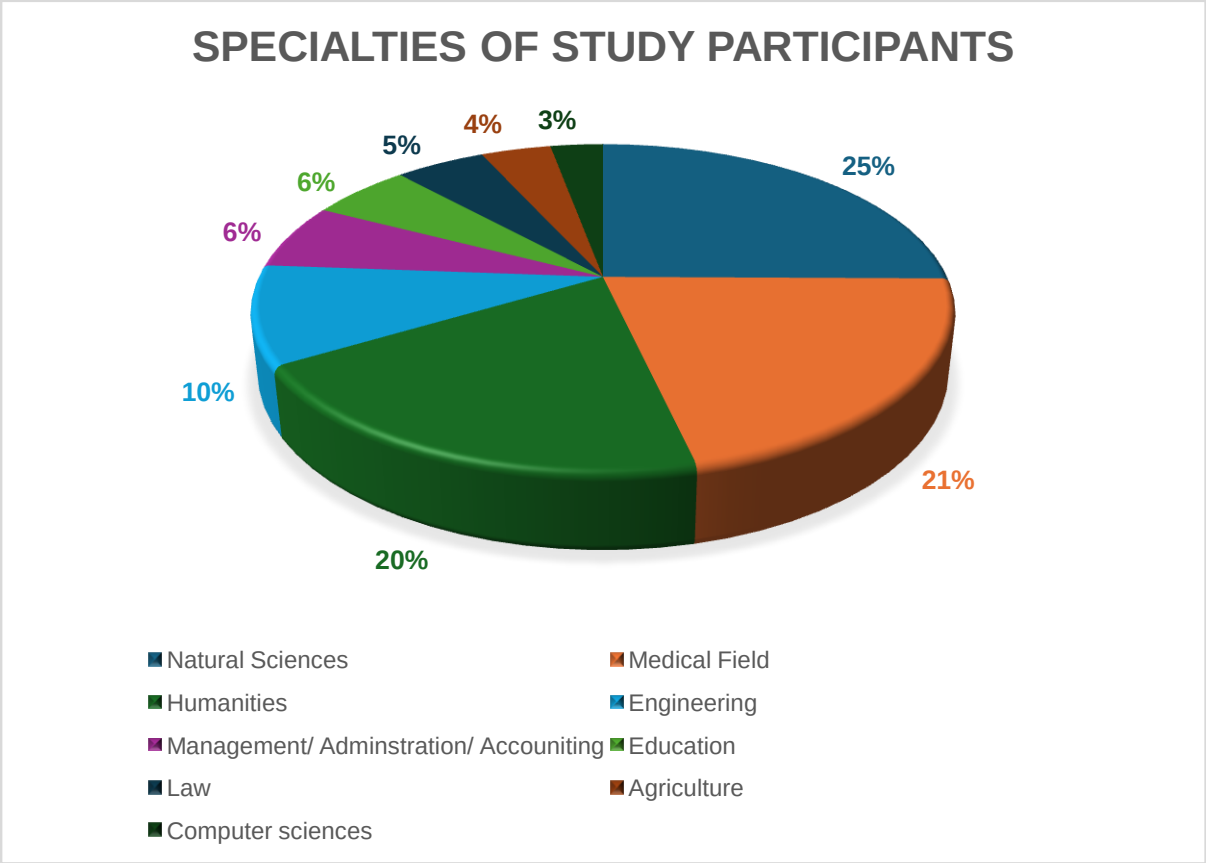

Figure 4.2 demonstrates the specialties of study participants. 25% of study participants were Natural sciences, 21% were in the Medical Field and 20% were in Humanities disciplines.

The employment status of the 823 study participants is detailed in **Table 4.2.**Regarding the alignment of their work with their field of specialty, a significant majority of participants (83.5%, n=687) reported working in jobs related to their specialty, while 16.5% (n=136) were employed in fields unrelated to their specialty.
In terms of work type, over half of the participants (54.1%, n=445) were governmental employees. Those working in academia represented 30.3% (n=249) of the sample. Participants engaged in business accounted for 7.7% (n=63), while 5.5% (n=45) reported holding more than one job.

