ABSTRACT

**Background:** Depression is a common mental disorder and represents a global mental health concern. Presents with depressed mood, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, low energy and poor concentration. Epidemiologic research have found clear genders differences in the prevalence of Major depressive disorders (MDD). **Objective:** The aim of this study was to find the difference in the symptoms of Major depressive disorder (MDD) between genders. **Methods:** It was analyzed 92 subjects from Health Center Zivinice in the period from September 2019 to May 2021, of which 57 (62 %) are women and 35 (38%) are men. The study identified and measured the severity of 25 different symptoms of depressive disorders in the analyzed subjects. The average age of women is 56 years ± 8.88, and the average age of men is 52 years ± 11.03. Statistical data were analyzed in SPSS statistical program. **Results:** Comparing the results t tests revealed significant difference between genders in symptoms like depressed mood, lack of energy, psychomotor retardation, pessimistic attitude towards the future. Symptoms such as angry outbursts, irritability from frustration, even over small matters, frequent or recurrent thoughts of death, suicidal thoughts suicide attempts and impulsive reaction, risky behaviour statistical significance in men in relation to women. **Conclusion:** In this study it was confirmed that MDD is more often diagnosed in women and showing different ways of experiencing, expressing and dealing with the symptoms of MDD. Women complained more about the typical symptoms of depressive disorder according, while men complained more about anger, irritability, waking up early in the morning and alcohol abuse.

**Keywords:** Major Depressive Disorder, Gender, Difference.
a difference in severity symptoms of depressive disorder between genders which we are in this study identifying and measuring.

3. SUBJECTS AND METHODS

2.1. Subjects and measurements

Data collection was carried out in outpatients in Primary care who were diagnosed with MDD, in period September 2019 to May 2021 in Health Center Zivinice. All benefits from these studies were explained to all participants. Clinical manifestations of MDD that have been identified and measuring in both gender in these study are: 1. depressed mood; 2. angry outbursts, irritability and frustration, even over small matters; 3. anxiety; 4. loss of interest and pleasure; 5. lack of energy, psychomotor retardation; 6. concentration difficulty; 7. low self – confidence; 8. feeling of guilt, 9. feelings of worthlessness; 10. pessimistic attitude towards the future; 11. crying for no apparent reason; 12. frequent and recurring thoughts of death, suicidal ideas; 13. impulsive reaction, risky behavior; 14. loss of interest for hobbies or sport; 15. insomnia; 16. hypomania; 17. waking up too early; 18. indecisiveness 19. morning depression; 20. fatigue; 21. decreased appetite, 22. increased appetite; 23. decreased libido; 24. low psychosocial functioning, lost interest in work; 25. insight into the illness. Clinical manifestations of MDD were assessed by the Likert scale. A Likert item is simply a statement that the respondent was asked to evaluate by giving it a quantitative value on any kind of subjective or objective dimension, with level of agreement / disagreement being the dimension commonly used. The format of a five-level Likert item is a typical agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. Agreement / disagreement being the dimension commonly used. 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Major Depressive Disorder and Difference between Genders

compared to the examined group of women and there is statistical significance \( p < 0.05 \). There is statistical significance in women compared the examined group men regarding insight into illness \( p < 0.05 \).

5. DISCUSSION

Genders differences in MDD have been investigated in numerous studies. Myrna Weissman was the first to point out the genders differences in MDD and that women get MDD twice as many as men, which was confirmed by later studies (10). Depression rates have been estimated at 7% and 3% for women and men, but these figures stand in contrast with suicide rates (14). In our study the percentage of women with MDD is 62 % of the total number of all respondents in the two study groups, relative to the percentage of men who are 35 %. Although it has been documented that the percentage of women diagnosed with MDD is twice as high, estimates indicate that there are still a significant number of men who suffer from this disorder and in whom MDD is masked and this can lead to underestimation of the actual rates at which men suffer from MDD (15). Possible reason why men do not seek help is also that because men consider depressive disorder as shame and hide it from others and maybe even from themselves and men who subscribe to traditional male gender role norms tend to endorse negative help-seeking attitudes and yet frequently have depressive symptoms (16). Male norms of self-confidence, control and competence are incompatible with depression (17). Women with MDD react in ways that are more in line with diagnostic criteria, while men tend to develop symptoms of irritability, aggression and antisocial behaviour (15). In our study between symptoms of depressive disorders which were measured in two analysed groups we found that the results for symptoms like depressed mood, lack of energy, psychomotor retardation, pessimistic attitude towards the future, problem with crying for no apparent reason significantly expressed in women. In men symptoms such as angry outbursts, irritability or frustration, “even over small matters”, frequent or recurrent thoughts of death, suicidal ideas suicide attempts and impulsive reaction, risky behaviour are significantly expressed. Although the percentage of women with MDD is higher than that of men, suicide rates are higher among men. Men complete suicide at a rate of four to five times more often than women (14). Risk factors for suicide include being unemployed may increase the suicide risk more for men than for women, single life increase the suicide risk more for men, then alcohol and drug abuse. For the females, risk factors was divorce or death of spouse and economic inactivity (17). In our study frequent and recurring thoughts of death, suicidal ideas were more pronounced in men who were divorced and alcohol abused. Among women, respondents with marital problems and

