

# Evaluation of Depression and Knowledge Levels about Depression among Women Living in Türkiye: A Descriptive Study

## Türkiye'deki Kadınların Depresyon ve Depresyon Hakkındaki Bilgi Düzeylerinin Değerlendirilmesi: Tanımlayıcı Çalışma

<sup>1b</sup> Hacer DEMİRKOL<sup>a</sup>, <sup>1b</sup> Melisa BABAOĞLU<sup>b</sup>

<sup>a</sup>Yozgat Bozok University Faculty of Health Science, Department of Nursing, Division of Psychiatric and Mental Health Nursing, Yozgat, Türkiye

<sup>b</sup>Yozgat Bozok University Faculty of Health Science, Department of Nursing, Yozgat, Türkiye

**ABSTRACT Objective:** The present study aimed to examine depression and knowledge about depression among women aged 18 years old and over in Türkiye. **Material and Methods:** The data of the cross-sectional descriptive study were collected online using the Introductory Information Form and Beck's Depression Inventory between 31 October 2023 and 11 February 2024 through snowball sampling method. Data analysis was conducted employing descriptive statistics and binary logistic regression analysis. **Results:** Of the participating women, 56.2% were in the 18-24 age group and 52.8% had a moderate income level. While 84.7% of the women believe they had depression previously, 39% stated that they would prefer self-healing without seeking support from others if they were to experience depression. The most common treatment methods are medication therapy and psychotherapy, with 49%. It was found that 87.3% (n=337) of the women had a good level of knowledge about depression. Poor-income level, previous experience of depression and insufficient knowledge of depression were determined as risk factors for depression. **Conclusion:** The results of the study have shown that women are reluctant to receive professional support for the treatment of depression and that the low level of knowledge about depression constitutes a risk factor for depression. Thus, nurses are recommended to conduct training programs to increase women's knowledge levels of depression and evidence-based treatments.

**ÖZET Amaç:** Bu çalışmada, Türkiye'deki 18 yaş ve üstü kadınların depresyon ve depresyon hakkındaki bilgi düzeylerinin incelenmesi amaçlanmıştır. **Gereç ve Yöntemler:** Kesitsel tanımlayıcı araştırmanın verileri Tanıtıcı Bilgi Formu ve Beck Depresyon Envanteri kullanılarak 31 Ekim 2023-11 Şubat 2024 tarihleri arasında, kartopu örnekleme yöntemi ile çevrim içi olarak toplanmıştır. Verilerin analizinde tanımlayıcı istatistikler ve ikili lojistik regresyon analizi kullanılmıştır. **Bulgular:** Kadınların %56,2'si 18-24 yaş aralığında ve %52,8'nin gelir düzeyi orta düzeydedir. Kadınların %84,7'si daha önce depresyon yaşadığını düşünürken %39'u depresyon yaşamaması durumunda, kimseden destek almayarak kendi kendine iyileşmeyi tercih edeceğini belirtmiştir. En çok bilinen tedavi türleri %49 ile ilaç tedavisi ve psikoterapidir. Kadınların %87,3'nün (n=337) depresyon hakkındaki bilgi düzeyinin iyi olduğu belirlenmiştir. Düşük gelir seviyesi, daha önce depresyon yaşama ve depresyon hakkında bilgi düzeyinin düşük olması depresyon için risk faktörleri olarak belirlenmiştir. **Sonuç:** Araştırma sonuçları, kadınların depresyon tedavisi için profesyonel destek almaya istekli olmadıklarını ve depresyon hakkında bilgi düzeyinin düşük olmasının, depresyon için bir risk faktörü olduğunu göstermiştir. Bu sebeple, hemşirelere kadınların depresyon ve kanıt dayalı tedaviler hakkında bilgi düzeylerinin artırılmasına yönelik eğitim programları yürütmeleri önerilmektedir.