Table 4.2: Employment status of study participants (N=823).

Variable	Group	Count	N%
WorkField	Related to specialty	687	83.5%
	Nonrelated to specialty	136	16.5%
WorkType	Governmental Employee	445	54.1%
	Business	63	7.7%
	Academic	249	30.3%
	More than one job	45	5.5%
	Job seeker	10	1.2%
	Other	11	1.3%

The prevalence and severity of anxiety among Iraqi employeesare summarized in **Table 4.3.**In terms of anxiety status, 56.5% (n=465) of the participants were categorized as normal, while 43.5% (n=358) were identified as experiencing anxiety.Among those who were classified as anxious, the severity of their anxiety varied. Specifically, 37%(n=132) of the participants experienced mild anxiety, 49% (n=176) had moderate anxiety, and 14% (n=50) were found to have severe anxiety.

Table 4.3: Prevalence and severity of anxiety among Iraqi employees (N=823).

Variable	Count	N%
Anxiety Status		
Normal	465	56.5%
Anxious	358	43.5%
Severity of Anxiety		
Mild	132	37%
Moderate	176	49%
Severe	50	14%

Table 4.4 presents the prevalence and severity of depression among Iraqi employees who participated in the study.Regarding depression status, 71.3% (n=587) of the participants were normal, while 28.7% (n=236) were identified as experiencing depression. Among those who were classified as depressed, the severity of their depression was distributed as follows: 42.4% (n=100) experienced mild depression, 41.9% (n=99) had moderate depression, and 15.7% (n=37) were found to have severe depression.

Table 4.4: Prevalence and severity of anxiety among Iraqi employees (N=823).

Variable	Count	N%
Depression Status		
Normal	587	71.3%
Depression	236	28.7%
Severity of Depression		
Mild	100	42.4%
Moderate	99	41.9%
Severe	37	15.7%

Table 4.5 shows the correlation between anxiety and various demographic factors amongIraqi employees.There was a significant correlation between gender and anxiety levels. Among female participants, 189 were anxious, and 170 were normal. In contrast, 169 males were anxious compared to 295 who were not. Females were more likely to experience anxiety than males (P<0.01). The correlation between marital status and anxiety was not statistically significant (P>0.05).The data also indicated no significant correlation between having children and anxiety levels (P>0.05). Furthermore, the number of children did not show a significant correlation with anxiety (P>0.05).The correlation between age and anxiety was not statistically significant (P>0.05).

Table 4.5: Correlation between Anxiety and Age, Gender, Marital Status, Being a Parent and Degree (N=823).

Variable	Group	Anxiety	Normal	P - value
Age	<25	33 (43.4%)	43 (56.6%)	P>0.05 N.S.
	25-35	206 (42%)	284 (58%)	
	>35	119 (46.3%)	138 (53.7%)	
Gender	Female	189 (52.6%)	170 (47.4%)	**P<0.01****
	Male	169 (36.4%)	295 (63.6%)	
Marital Status	Single	146 (43.1%)	193 (56.9%)	P>0.05 N.S.
	Married	212 (43.8%)	272 (56.2%)	
Has a Child	Yes	189 (44.6%)	235 (55.4%)	P>0.05 N.S.
	No	169 (42.4%)	230 (57.6%)	
Number of children	None	169 (42.4%)	230 (57.6%)	P>0.05 N.S.
	One Child	45 (44.6%)	56 (55.4%)	
	Two Children	62 (47%)	70 (53%)	
	>2 Children	82 (42.9%)	109 (57.1%)	
Degree	PhD	45 (42.1%)	62 (57.9%)	P>0.05 N.S.
	Master's degree	188 (46%)	221 (54%)	
	Diploma	10 (52.6%)	9 (47.4%)	
	Bachelor's degree	108 (39.6%)	165 (60.4%)	
	College Student	6 (50%)	6 (50%)	
	Secondary Education	0 (0%)	2 (100%)	
	Primary Education	1 (100%)	0 (0%)	

Table 4.6 presents the correlation between depression and various demographic factors among Iraqi employees.A significant correlation was observed between marital status and depression, with single participants more likely to experience depression compared to married participants (P<0.01).Having children was significantly correlated with depression, with parents less likely to experience depression than those without children (P<0.05). However, the number of children did not show a significant correlation with depression (P>0.05). No significant correlation was found between educational degree and depression (P>0.05).