| Symptoms of depressive disorders wich were measured | F \( (X ± SD) \) | M \( (X ± SD) \) | \( t \) | \( p \) |
|---------------------------------------------------|-------------|-------------|------|------|
| 1. Depressed mood                                 | 3.96        | 3.34        | 3.97 | <0.00|
| 2. Angry outbursts, irritability od frustration, even over smal matters | 2.40 | 3.69 | 4.83 | <0.00|
| 3. Anxiety                                        | 3.58        | 3.34        | 0.94 | 0.34 |
| 4. Los of interest and pleasure                    | 3.58        | 3.49        | 1.59 | 0.11 |
| 5. Lack of energy, Psychomotor retardation         | 3.95        | 3.44        | 2.57 | 0.01 |
| 6. Concentration difficulty                        | 3.53        | 3.26        | 1.24 | 0.21 |
| 7. Low self – confidence                           | 3.19        | 3.11        | 0.31 | 0.75 |
| 8. Feeling of guilt                                | 3.04        | 3.11        | 0.29 | 0.77 |
| 9. Feelings of worthlessness                       | 2.89        | 3.11        | 0.86 | 0.39 |
| 10. Pessimistic attitude towards the future        | 3.14        | 3.63        | 2.12 | 0.03 |
| 11. Crying for no apparent reason                  | 3.72        | 2.5         | 4.62 | <0.00|
| 12. Frequent and recurring thoughts of death, suicidal ideas | 1.89 | 2.86 | 3.73 | <0.00|
| 13. Impulsive reaction, risky behavior              | 1.42        | 3.06        | 8.11 | <0.00|
| 14. Los of intreset for hobbies or sport           | 3.47        | 3.40        | 0.37 | 0.70 |
| 15. Insomnia                                       | 3.02        | 3.40        | 1.42 | 0.15 |
| 16. Hypersomnia                                    | 2.51        | 2.32        | 0.61 | 0.54 |
| 17. Waking up too early                            | 2.77        | 3.35        | 2.27 | 0.02 |
| 18. Indecisiveness                                 | 3.25        | 3.20        | 0.21 | 0.83 |
| 19. Morning depression                             | 3.18        | 3.46        | 1.20 | 0.23 |
| 20. Fatigue                                        | 3.65        | 3.46        | 0.90 | 0.36 |
| 21. Decreased appetite                             | 2.75        | 2.29        | 1.64 | 0.10 |
| 22. Increased appetite                             | 2.73        | 2.41        | 1.11 | 0.26 |
| 23. Decreased libido                               | 2.79        | 3.37        | 2.39 | 0.01 |
| 24. Low psychosocial functioning, lose interes in work | 3.25 | 3.31 | 0.34 | 0.73 |
| 25. Insight into ilnes                             | 4.23        | 2.71        | 7.81 | <0.00|

Table 1. Comparison for each symptoms of depressive disorders which were measured for two analysed groups *Significant level <0.05 X-average value, SD–standard deviation, t–test value, p–statistical significance
problems of low economic standard had suicidal ideations.
No suicide attempts were reported.

