



# Assessment of Depression, Anxiety, and Stress of Women in Domestic Violence Shelters in Kurdistan-Iraq: A Cross-sectional Study

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## Abstract

**Objectives:** This study aims to evaluate the prevalence of domestic violence and severity of depression, anxiety, and stress with some socio-demographic characteristics among women who have sought sanctuary in domestic violence shelters.

**Materials and Methods:** This study utilized a cross-sectional design, employing different sampling methods to recruit a total of 46 participants. A convenience sampling method was used for the study group, while purposive sampling was employed for the control group. The primary data collection tool was a standardized questionnaire consisting of three validated scales: the Depression, Anxiety, and Stress Scale (DASS-42).

**Results:** The independent t-test analysis reveals highly significant differences between both groups ( $P \leq 0.001$ ). The multivariate analysis has revealed significant differences among occupations in stress ( $P \leq 0.05$ ), and significant differences were found in Relationship with family for Depression, Anxiety, and Stress ( $P \leq 0.001$ ).

**Conclusions:** Psychiatric disorders among domestic violence victims are very common, and the assessment of psychiatric disorders in domestic violence shelters is often overlooked or completely neglected. Physical, psychological, and verbal abuse are dominant types of violence suffered by shelter residents.

**Keywords:** Female abuse, Mental health, Garmian, GBV, violence

## Introduction

Domestic abuse, also referred to as “domestic violence” or “intimate partner violence,” is characterized by a consistent pattern of actions within a relationship aimed at acquiring or preserving power and authority over an intimate partner. These actions encompass physical, sexual, emotional, economic, or psychological behaviors or the use of threats to manipulate another individual (1). Violence against women is a global issue, nearly 1 in each 3 women (35%) are experiencing violence and the most common type of violence is domestic violence (30%) (2,3).

Domestic violence is a traumatic experience for victims and it has similar physical and psychological impacts as trauma (4). Domestic violence has complex consequences on women's health, in the United States, studies on domestic violence have revealed its impact on physical health (serious injuries), mental health (depression and post traumatic disorder), and sexual health (Human immunodeficiency virus “HIV” and unwanted pregnancies) (5). South Asian women with a history of domestic violence have also reported poor physical health and mental health (anxiety, depression, and suicidal ideation) (6). Other studies in United Kingdom have studied the link between domestic violence and victims' well-being; they found strong impacts on physical health and mental health,

victims were more prone to psychiatric disorders (mainly depression and anxiety) (7).

Domestic violence in Iraq is not a recent problem; rather, it is a longstanding issue with profound historical significance, linked to the societal pressures and adherence to traditional values and customs that emphasize masculinity across all aspects of life (8). Statistics in Iraq have shown that approximately 1.32 million individuals face the threat of various types of gender-based violence, with over 75% of these victims being women and adolescent girls. Of these incidents, 77% are associated with domestic violence (9). In Iraq, domestic violence is often given less attention compared to the Kurdistan region. One major issue is the inadequate availability of shelters for women seeking refuge from domestic violence (10). For instance, there are four domestic violence shelters in Kurdistan for 6 million citizens and only one in Iraq for a 40 million citizens (11). Women exposed to domestic violence in Iraq have to choose either to accept the violence or to leave their families and expect honor killing. It is very difficult for them to survive, especially when the law either does not punish honor killings or usually reduces prison sentence for the perpetrator (12).

Traditionally, it has not been the norm to report violence involving family members or partners, as it is generally

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## Key Messages

- ▶ Domestic violence is escalating in Iraq and Kurdistan Region and victims are suffering silently.
- ▶ Annually, more than 900 women seek refuge at domestic violence shelters in Kurdistan.
- ▶ Physical, psychological, and verbal abuse are very common among women in domestic violence shelters.
- ▶ Depression, anxiety, and stress are very dominant psychiatric disorders among women in domestic violence shelters.
- ▶ Studies on psychological disorders and needs among domestic violence survivors are overlooked in Iraq and Kurdistan.

regarded as a taboo subject and highly stigmatized. (13). Additionally, violence against women is considered “normal” in marital life (14). Women usually do not report any violence until they leave the abuser (15), and less than 40% of women suffering violence reach out for any form of assistance (16). Reporting violence by women usually leads to more violence by the abuser (17). For these reasons, the actual rates of violence are expected to be higher than the numbers of cases reported by the government.