Table 4.6: Correlation between Depression and Age, Gender, Marital Status, Being a Parent and Degree (N=823).

Variable	Group	Depression	Normal	P - Value
Age	<25	25 (32.9%)	51 (67.1%)	P>0.05 N.S.
	25-35	142 (29%)	348 (71%)	
	>35	69 (26.8%)	188 (73.2%)	
Gender	Female	109 (30.4%)	250 (69.6%)	P>0.05 N.S.
	Male	127 (27.4%)	337 (72.6%)	
Marital Status	Single	117 (34.5%)	222 (65.5%)	P<0.01**
	Married	119 (24.6%)	365 (75.4%)	
Has a Child	Yes	106 (25%)	318 (75%)	P<0.05*
	No	130 (32.6%)	269 (67.4%)	
Number of children	None	130 (32.6%)	269 (67.4%)	P>0.05 N.S.
	One Child	25 (24.8%)	76 (75.2%)	
	Two Children	37 (28%)	95 (72%)	
	>2 Children	44 (23%)	147 (77%)	
Degree	PhD	31 (29%)	76 (71%)	P>0.05 N.S.
	Master's degree	114 (27.9%)	295 (72.1%)	
	Diploma	7 (36.8%)	12 (63.2%)	
	Bachelor's degree	78 (28.6%)	195 (71.4%)	
	College Student	6 (50%)	6 (50%)	
	Secondary education	0 (0%)	2 (100%)	
	Primary Education	0 (0%)	1 (100%)	

Figure 4.3 demonstrates the prevalence of anxiety among Iraqi employees across Iraqi governorates. There was a statistically significant correlation between anxiety and the governorate of the employee (P<0.01). Taking into account the volume of responses for each governorate, more than half of Baghdad employees experience anxiety. The same can be observed with Karbalaa', Al Najaf and Wassit employees, but with a smaller sample size.

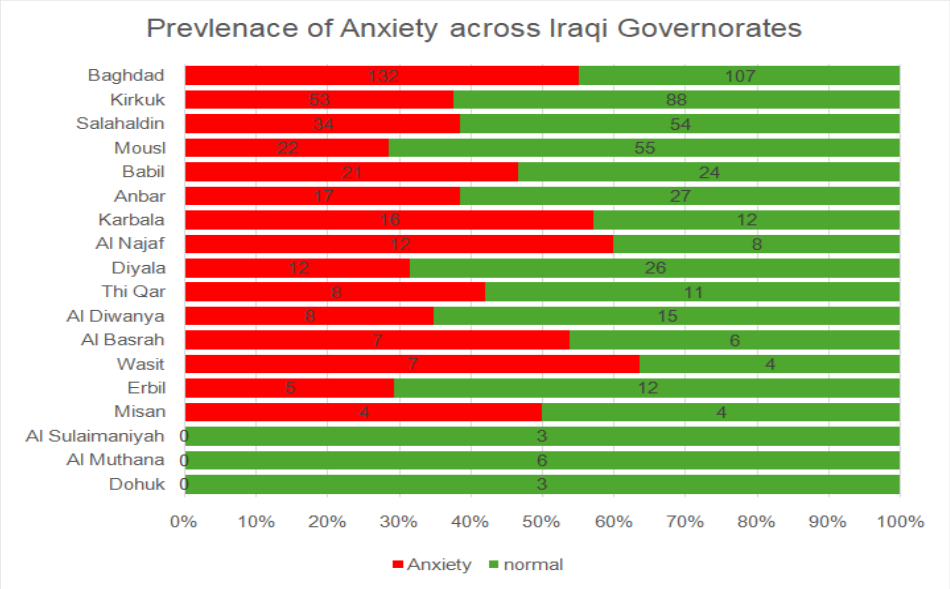

Figure 4.3: Prevalence of anxiety across different Iraqi governorates.