**Keywords:** Depression; knowledge; women; Türkiye

**Anahtar Kelimeler:** Depresyon; bilgi; kadın; Türkiye

Depression, a mood disorder, is generally characterized by low self-esteem, inability to enjoy life, hopelessness, indifference to life, difficulty concentrating, lack of energy, change in appetite either in

the form of increase or decrease, and/or thoughts of ending one's life, which can last for days, months or even years.<sup>1</sup> Depression is estimated to affect 3.8% (approximately 280 million individuals) of the global

**Correspondence:** Hacer DEMİRKOL

Yozgat Bozok University Faculty of Health Science, Department of Nursing, Division of Psychiatric and Mental Health Nursing, Yozgat, Türkiye

**E-mail:** hacedemircol@yobu.edu.tr



Peer review under responsibility of Türkiye Klinikleri Journal of Nursing Sciences.

**Received:** 08 Mar 2024

**Accepted:** 29 Jun 2024

**Available online:** 03 Jul 2024

2146-8893 / Copyright © 2024 by Türkiye Klinikleri. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

population. In addition, each year more than 700,000 individuals lose their lives as a result of suicide, one of the most significant results of depression.<sup>2</sup>

According to the literature, women are twice as likely as men to be diagnosed with depression. This higher prevalence of depression among women is due to biological processes such as the menstrual cycle, menopause, childbirth during which rapid hormonal changes occur, and some sociocultural factors like having a disadvantaged social status and emotion-focused coping.<sup>3,4</sup> Physical comorbidities and symptoms such as asthma, coronary heart disease, heart attack, stroke and diabetes as well as mental ones like anxiety, sleep problems, and substance use disorder are commonly observed among women who experience depression and women's quality of life decreases due to depression.<sup>5-9</sup>

Depression, which has various negative effects on women's health, is a mental disorder that can be treated and prevented. In order for the prevention and treatment of depression, professional support should be sought at the earliest stage, symptoms should be identified and interventions of mental healing and protection should be made immediately. Lack of knowledge about depression or ignoring the symptoms are among the biggest barriers to receiving professional help for women. Delayed treatment, on the other hand, leads to the progression, chronicity and intergenerational genetic transmission of depression in women, as well as upbringing unhealthy children.<sup>10,11</sup> In the light of all this information, the present study aimed to examine depression and knowledge of depression among adult women in Türkiye.

## MATERIAL AND METHODS

### RESEARCH DESIGN

The study was conducted with the cross-sectional research design between 31.10.2023 and 11.10.2024.

### PARTICIPANTS

According to the 2022 data of the Turkish Statistical Institute, the total number of women in Türkiye is 42 million 575 thousand 441.<sup>12</sup> "Sample size" online sample calculation tool was used to calculate the estimated sample size.<sup>13</sup> The sample size was determined as minimum 385 women with 50% incidence, 95%

confidence interval and  $p < 0.05$  significance level. The inclusion criteria for the study were being 18 years-old and over, being female, volunteering to participate in the study and being able to read and write in Turkish. Women who had physical and mental disabilities that would prevent them from reading and understanding the survey questions and those who did not have internet access were excluded. A total of 386 adult women were reached in the study.

### PROCEDURE

Written permission was obtained from Yozgat Bozok University Social and Humanities Ethics Committee in Türkiye (Date: October 18, 2023; no: 07/37). The data were collected online in 31.10.2023-11.02.2024 using the snowball sampling method through "Google Forms". In the first step, the link for the research was sent to the researcher's acquaintances through internet-based platforms such as Whatsapp Messenger, Mail, Twitter and Instagram. Later, the participants reached out at the initial step were asked to share the link with people they knew. Written consent was received from the participants and the study was conducted in accordance with the Declaration of Helsinki. In addition, permission was taken from the researchers who conducted the Turkish validity and reliability studies of the Beck Depression Inventory (BDI) through email. It took approximately 20 minutes to fill out the forms used in the study.

### MEASURES

**Introductory Information Form:** The form includes nine questions asking about the participants' age, education, employment status, income level, previous education on depression, previous experience of depression (subjective evaluation), state of receiving professional support when they experienced depression, and treatment/support of depression. Additionally, there are 16 questions to determine the level of basic knowledge about depression, which are to be responded as "I agree" and "I disagree". The form consists of 25 questions in total.