Domestic violence is a serious issue in the Kurdistan region of Iraq, affecting many women and families across the region. In conflict-affected regions, rates of domestic violence tend to increase, exacerbating the challenges faced by women seeking safety and support (18). For instance, in the Kurdistan region, rates of domestic violence are escalating; in 2020, more than 11 000 calls for help were received on the domestic violence hotlines. Adding to that, around 900 women seek refuge at the domestic violence shelters annually (19).

Exposure to domestic violence and abuse is a traumatic experience (20). In addition to physical consequences of domestic violence, literature shows that domestic violence is leaving indelible scars on the mental well-being of survivors (21). Adding to that, studies found that depression and anxiety among violated women are very common among violated women (22,23). However, studies on the impact of trauma are mainly focusing on post-traumatic stress disorder (PTSD), while depression and anxiety are less studied despite the fact that they are often happen prior to PTSD and/ or as a comorbidly (24).

Beside legal support, physical and social services, providing mental support for victims of domestic violence is necessary (25). Physical injuries are usually well treated and security for victims are provided, but mental health needs are not addressed despite the long-lasting consequences of domestic violence on mental health (26). As there is not any evidence yet on the mental state of domestic violence victims in Kurdistan, robust data on mental health status and needs of survivors is crucial and research can bring insight into needs and actions that have to be taken (27).

This study endeavors to bridge the gap in our understanding of the mental health challenges faced by women escaping domestic violence. By exploring the prevalence and impact of depression, anxiety, and stress among shelter-seeking women, we aspire to foster a more holistic approach to addressing the repercussions of abuse and advocate for a safer and more empathetic society for all survivors.

The objectives are to study the types of violence experienced by shelter residents, to assess the levels of depression, anxiety, and stress among women in domestic violence shelters and compare it with women are not exposed to violence, find out the correlation between sociodemographic characteristics with levels of depression, anxiety, and stress, and to predict the occurrence of depression and anxiety by stress.

## Materials and Methods

### Research Design

A cross-sectional design has been used to assess the severity of depression, anxiety, and stress symptoms among women in domestic violence shelters. A cross-sectional study allows for the collection of data at a single point in time, which offers valuable insights into psychiatric symptoms within a defined timeframe.

### The Setting

This study was conducted at the domestic violence shelter in Garmian region of Kurdistan, Iraq. This shelter provides a 72-hours services for women who ask for safety and security from violence and abuse. It was established in 2014 and it receives females from different geographical regions. During the 72-hours, the shelter administration communicates with victims' families for negotiations and solving the problems in the court, if the case was not solved in that 72-hours, the case will be referred to the permanent shelter in Sulaymaniyah governorate as it is a major shelter that provides services for a long period of time, unless women decide to leave voluntarily.

### Participants

The study's participants consisted of two groups; study and control. The study group were women who were resident in domestic violence shelters in the Garmian region across diverse geographical locations. Inclusion criteria include being currently residing in a domestic violence shelter, agree to participate in the study, and having experienced domestic violence. Females who visited the shelter were eligible to participate, during the data collection period, more than 40 females have visited the shelter, among those only 23 were interviewed based on the inclusion criteria and the residency time in the shelter.

The control group were matched with the study group by age, occupation, and marital status. The inclusion criteria of the control group were based on a few questions (never looked for or found refuge in a domestic violence

shelter, never exposed to domestic violence, and never asked for help for suffering domestic violence) and they were collected from different settings in the region such as university, hospitals, schools, and neighborhoods. Inclusion criteria included eligibility by age and marital status with study group, and agree to participate in the study. Participants' identities have been kept confidential for both groups to ensure anonymity and encourage open responses.