Figure 4.4 demonstrates the prevalence of Depression among Iraqi employees across Iraqi governorates. The prevalence of depression is relatively consistent across the governorates ranging from 15% to 35%.

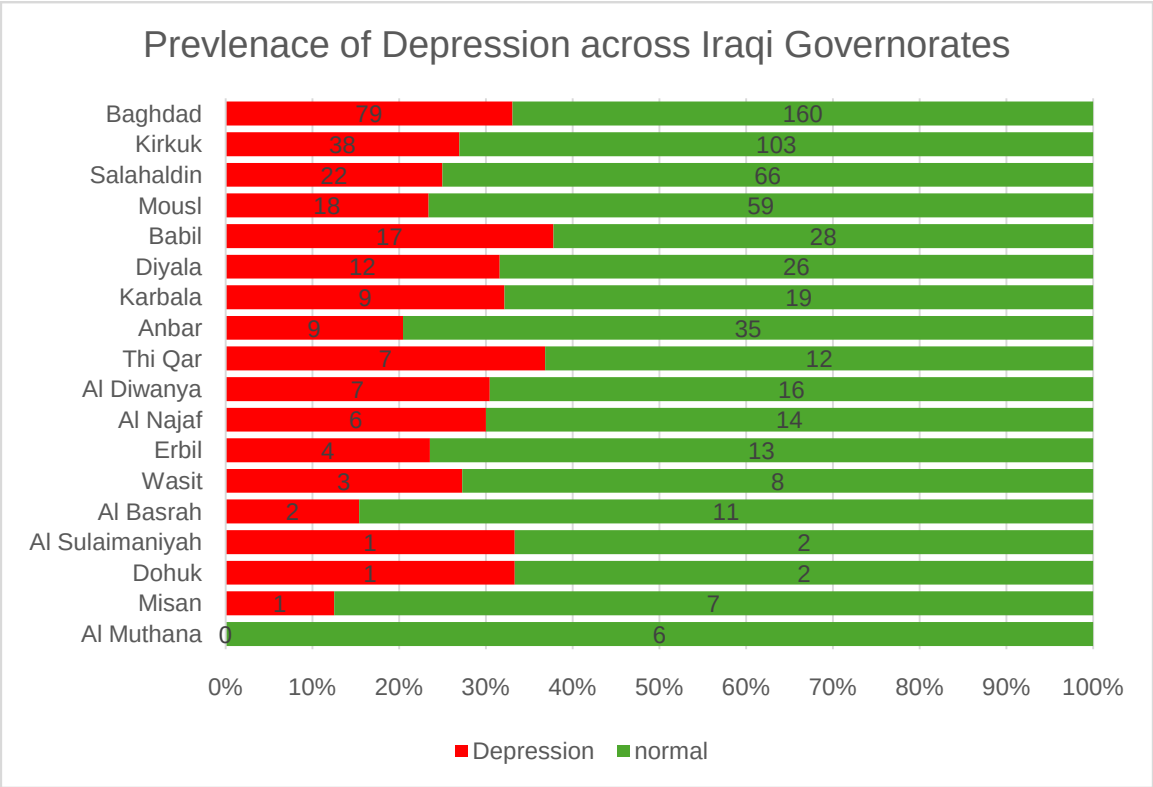

Figure 4.4: Prevalence of Depression across different Iraqi Governorates.

Figure 4.5 demonstrates the prevalence of anxiety across different specialties, which shows that overall anxiety levels regardless of the specialty remains consistent. As there was no statistically significant association between specialty and anxiety status.