**BDI:** The scale was developed by Beck to measure the severity of symptoms of depression.<sup>14</sup> The validity and reliability study of the Turkish version was conducted by Hisli on patients applying to the

psychiatry clinic (1988) and university students (1989). The 4-point Likert type scale consists of 21 items scored from 0 to 3. The minimum possible score to be obtained from the scale is 0, while the maximum score is 63. Higher scores indicate more severe symptoms of depression, with scores of 17 and above being the cut-off point for a probable diagnosis of clinical depression.<sup>15,16</sup>

## STATISTICAL ANALYSIS

The data were evaluated on IBM SPSS.22 software with the statistical significance of  $\leq 0.05$ . The data are represented as numbers, means, percentages and standard deviation. The overall BDI mean score was analyzed for normal distribution using skewness and kurtosis values. Skewness (0.674) and Kurtosis (0.274) values were found to be in the range of  $\pm 3$ , indicating a normal distribution.<sup>17</sup> Each correct answer to the 16 questions concerning the knowledge level was given five points. Individuals who obtained less than 60% of the total score were concluded to have poor knowledge of depression, while those who scored 60% and higher were considered to have good knowledge.<sup>18</sup> Data analysis was conducted using descriptive statistics and binary logistic regression. The cut-off point of BDI for a probable diagnosis of clinical depression was determined as 17 and higher.<sup>15,16</sup>

## RESULTS

According to the Table 1, 56.2% (n=217) of the participants are in the 18-24 age range, 52.3% (n=202) are high school graduates, 58.3% (n=225) are unemployed and 52.8% (n=204) have a middle income level. It was seen that 87.8% (n=339) of the participants had not received any type of education about depression before; 84.7% (n=327) believed they had experienced depression before, and 54.7% (n=211) stated they would not seek professional support if they were to experience depression. The most widely known types of treatment for depression were medication and psychotherapy, with 49% (n=189), while 39% (n=150) of the participants would choose self-healing instead of receiving support if they were to experience depression (Table 1).

Overall BDI mean score of the women participating in the study was found to be  $18.43 \pm 10.84$ , and

**TABLE 1: Sociodemographic data and depression-related descriptive characteristics of the participants (n=386).**

Variables	n (%)
<b>Age</b>	
18-24	217 (56.2)
25 and over	169 (43.8)
<b>Educational status</b>	
Elementary school	74 (19.2)
High school	202 (52.3)
Post-high school	110 (28.5)
<b>Employment status</b>	
Yes	161 (41.7)
No	225 (58.3)
<b>Income status</b>	
Poor	147 (38.1)
Middle	204 (52.8)
Good	35 (9.1)
<b>Receiving education on depression before</b>	
Yes	47 (12.2)
No	339 (87.8)
<b>Believing to have experienced depression before</b>	
Yes	327 (84.7)
No	59 (15.3)
<b>I would seek professional support if I experience depression</b>	
Yes	175 (45.3)
No	211 (54.7)
<b>Types of depression treatment known</b>	
Medication and psychotherapy	189 (49)
Psychotherapy	58 (15)
Medication	46 (12)
I don't know any treatment types	40 (10.3)
Medication, psychotherapy and ECT	29 (7.5)
Medication, psychotherapy,	10 (2.6)
<b>ECT and Repetitive magnetic stimulation</b>	
Medication, psychotherapy, ECT, Light therapy	9 (2.3)
Medication and ECT	3 (0.8)
ECT	2 (0.5)
<b>Who to seek support from in the event of depression</b>	
I wouldn't ask for anyone's support, I would heal myself	150 (39)
I would get support from my family and friends	118 (30.6)
I would consult a psychiatrist	55 (14.2)
I would turn to spiritual practices (praying etc.)	39 (10)
I would consult a psychologist	14 (3.6)
I would consult a general practitioner	5 (1.3)
I would ask for help from a nurse	5 (1.3)

ECT: Electroconvulsive therapy.

considering the cut-off value for BDI (17 and higher), it was determined that 52.8% (n=204) of them could clinically get a probable diagnosis of depression (Table 2).