### Data Collection

The process of data collection for the study group was under supervision of the shelter staff after getting verbal consent from each participant by the shelter staff and the researcher, asking for participants' names and/or their family members' names was not allowed (a nick name was used for each participant during data collection period) due to the sensitivity of the cases socially and legally.

The primary data collection tool was a standardized questionnaire consisting of three validated scales: the Depression, Anxiety, and Stress Scale (DASS-42). The DASS-42 is a well-established self-report instrument that assesses the severity of depression, anxiety, and stress symptoms over the past week. Participants were asked to respond to 42 items on a 4-point Likert scale (0 - Did not apply to me at all to 3 - Applied to me very much or most of the time) and the severity of symptoms as normal, mild, moderate, severe, and extremely severe.

In addition to the DASS-42, participants were requested to provide basic demographic information, such as age, marital status, education level, employment status, and quality of relationship with family, and few open-ended questions regarding the physical, verbal, and psychological violence. This data will help in understanding the socio-demographic profile of the participants and its potential influence on mental health outcomes.

Data collection took place from December 2022 to October 2023. During this period, 23 Women were interviewed for the study group, and 23 for the control group. Each interview required from 45–50 minutes.

### Sampling

Convenience sampling, a form of non-probability sampling, was used to recruit participants due to the sensitive nature of the cases and limited accessibility of women in domestic violence shelters. Shelter staff were assisting in the recruitment process by informing eligible women about the study and seeking their voluntary participation. A purposive sampling method was used for selecting the control group matched based on the sociodemographic characteristics of the study group including age, marital status, and education. The sample size was 46 women in total (23 women in each group). During the data collection period, over 40 cases have visited the shelter, among those only 23 were interviewed for these reasons: some of the cases are very sensitive

that the shelter administration does not give interview permission, some of the cases were leaving the shelter in a very short time in which interviewing them was not possible, and some of the cases did not agree to participate at all.

### Ethical Considerations

This research was adhered to ethical guidelines and principles as established by the University of Garmian. Informed consent was obtained verbally from all participants, as the written consent was not allowed by the Shelter administration for the sensitivity of the cases. Data collection started after clearly outlining the purpose of the study and the voluntary nature of participation. Participants were assured of confidentiality and the right to withdraw at any point without consequences. Ethical approval was issued by the relevant institutional review board before data collection started, the University of Garmian and the Directory of Labor and Social Affairs in the region (Approval No.: GRCEC113; October 15th, 2021).

### Pilot Study

A pilot study of 15 interviews (ten study and five control) were conducted before the actual study implementation, for testing the questionnaire and the clarity of the DASS-42 items for the interviewees, and for assessing the time needed for data collection. It was concluded that each interview required between 40-50 minutes, and that self-report was difficult for the participants. The questions required clarified for participants, and the author clarified the items which were unclear and helped with answering the questionnaire.

### The Reliability and Validity Process

The reliability and validity of the Kurdish version of DASS-42 tool have been established in previous research (28). For the current study, the reliability and validity were re-assessed, the translated version was compared with the English version and approved by a group of linguistics and professional experts at the University of Garmian. Internal consistency reliability was assessed using Cronbach's alpha coefficient for each domain of the questionnaire. The Cronbach alpha test was implemented and it was (0.96), which is statistically considered excellent internal consistency.

### Data Analysis

Data of the study was coded and analyzed using SPSS software (version-26). Descriptive statistics was employed to summarize the demographic characteristics of the participants. The mean scores and standard deviations were calculated for the DASS-42 subscales (depression, anxiety, and stress) to determine the prevalence and severity of these symptoms between the groups.

Inferential statistics was used to study the associations

of sociodemographic factors with depression, anxiety, and stress levels. Statistical tests such as t-test, univariate, and linear regression were used at *P* value of  $\leq 0.05$  as significance level.