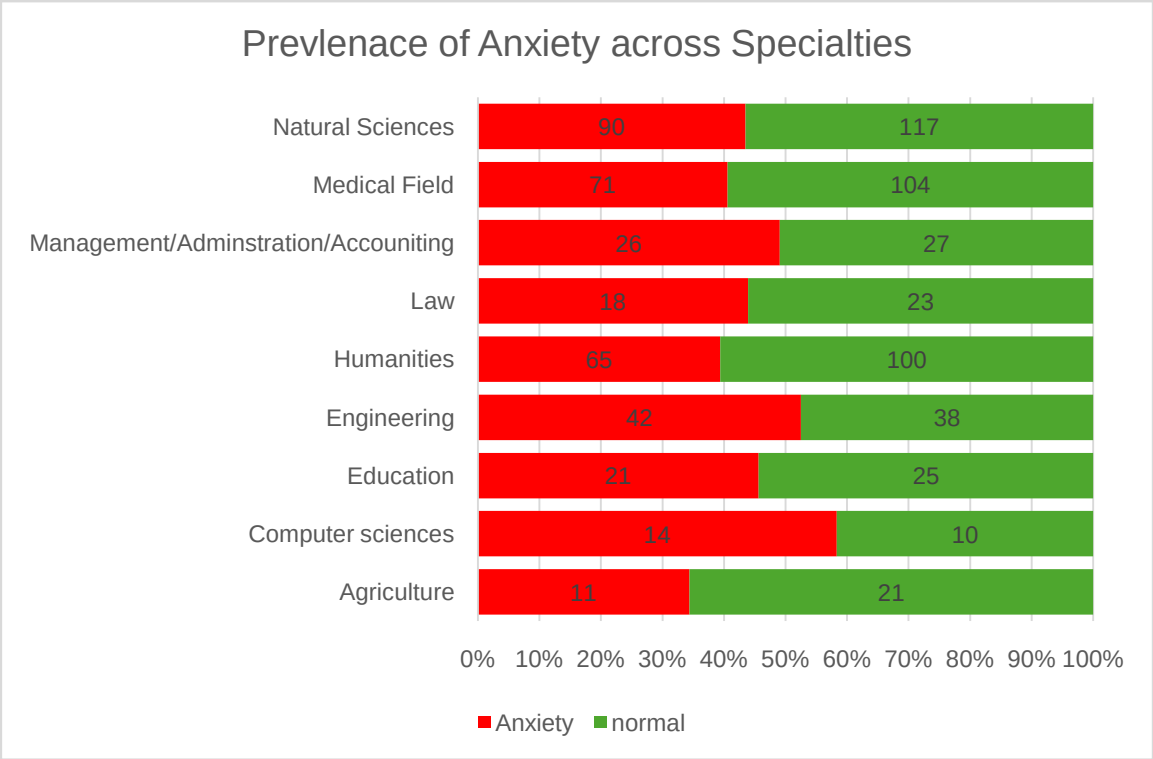

Figure 4.5: Prevalence of Anxiety across Specialties.

Figure 4.6 demonstrates the prevalence of depression across specialties, which shows that there's a slight discrepancy between humanities and engineering specialties, however that differences was not statistically significant.