**TABLE 2:** Mean BDI scores and prevalence of a probable depression diagnosis according to the BDI cut off score 17 (n=386).

Variables	Probable depression according to BDI (17 and above cut off score) n (%)
Depression	204 (52.8)
No depression	182 (47.2)
BDI	$\bar{X}\pm SD$
Overall mean score	18.43 $\pm$ 10.84

BDI: Beck Depression Inventory; SD: Standard deviation.

The women who participated in the study were asked 16 questions including basic information related to depression. It was seen that 87.3% (n=337) of the women scored 48 and higher, which showed a good level of depression-related knowledge (Figure 1).

It was determined that the highest rate of incorrect answers were given to the questions “Depression can be controlled by willpower” with 96.4% (n=268) and “Using medication for depression treatment causes addiction” with 69.2% (n=267) (Table 3).

Binary logistic regression analysis was conducted in order to identify the risk factors related to depression. Statistical analysis was performed for income level, previous experience of depression and level of knowledge about depression, which were determined to significantly contribute to the model to be constructed for binary logistic regression. The results of the analysis showed that poor income level [Exp (B)=0.569, p=0.018], having previous experience of depression [Exp (B)=5.630, p=0.000] and

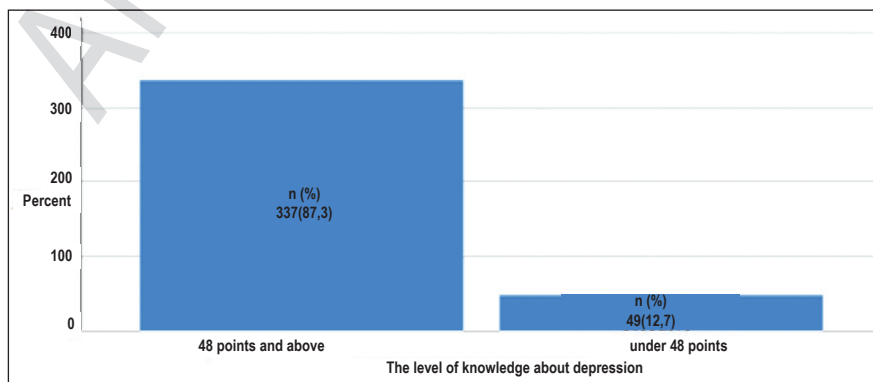
poor knowledge of depression [Exp (B)=0.018, p=0.000] were seen to be associated with a clinically probable diagnosis of depression (according to the BDI cut off score 17). These variables were found to be risk factors for depression (p $\leq$ 0.05) (Table 4).

## DISCUSSION

In the present study, depression and depression knowledge levels of adult women in Türkiye were examined and the results have been discussed in the light of the current literature.

According to the findings of the study, more than half of the women believe they have experienced depression before and display symptoms of depression. The rate of depression determined among women in the study is higher than that reported by previous studies conducted with women in Türkiye.<sup>19</sup> In recent years, individuals in our country, like in the whole world, have witnessed stressful events like the coronavirus disease-2019 pandemic and wars. Additionally, over the last four years, our country has faced natural disasters such as devastating earthquakes and floods, which have deeply affected the whole society. The present studies, as well as other studies conducted recently, have revealed that all individuals, including women, are at risk of depression and there is an increase in the prevalence of depression.<sup>20-23</sup>

Although only nearly 12% of the participating women have received information or education related to depression, a great majority was seen to know at least one method of depression treatment correctly,