**Results**

Based on the open-ended questions about physical violence, it showed that 14 (60.8%) of the study group have been exposed to physical violence (beating by hand or objects, injuries by sharp objects, and strains) and 3 (13.0%) were severely injured by sharp objects. All participants of the study group were exposed to prolonged psychological violence (insulting, disrespecting, humiliating, ignoring, etc.) and verbal violence (verbally threatened, using of bad words, shouting at, etc). The violence was committed by parents, partners, siblings, sister in law, and mother in law. Sexual violence was less common, it was reported by three (13.0%) and it was committed by intimate partners and/or strangers.

Table 1 presents the sociodemographic characteristics of the study and control groups, showing that the mean age was  $22.7 \pm 7.6$ , with a range from 13 to 44 years. The majority of participants were single, had completed

primary education, were unemployed, and the vast majority of the study group reported having a poor relationship with their families.

The results of the independent t-test analysis in Table 2 show significant differences between both groups ( $P \leq 0.001$ ). The means for depression and stress were notably different.

The multivariate analysis in Table 3 has shown significant differences among *occupations* in stress ( $P \leq 0.05$ ), and also significant differences were found in the *relationship with family* for depression, anxiety, and stress ( $P \leq 0.001$ ).

As shown in Table 4, results show that all the hypotheses have been strongly supported. The dependent variable (depression) was regressed on predicting variable (stress) to test the hypothesis H1. The result of the study ( $F(1/44) = 189.978, P \leq 0.001, B = 0.817$ ) indicates that stress is a significant predictor of depression. This suggests that stress plays a significant role in causing depression, highlighting the positive effect of stress on depression. Moreover,  $R^2 = .808$  depicts that stress explains 80.8% of variance in depression. Anxiety was also regressed on stress to test hypothesis H2. The results show that stress significantly predicts anxiety ( $F(1/44) = 81.897, B = 0.584$ ,

**Table 1.** Sociodemographic Characteristics of Both Groups

| Socio-demographics            |                    | Study Group |      | Control Group |      | Total |       |
|-------------------------------|--------------------|-------------|------|---------------|------|-------|-------|
|                               |                    | No.         | %    | No.           | %    | No.   | %     |
| Age groups ( $22.7 \pm 7.6$ ) | < 18               | 5           | 21.7 | 4             | 17.4 | 9     | 19.6  |
|                               | 18-25 years        | 13          | 56.5 | 14            | 60.9 | 27    | 58.7  |
|                               | > 25 years         | 5           | 21.7 | 5             | 21.7 | 10    | 21.7  |
| Marital status                | Single             | 14          | 60.9 | 14            | 60.9 | 28    | 60.9  |
|                               | Married            | 6           | 26.1 | 6             | 26.1 | 12    | 26.1  |
|                               | Divorced/separated | 3           | 13.0 | 3             | 13.0 | 6     | 13.0  |
| Education                     | Primary education  | 13          | 56.5 | 14            | 60.9 | 27    | 58.7  |
|                               | High school        | 7           | 30.4 | 6             | 26.1 | 13    | 28.3  |
|                               | University         | 3           | 13.0 | 3             | 13.0 | 6     | 13.0  |
| Occupation                    | Not working        | 14          | 60.9 | 11            | 47.8 | 25    | 54.3  |
|                               | House wife         | 6           | 26.1 | 6             | 26.1 | 12    | 26.1  |
|                               | Student            | 3           | 13.0 | 4             | 17.4 | 7     | 15.2  |
|                               | Employee           | 0           | 0.0  | 2             | 8.7  | 2     | 4.3   |
| Relationship with family      | Bad                | 22          | 95.7 | 2             | 8.7  | 24    | 52.2  |
|                               | Neutral            | 1           | 4.3  | 10            | 43.5 | 11    | 23.9  |
|                               | Good               | 0           | 0.0  | 11            | 47.8 | 11    | 23.9  |
| Total                         |                    | 23          | 50.0 | 23            | 50.0 | 46    | 100.0 |