6. CONCLUSION
In this study, it was confirmed that MDD is more often diagnosed in women than men, and it is interesting how women and men have different ways of experiencing, expressing and dealing with the symptoms of MDD. Women complained more about the typical symptoms of depressive disorder according such as depressed mood, lack of energy, psychomotor retardation, pessimistic attitude towards the future, problem with crying for no apparent reason, while men complained more about symptoms such as angry outbursts, irritability or frustration, “even over small matters”, frequent or recurrent thoughts of death, suicidal ideas and impulsive reaction, risky behaviour, waking up too early and alcohol abuse. Women had better insight into illness. Men are less likely to seek help because of depressive symptoms, and all of those can present barriers to health care providers recognizing depression and a willingness to engage in treatment.

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REFERENCES
1. Eid RS, Gobinath AR, Galea LAM. Sex differences in depression: Insights from clinical and preclinical studies. Prog Neurobiol. 2019;176:86-102. doi: 10.1016/j.pneurobio.2019.01.006.
2. Debjit BKP, Sampath K, Shweta S, et al. Depression-symptoms, causes, medications and therapy. the pharma journal. 2012; 1(3):32-45.
3. Marcus SM, Young EA, Kerber KB et al. Gender differences in depression: findings from the STAR*D study. J Affect Disord. 2005; 87(2-3):141-150. doi: 10.1016/j.jad.2004.09.008.
4. Schuch JJ, Roest AM, Nolen WA, Penninx BW, de Jonge P. Gender differences in major depressive disorder: results from the Netherlands study of depression and anxiety. J Affect Disord. 2014; 156:156-163. doi: 10.1016/j.jad.2013.12.011.
5. Sloan DM, Sandt AR. Gender Differences in Depression. Women's Health. May 2006:425-434. doi:10.2217/17455057.2.3.425
6. Kim JH, Cho MJ, Hong JP, et al. Gender Differences in Depressive Symptom Profile: Results from Nationwide General Population Surveys in Korea. J Korean Med Sci. 2015; 30(11):1659-1666. doi:10.5346/jkms.2015.30.11.1659.
7. Picco L, Subramaniam M, Abdin E, et al. Gender differences in major depressive disorder: findings from the Singapore Mental Health Study. Singapore Med J. 2017; 58(11):649-655. doi: 10.11622/smij.2016144.
8. Kessler RC. Epidemiology of women and depression. J Affect Disord. 2005; 74(1): 5-15. doi: 10.1016/s0165-0327(02)00426-3.
9. Ferrari AJ, Somerville AJ, Baxter AJ et al. Global variation in the prevalence and incidence of major depressive disorder: a systematic review of the epidemiological literature. Psychol Med. 2013; 43(5):471-81. doi: 10.1017/S0033291712001511.
10. Salk RH, Hyde JS, Abramson LY. Gender differences in depression in representative national samples: Meta-analyses of diagnoses and symptoms. Psychol Bull. 2017; 143(8):783-822. doi: 10.1037/bul0000102.
11. Kessler RC. Gender differences in major depression: Epidemiological findings. In E. Frank (Ed.), American Psychopathological Association series. Gender and its effects on psychopathology (p. 61–84). American Psychiatric Publishing, Inc.
12. Marco P, Greg W. Gender differences in depression: Critical review. The British journal of psychiatry: the Journal of mental science. 2001; 177. 486-92. 10.1192/bjp.177.6.486.
13. Ryba MM, Hopko DR. Gender Differences in Depression: Assessing Mediational Effects of Overt Behaviors and Environmental Reward through Daily Diary Monitoring. Depress Res Treat. 2012; 2012: 865679. doi:10.1155/2012/865679.
14. Rochlen AB, Paterniti DA, Epstein et al. Barriers in diagnosing and treating men with depression: A focus group report. American Journal of Men’s Health. 2010; 4(2), 167-175. https://doi.org/10.1177/1557988309335823.
15. Michael E. Addis. Gender and Depression in Men. Clinical Psychology: Science and Practice. 2008; 15. 155–168. 10.1111/j.1468-2850.2008.00125.
16. Glenn G. Phillip W. Male Gender Role Conflict, Depression, and Help Seeking: Do College Men Face Double Jeopardy?. Journal of Counseling & Development. 1995; 74. 70-75. 10.1002/j.1556-6676.1995.tb01825.
17. Vörös V, Osváth P, Fekete S. Nemi különbségek a suizid viselkedésben [Gender differences in suicidal behavior]. Neuropsychopharmacol Hung, 2004 Jun;6(2):65-71 (Hungarian).