**FIGURE 1:** Knowledge levels of women participating in the study regarding depression (n=386).

**TABLE 3:** Distribution of women's responses to depression-related questions (n=386).

Questions	I agree	I disagree
	n(%)	
Depression is a mental disorder.	344 (89.1)	42 (10.9)
Depression is a disorder that can be treated.	350 (90.7)	36 (9.3)
Experiencing depression or not is within the individual's own control.	157 (40.7)	229 (59.3)
Depression can be controlled by will power.	268 (69.4)	118 (30.6)
Using medication for depression causes addiction.	267 (69.2)	119 (30.8)
Depression can be seen at any age.	339 (87.8)	47 (12.2)
Genetics play a role in depression.	154 (39.9)	232 (60.1)
Depression causes loss of concentration.	346 (89.6)	40 (10.4)
Depression leads self-confidence to decrease.	348 (90.2)	38 (9.8)
Profound sorrow is experienced in depression.	359 (93)	27 (7)
Depression causes decrease in energy levels and disruption in sleep patterns.	363 (94)	23 (6)
Depression causes decrease or increase in appetite.	343 (88.9)	43 (11.1)
Depression can become chronic if not treated.	272 (70.5)	114 (29.5)
Depression causes disruption of interpersonal relationships.	349 (90.4)	37 (9.6)
Individuals lose interest or joy in daily activities in depression.	346 (89.6)	40 (10.4)
Depression is more common among women than men.	272 (70.5)	114 (29.5)

**TABLE 4:** Distribution of the risk factors affecting a probable depression diagnosis (BDI cut-off point=17 and higher) in women (n=386).

Risk factors	Exp (B) (Odds ratio)	95% Confidence interval		p value
		Lower bound	Upper bound	
Poor income level	0.569	0.356	0.908	0.018*
Having previous experience of depression	5.630	2.422	13.087	0.000*
Poor knowledge of depression (lower than 48 points)	0.018	0.004	0.084	0.000*

\*p≤0.05.

and the overall level of depression knowledge was found to be good. It was determined that the women's overall knowledge of depression was at a higher level than that of individuals living in Canada and Saudi Arabia.<sup>18,24</sup> This finding is considered to be due to the fact that the women who participated in the present study have higher education levels and they access depression-related information particularly on online platforms.

Although the women's overall knowledge of depression is at a good level, a great majority were seen to prefer seeking support from their relatives and friends instead of professional support for depression, which is similar to the findings of the study conducted by AlJadani and et al.<sup>18</sup> As the results of the study indicate, most of the women think they would be addicted if they use medications. This belief may to be among the greatest barriers in front of applying

to professional support. In the study carried out by Wang and et al. in Canada, it was found that the participants mostly wanted to get help from their general practitioners when they experienced depression, while very few of the women stated they would consult their general practitioners in the present study.<sup>24</sup> The results of the study highlight the necessity that physicians and nurses in primary healthcare services inform patients about depression and medications used for depression and establish therapeutic relationships.<sup>25</sup>

According to the results of the study, a majority of the women believe that they can heal themselves and take depression under control through willpower instead of receiving professional support for depression treatment. In a similar study conducted by Yoshikawa and et al., more than half of the participants were found to be unwilling to seek professional

support for depression.<sup>26</sup> In the World Health Organization's study including 24 countries, it is reported that the greatest barrier in front of seeking treatment for mental disorders is individuals' willingness to solve the problem themselves.<sup>27</sup>

While individuals can utilize methods like coping with stress and receiving social support which they can implement themselves for depression, it is crucial to receive professional medical support in depression.<sup>26</sup> Depression, unless treated at an early stage, can lead to deterioration of overall health outcomes and even suicide.<sup>28-30</sup> Causing losses in the workforce and increases in hospital costs, depression negatively affects the society as well as the individual.<sup>31,32</sup>

The findings show that poor income levels and previous experience of depression are risk factors for depression. These results are consistent with the existing literature. It is reported that a poor income level is a risk factor for depression given the psychosocial problems it brings along, and at least 50% of the individuals who experience depression once face it again in another stage of their lives and depression can become chronic.<sup>28-30,33</sup>

Additionally, poor level of knowledge about depression was found as a risk factor for depression in the present study. Lack of knowledge has an adverse effect on behavioral patterns that lead to positive health outcomes such as seeking treatment and adherence to treatment.<sup>24</sup> When the results of the present study are considered together with the previous findings in the literature, as understood from some women's responses about receiving support from nurses, nurses assume important roles in providing women with education on depression and symptoms, the importance of seeking professional support for depression, coping mechanisms with depression and evidence-based treatment options.<sup>34,35</sup>

The present study has some significant limitations. Women's depression levels were not determined for clinical diagnosis purposes, but using the self-report scale BDI. The cross-sectional design of the study prevents causal deductions. In addition, the

data of the study were collected online using the snowball sampling method. Thus, reaching better educated women with internet access could be considered a selection bias.

