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Knowledge of and attitudes to major depressive disorder and its treatment in a sample of the general population in Serbia

Знање и ставови према особама са депресивним поремећајем
и начини третмана у узорку особа опште популације у Србији

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Знање и ставови према особама са депресивним поремећајем и начини третмана у узорку особа опште популације у Србији

SUMMARY

Introduction/Objective The objective of this paper was to examine the mental health literacy of the general population in Serbia and their attitudes towards persons with a mental illness.

Methods A cross-sectional study with structured interview using the vignette of a person with major depressive disorder (MDD). The attitudes toward people with mental illness were assessed by the Department of Health Attitudes to Mental Illness Questionnaire. A convenient sample consisted of 504 participants.

Results A total of 72 % of the sample recognized the presence of some sort of mental health problem, of which 40.9 % correctly labeled the symptoms as MDD. More participants believed that MDD was caused by stress than by biological factors. Psychologist, close friend and psychiatrist were often rated as helpful for the person described by the vignette. Vitamins and healing herbs were rated as the most helpful remedy. Antidepressants were considered both helpful and harmful. The attitudes towards people with mental illness were moderately positive.

Conclusion Mental health literacy in Serbia is moderate. Risk factors for negative attitudes included older age and lower education.

Keywords: mental health literacy; major depressive disorder; attitudes towards people with mental illness

САЖЕТАК

Увод/Циљ Циљ студије је испитати писменост у области менталног здравља код узорка особа опште популације у Србији као и ставове према особама са менталним болестима.

Методе Примењена је студија попречног пресека, са структурисаним интервјуом и вињетом која приказује особу са симптомима депресије. Ставови су процењени Упитником о ставовима према особама са менталним болестима британског сектора здравља. Пригодан узорак особа опште популације се састојао од 504 учесника.

Резултати Резултати су указали да је 72% испитаника препознало да је у питању неки проблем менталног здравља, док је 40,9% тачно идентификовало особу са депресивним поремећајем. Више испитаника је веровало да је депресија узрокована стресом него биолошким факторима. Као најкориснија помоћ за особу приказану у вињети је изабрана помоћ психолога, блиског пријатеља и психијатра. Употреба витамина и лековитих биљака је процењена као најкориснији вид лечења. Антидепресиви се сматрају и корисним и штетним. Ставови према особама са менталним болестима су умерено позитивни.

Закључак Писменост у области менталног здравља у Србији је умерена. Ризико фактори за негативне ставове укључују старији узраст и нижи степен образовања.

Кључне речи: писменост у области менталног здравља; депресија; ставови према особама са менталним болестима

INTRODUCTION

According to the World Health Organization, major depressive disorder (MDD) will become the second largest cause of disability in the world and a leading cause in the developed countries by 2020 [1]. Based on research conducted in Serbia in 2000, MDD was ranked as the fourth most prevalent disorder among 18 health disorders [2]. Despite the relatively high prevalence of mental disorders, many affected people do not receive any sort

of professional help [3]. One of the reasons for the lack of appropriate treatments is the absence of help-seeking behavior. One study suggested that early help-seeking for mental health problems promotes early intervention and positive long-term outcomes [4]. There are multiple factors related to the poor help-seeking behavior and one is low mental health literacy [5].

Mental health literacy is a construct arising from the domain of health literacy that focuses on the ability of people to better understand and adhere to medication treatments. It has been demonstrated that health literacy is closely related to significant health outcomes [6]. The concept of mental health literacy, introduced by Jorm and associates in 1997 [7], includes the ability to recognize specific disorders, knowledge about causes and risk factors, self-help knowledge, availability of expert medical help, and attitudes that could lead to a better recognition of disorders and search for adequate treatment.

Mental health literacy is important so that not only the person affected can recognize a mental disorder and seek appropriate help, but also family members and close friends, who can spot early signs and direct the person towards appropriate professionals. Although numerous studies have explored mental health literacy in different countries [5, 6, 7], to the best of our knowledge, this construct has not been examined in Serbia. Determination of the current level of mental health literacy in Serbia could help in the identification of specific areas for improvement and could aid the tailoring of education programs concerning mental health. Similar actions were realized in Australia through a National Survey of Mental Health Literacy in 1995 in which specific areas for improvement were pinpointed and then a campaign for increasing mental health literary was implemented. The results of the most recent study [8] indicated that there has been a significant progress in recognizing different kinds of mental illnesses over the years, an increase in beliefs about the effectiveness of the specific treatments prescribed by mental health specialist, and beliefs about the efficiency of medications, especially antidepressants.

This cross-sectional survey was designed to provide an initial overview of the current mental health literacy and attitudes in a sample of the general population in the Republic of Serbia towards persons who experienced symptoms of MDD. The objectives of the present study were to examine (1) the public's recognition of the symptoms of MDD and their beliefs about the causes of depression and the effectiveness of various treatments, (2) attitudes towards people with mentally illness, and (3) to explore the correlation among socio-

demographic factors and the attitudes of the people in the sample of the general population in Serbia.