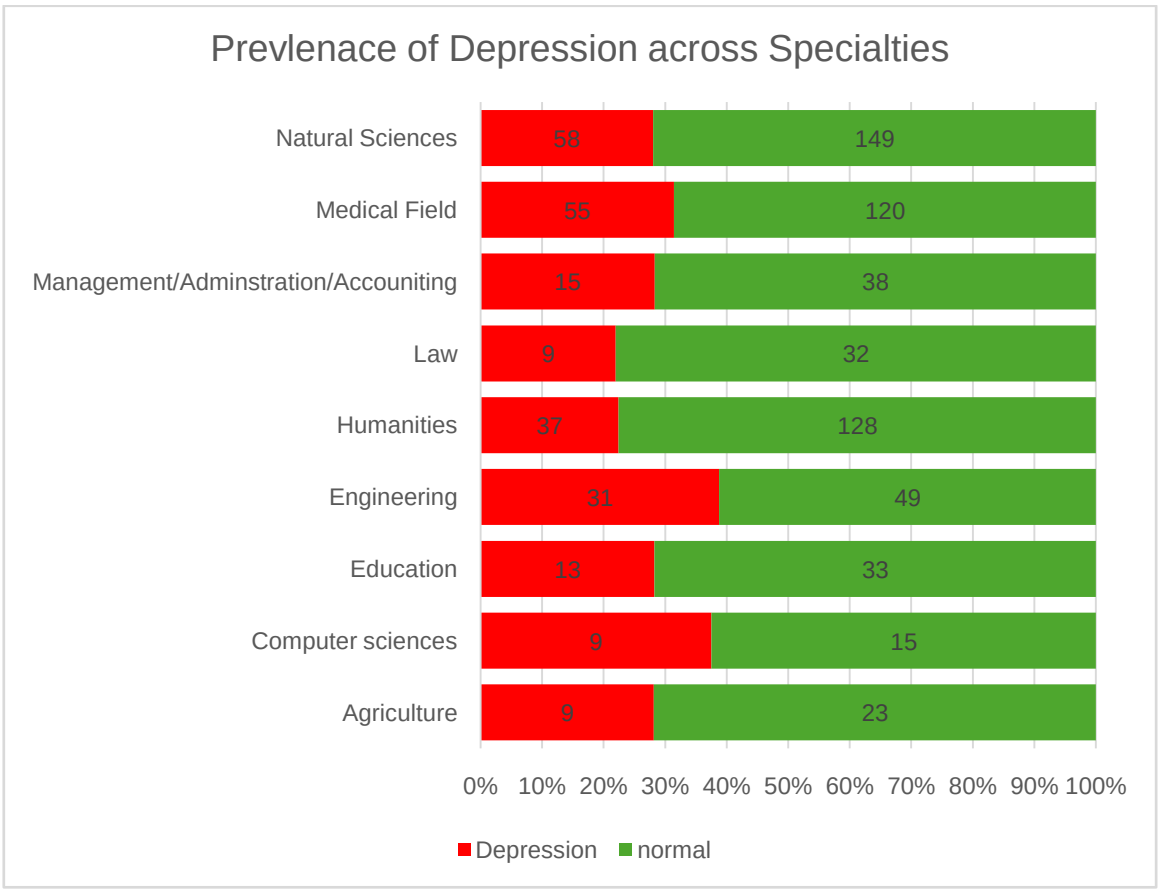

Figure 4.6: Prevalence of Depression across Specialties.

Table 4.7 explores the correlation between employment status and the prevalence of anxiety and depression among Iraqi employees.A significant correlation was found between work type and anxiety, with business owners more likely to experience anxiety compared to other job types (P<0.05). there was no significant correlation between work type and depression (P>0.05). There was no significant correlation between working in a field related to one's specialty and either anxiety or depression (P>0.05).

Table 4.7: Correlation between employment status and Anxiety and Depression (N=823).

Variable	Group	Anxiety	Normal	P-value	Depression	Normal	P-value
Work Field	Related to specialty	299 (43.5%)	388 (56.5%)	P>0.05 N.S.	192 (27.9%)	495 (72.1%)	P>0.05 N.S.
	Nonrelated to specialty	59 (43.4%)	77 (56.6%)		44 (32.4%)	92 (67.6%)	
Work Type	Government Employee	192 (43.1%)	253 (56.9%)	P<0.05*	129 (29%)	316 (71%)	P>0.05 N.S.
	Business	37 (58.7%)	26 (41.3%)		20 (31.7%)	43 (68.3%)	
	Academic	109 (43.8%)	140 (56.2%)		69 (27.7%)	180 (72.3%)	
	More than one Job	15 (33.3%)	30 (66.7%)		14 (31.1%)	31 (68.9%)	
	Job seeker	2 (20%)	8 (80%)		1 (10%)	9 (90%)	
	Other	3 (27.3%)	8 (72.7%)		3 (27.3%)	8 (72.7%)	

DISCUSSION

The prevalence of anxiety among Iraqi employees was 43.5%, with the majority (49%) having moderate levels of anxiety.The Iraqi population experiences anxiety across various professions. Notably, according to a study by Suhail, high levels of anxiety have been reported amongAl-Qadisia physicians (47.9%) and medical students (11)Furthermore, a study by Lafta et al. (2016) found that over half of Iraqi junior doctors in Baghdad (50.8%) experienced anxiety symptoms(12). Another study involved 16 primary and secondary schools in Baghdad showed that the majority of teachers showed elevated anxiety symptoms(13).