## CONCLUSION

It was concluded that more than half of the women who participated in the study could receive a probable depression diagnosis clinically. Although the women had a good level of knowledge about depression, a great majority were found to prefer self-healing instead of seeking professional support if they were to experience depression. Moreover, most of the women in the study believe that they could be addicted if they used medication for depression and that they could take depression under control through willpower. Poor income level, previous experience of depression and insufficient knowledge of depression were identified as risk factors for depression. In the light of all this information, it is evident that nurses assume pivotal roles in informing women in our country about depression and its treatment.

### *Source of Finance*

*During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.*

### *Conflict of Interest*

*No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.*

### *Authorship Contributions*

*Idea/Concept: Hacer Demirkol, Melisa Babaoğlu; Design: Hacer Demirkol, Melisa Babaoğlu; Control/Supervision: Hacer Demirkol; Data Collection and/or Processing: Hacer Demirkol, Melisa Babaoğlu; Analysis and/or Interpretation: Hacer Demirkol; Literature Review: Hacer Demirkol, Melisa Babaoğlu; Writing the Article: Hacer Demirkol, Melisa Babaoğlu; Critical Review: Hacer Demirkol; References and Fundings: Hacer Demirkol.*

## REFERENCES

1. American Psychiatric Association. *Depressive Disorders. Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*. 5th eds. Arlington: American Psychiatric Association; 2013. p.155-88. [https://repository.poltekkes-kaltim.ac.id/657/1/Diagnostic%20and%20statistical%20manual%20of%20mental%20disorders%20\\_%20DSM-5%20\(%20PDF-Drive.com%20\).pdf](https://repository.poltekkes-kaltim.ac.id/657/1/Diagnostic%20and%20statistical%20manual%20of%20mental%20disorders%20_%20DSM-5%20(%20PDF-Drive.com%20).pdf)
2. Global Health Data Exchange [Internet]. ©2024 University of Washington [Cited: February 16, 2024]. Available from: <https://vizhub.healthdata.org/gbd-results/>
3. Noble RE. Depression in women. *Metabolism*. 2005;54(5 Suppl 1):49-52. PMID: 15877314.
4. Woody CA, Ferrari AJ, Siskind DJ, Whiteford HA, Harris MG. A systematic review and meta-regression of the prevalence and incidence of perinatal depression. *J Affect Disord*. 2017;219:86-92. PMID: 28531848.
5. Kim WK, Shin D, Song WO. Depression and its Comorbid Conditions More Serious in Women than in Men in the United States. *J Womens Health (Larchmt)*. 2015;24(12):978-85. PMID: 26131726.
6. Jagtap N, Muliayala KP, Chaturvedi SK. Depression, anxiety, and physical morbidity in women. Chandra P, Herrman H, Fisher J, Riecher-Rössler A, eds. *Mental Health and Illness of Women. Mental Health and Illness Worldwide*. Singapore: Springer; 2020. [https://link.springer.com/referenceworkentry/10.1007/978-981-10-2369-9\\_21](https://link.springer.com/referenceworkentry/10.1007/978-981-10-2369-9_21)
7. Barsha RAA, Hossain MB. Trouble sleeping and depression among us women aged 20 to 30 Years. *Prev Chronic Dis*. 2020;17:E29. PMID: 32242798; PMCID: PMC7207056.