METHODS

Sample

The convenient sample consisted of 504 participants from different cities in Republic of Serbia. The majority of the sample (60.1 %) had a high school diploma, followed by a bachelor's degree (32.5 %), middle school diploma (4.2 %), and a master's or a doctoral degree (3.2 %). Table 1 presents more information about demographic characteristics of the sample.

The instruments were administrated by fourth-semester students at the Faculty of Special Education and Rehabilitation of the University of Belgrade, trained in conducting the interview and administrating the questionnaires. Each student was asked to apply the questionnaires to six respondents of different sex, age and level of education during the year 2016. The students recruited the participants via personal contacts or by word of mouth and conducted an individual interview with each participant. All participants were informed that their responses would stay anonymous and they provided verbal consent. The participants were interviewed in person and none of the questionnaires was self-administrated. The study was done in accord with standards of the institutional committee on ethics.

Instruments and procedure

After the participants provided their consent for participation, they completed several demographic questions (sex, age and level of education) followed by a series of questions related to the variety of their contacts with persons with a mental illness. The participants were asked close-ended questions, such as "Have you ever lived, or do you live now with a person with a mental illness?"

To assess the components of mental health literacy, a vignette of a person suffering from a mental disorder, without disclosing the diagnosis was presented. The vignette was

developed by Jorm and colleagues [7] and described a person who met ICD-10 criteria for MDD.

After being shown the vignette, an interview with closed-ended questions was conducted. In the first part of the interview, the participants were asked four yes-no questions related to their experience of similar symptoms as the ones depicted in the vignette.

In the second part of the interview, the questions used in the study of Jorm et al [7] were applied. The respondents were asked two open-ended questions: "What, if anything is wrong with Maria?" and "What kind of help does Maria need?" The rest of the interview consisted of the questions aimed at determining the respondents' rating on the three-point Likert scale about different sources of help and about the effectiveness of possible treatments. Finally, the respondents were asked about the likely result for the individual in the vignette if she would or would not receive the professional help that the respondent rated as the most appropriate.

Attitudes towards mentally ill persons were assessed by the Attitudes to Mental Illness Questionnaire (AMI) of the UK Department of Health. The AMI was originally developed in 1993 but the questions used in this study were from 2011 and 2014 [9]. The AMI includes 26 items from the 40-item Community Attitudes toward the Mentally Ill scale (CAMI) [10] and an added item on employment-related attitudes. The items explore attitudes related to fear and exclusion of people with mental disorder, understanding and tolerance of mental disorder and integration of people into the community. The participants rated the 27 statements on 5-point Likert scale ranging from "1= strongly disagree" to "5= strongly agree" [9,11]. The AMI is validated in various languages and has been used in studies conducted in Sweden [12], China [13] and Spain [14].

RESULTS

Previous contact with a person with mental illness

To understand the previous experience and relationships participants have had with a person with a mental illness, a descriptive statistic was performed. The results indicated that 6.7 % of the participants are living or have lived with a person with a mental illness, 34.9 %

have or had a neighbor, 12.7 % have or had a coworker and 12.1 % reported having a close friend with a mental illness.

Furthermore, the results showed that 34.3 % of the participants had a family member or a close friend with problems similar to those described in the vignette. The responses showed that 13.9 % of the respondents had personally experienced some of the problems described in the vignette and 5.8 % have received treatments for these symptoms. A total of 0.8 % of the participants self-reported that they have a mental illness diagnosis while 3.2 % reported that they were taking antidepressants at the time of the interview. Further analysis revealed that 2 out of 16 participants who self-reported antidepressant consumption disclosed a diagnosis of depression, while 14 participants did not report a mental illness diagnosis. A total of 56.0 % of the participants who self-reported consumption 0f antidepressants were less than 40 years old.

Recognition of disorder, beliefs about causes, first aid, treatment, and outcomes

The responses to the question "What, if anything, is wrong with Maria?" are summarized in Table 2, which shows that 72.8 % of the sample identified a mental health issue, while 41.0 % of the sample correctly recognized MDD.

As shown in Table 3, most of the participants (82.0 %) believed that stressful life events caused the person's problems, while 6.9 % of the sample thought it is due to biological factors.

For the question "How Maria could best be helped?" 42.5 % of the participants rated professional help as the most important and conversation with family or friends was rated as important by 12.0 % of the participants (Table 4).

The respondents were asked to rate whether different types of the help would be helpful or harmful. (Table 5). Most of the respondents regarded support from a psychologist as helpful, followed by help from a friend or a family member and a psychiatrist.

The respondents were given a list of various treatments to rate as helpful or harmful. Table 6 shows that the consumption of vitamins or/and minerals was rated the most helpful, followed by antidepressants, and healing herbs and tea.

The results of the participants' opinion on the person's prognosis with and without the help they thought were the most appropriate are presented in Table 7. Most of the participants believed that the person in the vignette could completely recover with adequate help and 55.6 % of the sample responded that the condition would get worse without adequate help and treatment.