The Prevalence of Depression among Iraqi employees was 28.7%, with the majority (42.4%) having mild levels of Depression. This is in line with a study in 2016 conducted in Ramadi and Fallujahwhich showed that over 63% of Iraqis experienced symptoms consistent with depression(14). Another study in Baghdad found that 57.2% of students have depression (15). Furthermore, in a study investigating the clinical and sociodemographic characteristics of depressive disorders in Kirkuk,Major depression was the most common subtype (61%), followed by dysthymia (15%) and bipolar depression (6%)(16). A nationally representative survey of 4,332 adults aged 18+ showed that 7.4% of participants had experienced a major depressive episode at some point in their lifetime(17). Another study conducted at Al-Saniyah primary health center in Iraq to estimate the prevalence of depressive disorders among Iraqi patients visiting primary health centers showed that 27.6% had depression (18).

The research study by Lafta and her team revealed that approximately 45.5% of junior doctors in Iraq reported experiencing depressive symptoms. Furthermore, their research identified a significant link between these depressive symptoms and exposure to violence at work(12). Another study in Kirkuk found that among pregnant woman being Illiterate and Housewife is significantly associated with depression (19).

In the Middle East, an Egyptian study showed that approximately 16.93% of the adult population experienced mental health disorders. The most common types of disorders were mood disorders (6.43%), anxiety disorders (4.75%), and multiple disorders (4.72%)(20). Among medical residents, 72.7% had mild to extreme levels of depression (21). Whereas 31.4% of healthcare professionals in the current study reported depression.Among Teachers, an Egyptian study revealed that occupationalanxiety was 67.5%, and depression 23.2%(22). whereas in the current study, employees of the educational field reported 45.7% and 28.3% prevalence of anxiety and depression respectively.The same can be seen worldwide where a study from Brazil in 2019 found that a significant proportion (45%) of employees of public higher education institutions exhibited symptoms of anxiety, while 39% showed signs of depression(23). Another study found that working in office jobs in general was associated with a higher risk of anxiety (2.17 times more likely) compared to working in a jobs that require physical labor(24).

In the present study, the risk difference for having anxiety is 16.2% higher for females compared to males. 52.6% of females had anxiety compared to 36.4% of males. This risk difference was statistically significant$P<0.05$. This is consistent with the current literature that suggests that there is a notable gender disparity in the prevalence of mental health conditions, with women experiencing significantly higher rates of anxiety and depression compared to men(25).A study in college of nursing in Kirkuk university found that female students reported higher anxiety levels than male students(26).

However, in the current study there was no association between sex and depression, for which current literature suggest that Males have a significantly higher risk of depression than femaleswith the largest difference observed in adolescence(27).Whereasaccording to Iraq Mental Health Survey of 2006/7, Women are more likely to experience severe depression, as well as specific anxiety disorders such as agoraphobia and phobias(28). In a study in Mosul found a higher prevalence of anxiety among females (64.8%), compared to males (35.2%)(29). In a study on records of a specialized center for psychiatry at Azadi Teaching Hospital, KirkukThe most common medical diagnoses among female inpatients weredepression (52.6%) followed by psychotic disorders (22.7%)(30). Another study in Kirkuk found that the majority of depressed patients were female (66%)(31). In Tikrit, 57.14% of patient attending the outpatient clinic with depression are females(32).

Sex differences in anxiety prevalence may be influenced by reporting bias asmost studies on anxiety disorders rely on self-reported data, which can lead to biases in results. Some researchers have suggested that the observed sex differences in anxiety prevalence may be partly due to men being less likely to report symptoms of anxiety compared to women(33). Another reason may be fluctuations in estrogen and progesterone levels during the menstrual cycle, pregnancy, and postpartum periods can affect mood regulation and increase anxiety(34). In addition, women are often socialized to be more emotionally expressive and nurturing, which can lead to increased pressure to manage the emotions of others, potentially exacerbating anxiety(35).