8. Zhou J, Ko JY, Haight SC, Tong VT. Treatment of substance use disorders among women of reproductive age by depression and anxiety disorder status, 2008-2014. *J Womens Health (Larchmt)*. 2019;28(8):1068-76. PMID: 31298606; PMCID: PMC8893023.
9. Cho Y, Lee JK, Kim DH, Park JH, Choi M, Kim HJ, et al. Factors associated with quality of life in patients with depression: a nationwide population-based study. *PLoS One*. 2019;14(7):e0219455. PMID: 31295291; PMCID: PMC6623963.
10. Josefsson A, Vikström J, Bladh M, Sydsjö G. Major depressive disorder in women and risk for future generations: population-based three-generation study. *BJPsych Open*. 2019;5(1):e8. PMID: 30632472; PMCID: PMC6343114.
11. Cacheda F, Fernandez D, Novoa FJ, Carneiro V. Early detection of depression: social network analysis and random forest techniques. *J Med Internet Res*. 2019;21(6):e12554. PMID: 31199323; PMCID: PMC6598420.
12. Türkiye İstatistik Kurumu [Internet]. Türkiye İstatistik Kurumu © 2024 [Erişim tarihi: 02 Mart 2024]. Adrese Dayalı Nüfus Kayıt Sistemi Sonuçları. Erişim linki: <https://www.tuik.gov.tr/>
13. Sampsiz [Internet]. © 2003-2005 Philippe Glaziou [Cited: 02 March 2024]. Available from: <http://sampsiz.sourceforge.net/iface/>
14. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. *Arch Gen Psychiatry*. 1961;4:561-71. PMID: 13688369.
15. Hıslı NŞ. Beck Depresyon Envanteri'nin geçerliği üzerine bir çalışma [A study on the validity of Beck Depression Inventory]. *Psikoloji Dergisi*. 1988;6(22):118-26. [https://scholar.google.com.tr/citations?view\\_op=view\\_citation&hl=tr&user=3\\_hoosAAAAJ&citation\\_for\\_view=3\\_hoosAAAAJ:RHPTsmoSYBkC](https://scholar.google.com.tr/citations?view_op=view_citation&hl=tr&user=3_hoosAAAAJ&citation_for_view=3_hoosAAAAJ:RHPTsmoSYBkC)
16. Hıslı NŞ. Beck Depresyon Envanteri'nin üniversite öğrencileri için geçerliği, güvenilirliği [The validity and reliability of Beck Depression Inventory for university students]. *Psikoloji Dergisi*. 1989;7(23):3-13. <https://psikolog.org.tr/tr/yayinlar/dergiler/1031828/tpd1300443319890000m000366.pdf>
17. Brown TA. *Confirmatory Factor Analysis for Applied Research*. 2nd Edition. New York City: Guilford Press; 2006.
18. AlJadani AH, Alshammari SN, Alshammari KA, Althagafi AA, AlHarbi MM. Public awareness, beliefs and attitude towards depressive disorders in Saudi Arabia. *Saudi Med J*. 2021;42(10):1117-24. PMID: 34611007; PMCID: PMC9129236.
19. Cengiz Özyurt B, Deveci A. Manisa'da kırsal bir bölgedeki 15-49 yaş evli kadınlarda depresif belirti yaygınlığı ve aile içi şiddetle ilişkisi [The relationship between domestic violence and the prevalence of depressive symptoms in married women between 15 and 49 years of age in a rural area of Manisa, Turkey]. *Türk Psikiyatri Dergisi*. 2010;21:1-7. <https://www.turkpsikiyatri.com/Data/UnpublishedArticles/acy3u1.pdf>
20. Okyay P, Atasoylu G, Önde M, Dereboy Günseli Ç, Beşer E. Kadınlarda yaşam kalitesi anksiyete ve depresyon belirtilerinin varlığında nasıl etkililiyor? Kesitsel bir alan çalışması [How is quality of life affected in women in the presence of anxiety and depression symptoms? ]. *Türk Psikiyatri Dergisi*. 2012;23(3):178-88. <https://search.trdizin.gov.tr/en/yayin/detay/137461/>