**Table 2.** Independent T test Analysis for Depression, Anxiety, and Stress for Both Groups

|            | Groups  | Mean $\pm$ Standard Deviation | t- value | P value |
|------------|---------|-------------------------------|----------|---------|
| Depression | All     | 20.87 $\pm$ 7.092             |          |         |
|            | Study   | 26.57 $\pm$ 4.971             | 9.229    | <0.001  |
|            | Control | 15.17 $\pm$ 3.214             |          |         |
| Anxiety    | All     | 18.93 $\pm$ 5.666             |          |         |
|            | Study   | 22.30 $\pm$ 4.733             | 4.991    | <0.001  |
|            | Control | 15.57 $\pm$ 4.419             |          |         |
| Stress     | All     | 21.91 $\pm$ 7.823             |          |         |
|            | Study   | 28.52 $\pm$ 4.294             | 10.896   | <0.001  |
|            | Control | 15.30 $\pm$ 3.925             |          |         |



$P < 0.001$ ), indicating that stress plays a significant role in causing anxiety.  $R^2 = 0.651$  depicts that stress predicts 65.1% of variance in anxiety. Furthermore, Additionally, in hypothesis H3, anxiety predicts depression, showing a positive relationship between the two ( $F(1/44) = 55.720$ ,  $B = 0.935$ ,  $R^2 = 0.549$ ,  $P < 0.001$ ), explaining 54.9% of the variance in depression.

## Discussion

To the best of our knowledge, this study is the first study about the mental state of women in domestic violence shelters in Iraq and Kurdistan region. The objectives of the current study were to find out the types of violence experience by women in domestic violence shelters, to assess the levels of depression, anxiety, and stress among women in domestic violence shelters, and to find out the correlation between sociodemographic characteristics with levels of depression, anxiety, and stress.

The women seeking refuge in Garmian domestic violence shelter had a wide age range, spanning from under 18 years to over 40 years old (mean = 22.7 ±

7.6), with the youngest being 13 and the oldest being 44 years old. The majority of these women were single, had completed primary education, and did not have employment. Women with an occupation tend to have less stress compared to women without a job. This is similar to the WHO report about Iraq; women aged 15 to 49 in Iraq have experienced intimate partner violence at some point in their lives (9). Education and economic status of women have been linked to exposure to domestic violence; lower domestic violence cases were found among higher educational levels and economic states (29). This sheds light on the reasons women accept violence: they do not have a source of income, what forces them to stand the violence (30). Contrary to the results in other countries, studies in Pakistan have shown that women with a source of income are more susceptible to domestic violence, possibly because they are financially independent and may resist male dominance (31, 32). This explains that women with income are more likely to seek empowerment which is culturally and traditionally unacceptable in a community with dominant men (33).