The risk difference for depression is 9.9% higher for single individuals compared to Married individuals. 34.5% of single individuals had depression while24.6% of married individuals had depression. This risk difference was statistically significant $P<0.05$. This is consistent with the findings of Lee et al where they concluded that delayed or never-married individuals, especially those above the average age of first marriage, are at higher risk of developing mental health issues and suicidal tendencies(36). Marriage provides a built-in social support system, which can help alleviate feelings of loneliness and isolation that often accompany depression(37). The

current study demonstrated no significant association between marital status and anxiety. Which is inline with findings of Nieder and Kämpe who concluded that being single does not independently predict increased levels of anxiety(38).

The risk of having depression is 7.5% lower if the individual has a child compared to individuals who don't have a child. 25% of individuals who had a child had depression while 32.6% of individuals who do not have a child have depression. This risk difference was statistically significant $P<0.05$. This is a reiteration of the findings by Golovina et al where they found that For both men and women experiencing depression treated in secondary care settings, there appears to be a link between the condition and reduced likelihood of starting or having families(39). The current study demonstrated that there was no significant association between having a child and number of children and anxiety. Which is contrary to findings of Chung and Kim who demonstrated that Mothers with more children experienced greater anger levels and parenting anxiety (40). In contrast, according to an Egyptian study having more children is associated with lower levels of depression. Suggesting that the presence of multiple children may act as a protective factor or buffer against depressive symptoms(41).

The highest Prevalence of anxiety is in Bagdad with 55.2% of participants having anxiety. The lowest prevalence is in Mosul with 26.6% of participants having anxiety. This discrepancy is statistically significant $P<0.05$. The life time prevalence of anxiety in the city of Mosul according to a study in 2021 by Meshaal and Ibrahim is 39.31%(42). Another study in Mosul found that 20.8% of nurses and 7.6% of paramedical staff reported being anxious(43). A study in Kirkuk found that 28.7% of technical students had depressive symptoms (44).

According to the Iraqi Mental Health Survey of 2006/7,individuals living in urban areas have a higher likelihood of experiencing various mental health conditions compared to those residing in rural areas, including severe depression, dysthymia, agoraphobia, PTSD, and substance abuse issues(28).

Business owners had 15.6% greater risk of having anxiety compared to government employees and 15% greater risk of having anxiety compared to Academic jobs. This is consistent with the current literature that suggests that 36.8% of small-to-medium business owner/managers reported high or very high psychological distress(45). However, some studies suggest that there is no significant differences in the prevalence of affective disorders, anxiety disorders,between businessowners and employees(46). Although academic jobs showed lower levels of anxiety, A study from Kirkuk university found that lecturer assistants had higher levels of emotional exhaustion and depersonalization(47).

In the present study, age didn't play a role in having anxiety or depression. This is contrary to what is seen in literature where anxiety is greatest during the first two decades of life and declining with age (48). In contrast, depression tends to become more prevalent with age (49).

The current study the was no association between educational level and anxiety and depression. In contrast, studies show that higher levels of education among young adults were found to have both positive and negative associations with mental health symptoms. Specifically, higher educational attainment was linked to lower symptoms of depression alone and co-occurring anxiety and depression, but higher symptoms of anxiety only(50).

CONCLUSION

The current study sheds light on the significant prevalence of anxiety and depression among Iraqi employees, emphasizing the need for effective mental health interventions in the workforce. With 43.5% of participants reporting anxiety and 28.7% reporting depression, these mental health conditions are clearly widespread and require urgent attention.

Key factors associated with higher risk—such as gender, marital status, parenthood, occupation, and geographical location—underscore the importance of specialized support services. Female employees, single individuals, business owners, and those without children were found to be more vulnerable to anxiety and depression, suggesting that mental health interventions tailored to these groups may be especially beneficial.

Additionally, the geographical variation in anxiety prevalence, particularly the high rates observed in Baghdad, points to the need for region-specific approaches to mental health support. The current study calls for the development of targeted mental health programs and policies to address these vulnerabilities, with a focus on fostering a supportive work environment and improving access to mental health services across Iraq.

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