21. Karaşar B, Canlı D. Psychological resilience and depression during the Covid-19 pandemic in Turkey. *Psychiatr Danub*. 2020;32(2):273-9. PMID: 32796798.
22. COVID-19 Mental Disorders Collaborators. Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *Lancet*. 2021;398(10312):1700-12. PMID: 34634250; PMCID: PMC8500697.
23. Öztekin GG, Örki H. Effects of depression, anxiety, and stress on disaster preparedness: evidence from the February 6 Türkiye earthquakes. *Afet ve Risk Dergisi*. 2023;6(4):1332-47. <https://dergipark.org.tr/en/download/article-file/3262227>
24. Wang J, Adair C, Fick G, Lai D, Evans B, Perry BW, et al. Depression literacy in Alberta: findings from a general population sample. *Can J Psychiatry*. 2007;52(7):442-9. PMID: 17688008.
25. Yıldız Y, Sunay D, Akkuş MA. Aile hekimi uzmanlarının depresyon tedavisine bakışı [Attitude of family physicians to depression treatment]. *Bilişsel Davranışçı Psikoterapi ve Araştırmalar Dergisi*. 2018;7(2):62-71. <https://www.bibliomed.org/mnsfulltext/77/77-1502868058.pdf?1719988314>
26. Yoshikawa E, Taniguchi T, Nakamura-Taira N, Ishiguro S, Matsumura H. Factors associated with unwillingness to seek professional help for depression: a web-based survey. *BMC Res Notes*. 2017;10(1):673. PMID: 29202791; PMCID: PMC5716254.
27. Andrade LH, Alonso J, Mneimneh Z, Wells JE, Al-Hamzawi A, Borges G, et al. Barriers to mental health treatment: results from the WHO World Mental Health surveys. *Psychol Med*. 2014;44(6):1303-17. PMID: 23931656; PMCID: PMC4100460.
28. Burcusa SL, Iacono WG. Risk for recurrence in depression. *Clin Psychol Rev*. 2007;27(8):959-85. PMID: 17448579; PMCID: PMC2169519.
29. Ghio L, Gotelli S, Marcenaro M, Amore M, Natta W. Duration of untreated illness and outcomes in unipolar depression: a systematic review and meta-analysis. *J Affect Disord*. 2014;152:4-45-51. PMID: 24183486.
30. Jiang Y, Lu Y, Cai Y, Liu C, Zhang XY. Prevalence of suicide attempts and correlates among first-episode and untreated major depressive disorder patients with comorbid dyslipidemia of different ages of onset in a Chinese Han population: a large cross-sectional study. *BMC Psychiatry*. 2023;23(1):10. PMID: 36600266; PMCID: PMC9814200.
31. Arena AF, Mobbs S, Sanatkar S, Williams D, Collins D, Harris M, et al. Mental health and unemployment: a systematic review and meta-analysis of interventions to improve depression and anxiety outcomes. *J Affect Disord*. 2023;335:450-72. PMID: 37201898.
32. Schouboe JT, Vo TN, Kats AM, Langsetmo L, Diem SJ, Taylor BC, et al. Depressive symptoms and total healthcare costs: roles of functional limitations and multimorbidity. *J Am Geriatr Soc*. 2019;67(8):1596-603. PMID: 30903701; PMCID: PMC684454.
33. Corcoran J, Marinescu I, Vogelsang C, Kim JC, Morgan S. Prevalence of depression in women with low income living in developed countries. *Depress Anxiety*. 2021;38(10):1046-53. PMID: 34358395.
34. Shia N. The role of community nurses in the management of depression. *Nurse Prescribing*. 2009;7(12):548-54. <https://www.magonlineibrary.com/doi/abs/10.12968/npre.2009.7.12.45631>
35. Engin E, Ergün G. Depresyon bozuklukları. Çam O, Engin E, eds. *Ruh Sağlığı ve Hastalıkları Hemşireliği Bakım Sanatı*. 3. Baskı. İstanbul: İstanbul Medikal Sağlık ve Yayıncılık; 2021. p.314-48.