**Table 3.** Multivariate Analysis of DASS and Sociodemographic Characteristics

| Socio-demographics             |                   | Depression                 | Anxiety                     | Stress                      |
|--------------------------------|-------------------|----------------------------|-----------------------------|-----------------------------|
|                                |                   | Mean ± SD                  | Mean ± SD                   | Mean ± SD                   |
| Age groups (mean = 22.7 ± 7.6) | < 18 years        | 19.89 ± 6.716              | 18.33 ± 3.674               | 22.44 ± 7.316               |
|                                | 18-25 years       | 20.30 ± 7.054              | 18.63 ± 5.917               | 21.48 ± 7.837               |
|                                | > 25 years        | 23.30 ± 7.689              | 20.30 ± 6.684               | 22.60 ± 8.922               |
|                                | <i>P</i> value    | 0.477                      | 0.693                       | 0.908                       |
| Marital status                 | Single            | 20.5 ± 7.589               | 18.79 ± 5.977               | 21.32 ± 7.954               |
|                                | Married           | 21.25 ± 7.162              | 19.33 ± 6.169               | 22.17 ± 8.716               |
|                                | Divorced          | 21.83 ± 5.154              | 18.83 ± 3.430               | 24.17 ± 5.811               |
|                                | <i>P</i> value    | 0.899                      | 0.962                       | 0.724                       |
| Education                      | Primary education | 21.19 ± 6.720              | 19.37 ± 5.617               | 22.63 ± 7.762               |
|                                | High school       | 20.92 ± 7.077              | 18.92 ± 5.155               | 21.85 ± 7.426               |
|                                | University        | 19.33 ± 9.709              | 17.0 ± 7.457                | 18.83 ± 9.538               |
|                                | <i>P</i> value    | 0.851                      | 0.661                       | 0.571                       |
| Occupation                     | Not working       | 21.68 ± 7.004              | 19.20 ± 5.393               | 23.12 ± 7.463 <sup>a</sup>  |
|                                | House wife        | 21.42 ± 6.331              | 19.83 ± 5.890               | 23.0 ± 7.544 <sup>b</sup>   |
|                                | Student           | 20.29 ± 7.521              | 19.0 ± 5.416                | 19.71 ± 7.204               |
|                                | Employee          | 9.5 ± 4.950                | 10.0 ± 4.243                | 8.0 ± 2.828 <sup>ab</sup>   |
|                                | <i>P</i> value    | 0.131                      | 0.147                       | <b>0.046</b>                |
| Relationship with family       | Bad               | 25.92 ± 5.54 <sup>ab</sup> | 22.25 ± 4.627 <sup>ab</sup> | 27.96 ± 4.894 <sup>ab</sup> |
|                                | Neutral           | 16.36 ± 3.171 <sup>a</sup> | 16.18 ± 4.75 <sup>a</sup>   | 17.09 ± 4.011 <sup>a</sup>  |
|                                | Good              | 14.36 ± 3.957 <sup>b</sup> | 14.45 ± 3.984 <sup>b</sup>  | 13.55 ± 3.725 <sup>b</sup>  |
|                                | <i>P</i> value    | <b>&lt;0.001</b>           | <b>&lt;0.001</b>            | <b>&lt;0.001</b>            |

SD, standard deviation;

Note: 'a' and 'b' letters indicate pairwise differences.

**Table 4.** Linear Regression for Testing the Hypotheses

| Hypotheses | Regression weights   | B     | R <sup>2</sup> | F       | T Value | P Value | Results   |
|------------|----------------------|-------|----------------|---------|---------|---------|-----------|
| H1         | Stress → Depression  | 0.817 | 0.808          | 189.978 | 13.783  | <0.001  | Supported |
| H2         | Stress → Anxiety     | 0.584 | 0.651          | 81.897  | 9.050   | <0.001  | Supported |
| H3         | Anxiety → Depression | 0.935 | 0.549          | 55.702  | 7.463   | <0.001  | Supported |

\*  $P$  value  $\leq 0.05$ , B = beta coefficient.

H1: Stress leads to occurrence of depression; H2: Stress leads to Anxiety; H3: Anxiety leads to occurrence of depression.

Psychological violence was the dominant type of violence, followed by verbal and physical violence, while sexual violence was less common. This result aligns with previous studies, psychological and physical violence are mostly common type of violence with high rates. Azhar et al found the majority of women were exposed to psychological violence (71%) and followed by physical violence (56%) (30). Similar findings were found in Palestine (34), Iran (35), Pakistan (36), India (37), South Africa (38). Different finding was found in a systematic review of 10 studies revealed that sexual violence was the dominant type of violence (39). Less reported rates of sexual violence in this study could be related to absence of suitable assessment tool for sexual violence and the sensitivity of such assessments (40). These findings indicate that violence against women is widespread, types are the same over decades and different regions in the world, adding to that that all the studies most likely only a tiny part of the cruel reality.

Regarding the levels of mental health distress among the women in the shelters, we have found highly significant differences between the study and the control groups in the severity of Depression, Anxiety, and Stress. These findings mirror similar results from other studies (21, 41). Furthermore, Ahmedabadi et al found a relationship between violence and depression in women with intimate partner violence (22).

Stress affects the psychological well-being; having stress will lead to the occurrence of depression and anxiety. Research has shown similar outcomes among domestic violence survivors, indicating that stress and fear from violence can lead to depression (42). Similarly, Laugharne et al have studied the role of psychological trauma and have found that is causing anxiety and depression (24).

Domestic violence is usually a prolonged stressful mode of life and survival, that has many consequences; physical, psychological, and emotional disorders. People living in such environments are prone to many severe psychological disorders including anxiety, depression, and PTSD (3). Therefore, providing social and psychological support for victims can lead to lower and less severe consequences on domestic violence victims (43). Moreover, research has shown that raising awareness and utilizing cognitive behavioral therapy and psychological counseling for women can reduce the severity of psychological symptoms, such as depression and anxiety (44-46).

#### Limitations of the Study

This study has several limitations that need to be considered for future research. The sample size and duration of data collection were both limited and should be expanded for future studies. Data collection took place in a temporary shelter with a 72-hour residency limit, making it difficult to interview all the females in the shelter, particularly those who left earlier. Future studies are recommended to be conducted in permanent shelters to allow for a larger

sample size and sufficient time for interviews. The data collection process faced restrictions from the shelter administration, so it is essential for authorities and shelter administration to provide more facilities for researchers. The limited time permitted for interviews did not allow for the study of additional psychological factors that could affect the physical and mental well-being of shelter residents.

#### Conclusions

Psychiatric disorders are prevalent among domestic violence victims, yet the assessment of these disorders in domestic violence shelters is often overlooked or neglected. Women in domestic violence shelters in the Kurdistan region of Iraq are experiencing severe symptoms of depression, anxiety, and stress, and have strained relationships with their family members compared to women who have not been exposed to domestic violence or forced to seek refuge in domestic violence shelters. Physical, psychological, and verbal abuse are the predominant types of violence suffered by shelter residents.

#### Directions for Future Research

The findings of this study provide valuable insights for future research, practice, and policy development regarding the assessment of depression, anxiety, and stress levels among women in domestic violence shelters in Kurdistan, Iraq. The implementation of these recommendations by policy-makers can aid in the establishment of more effective and comprehensive methods to address the mental health issues faced by women in domestic violence shelters in Kurdistan, Iraq.

There is urgent need to develop and apply interventions that are evidence-based, culturally aware, and especially suited to the psychological requirements of women in shelters for domestic violence. The intricate interactions between depression, anxiety, and stress should be addressed in these interventions, which should also include therapeutic approaches that take into account the distinct sociocultural setting of Kurdistan, Iraq. The recognition of family relationships needs to be given high priority as a factor in mental health outcomes. Interventions need to help families create a safe and encouraging atmosphere for victims of domestic violence. Additional factors have to be explored in future studies, such as social support networks, coping strategies, and access to education and career opportunities, that may have an impact on the mental health outcomes for women staying in domestic violence shelters.

Hence, this study brings insight into the mental state of women who seek for domestic violence shelters. The insights gained from this study can inform policy makers, improve the quality of services, and advocate for better mental health support for survivors. It also strengthens the case of domestic violence to get funding by non-

governmental organizations (NGOs) to better support shelters and survivors through providing resources, training shelter staff, and providing specialists.

#### Authors' Contribution

**Conceptualization:** Nazdar Qudrat Abas.

**Data curation:** Nazdar Qudrat Abas.

**Formal analysis:** Nazdar Qudrat Abas.

**Supervision:** Saadoun Dawood Ahmed Al-Jiboori.

**Writing—original draft:** Nazdar Qudrat Abas.

**Writing—review & editing:** Saadoun Dawood Ahmed Al-Jiboori.

#### Conflict of Interests

Authors declare that there was no conflict of interest.

#### Data Availability Statement

The datasets used and/or analyzed for this study are available by the corresponding author upon reasonable request.

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