Attitudes to mental illness

Following Rüsch and colleagues [11] results of the explanatory analysis of AMI, two mean composite scores were calculated. In their study, two factors were extracted "prejudice and exclusion" and "tolerance and support for community care". The average factor score for prejudice and exclusion subscale in the present study was 2.4 (SD=0.58) and for tolerance and support for community care subscale was 3.72 (SD=0.52). In addition, the mean composite score for AMI was computed as was performed in other studies [15, 16] and the result was 3.54 (SD=0.47). The Cronbach α for the prejudice and exclusion subscale was 0.77 (total of 14 items), while the Cronbach α for the tolerance and support for community care subscale was 0.72 (total of 13 items). Both subscales were negatively correlated (r=–0.51). For the AMI composite score, the Cronbach α was 0.82.

To provide an easier interpretation, the reverse items within the prejudice and exclusion subscale and the tolerance and support for community care subscale were re-coded in the direction that higher scores indicated more prejudice and exclusion, or tolerance and support. In addition, in the second step, all negative items were re-coded so that a higher composite score of the AMI scale presented more positive attitudes.

In addition, 2 (gender) × 4 (level of education) univariate analysis of variance (ANOVA) on the AMI scores revealed a main effect of education (F (1.496) =4.085, p<0.01, partial eta square=.024). The post hoc Scheffe test showed that the participants who had finished a middle school (8 years of education) held the most negative attitudes (M=3.23, SD=0.63) among all four groups; p=0.044, M=3.52, SD=0.47 for the participants with a high school diploma; p=0.011, M=3.58, SD=0.42 for the participants with a bachelor's degree, and p=0.019, M=3.68, SD=0.47 for the participants with a master's or doctoral degree). No main effect of gender or an interaction was found.

Furthermore, 2(gender) $\times$ 4 (level of education) ANOVA on tolerance and support for community care subscale showed a main effect of education ($F(1,496)$ =3.914, p<0.01, partial eta square=0.023). Post hoc Scheffe test showed that participants who finished middle school (8 years of education) held the most negative attitudes (M=3.37, SD=0.78) compared to participants with high school diploma (p=0.040, M=3.71, SD=0.52) and with a bachelor's degree (p=0.009, M=3.78, SD=0.48). No main effect of the gender or effect of interaction has been established. Furthermore, no main effect of gender, age or their interaction on the prejudice and exclusion scale was found.

Pearson correlation between age and the prejudice and exclusion scale was significant (r= 0.124, p<0.01). The results indicated that with increasing age, the participants held more negative attitudes on the prejudice and exclusion subscale. No correlations between age and the AMI composite score or the tolerance and support for community care scale were found.

DISCUSSION

The present study examined the mental health literacy and attitudes in relation to MDD among a sample of the general population in Serbia. The results showed that 34.3 % of respondents reported that someone in their family or a close friend had problems similar to the one presented in the vignette and 13.9 % of the respondents had personally experienced them. In the research of Ravley and Jorm [8], almost two-thirds of respondents revealed that a family member or a close friend had experienced similar problems, and 33 % stated they had a personal experience similar to those presented in the vignette. The difference between the Ravley and Jorm [8] and the present study could be contributed to campaigns about mental health that had been active in Australia for over 15 years. Research indicated that in areas where there had been active campaigns to improve mental health literacy, a greater number of people identified themselves or family members to have MDD [8].

Although 13.9 % of the respondents in the current study self-reported experience of similar problems to the ones presented in the vignette, only 3.2 % reported taking antidepressants. This result is in accordance to an analysis in Serbia which showed that usage of antidepressants is low compared to the number of people with MDD [17]. Interestingly, only two out of sixteen respondents who reported taking antidepressants disclosed the diagnosis of depression. Evidence suggests that people with mental health problems often

fear stigma and this may influence help-seeking behavior or adherence to treatment [18]. In the present study, a definition of antidepressants was not provided, which could have left space for its different interpretation by the respondents (such as using over-counter medication). Further research is warranted to examine whether this discrepancy is evident among a larger sample of the people who consume antidepressants and what factors could contribute to it.

Knowing that early recognition and early treatment are positively related to the long-term outcome of a disorder [19], it is clear the importance of recognizing mental health disorders at an early stage is clear for seeking professional help. Although recognition of a mental health issue was high in the present sample, only 40 % of the participants correctly recognized MDD, which is considerably lower compared with the 86 % recognition in a study conducted in Australia [20]. Recognition of the disorder in the present sample was at the same level as that in Australia 21 years ago [21]. That an active campaign is effective is evident in the study in which Jorm and associates showed improvement in depression recognition from 39% to 67% in the span of 8 years (1995 to 2003) [21].

The respondents in the present study believed that stress contributed more to the development of MDD than biological factors. This is in agreement with the findings that the general public favors psychosocial explanations over biological explanations for different mental health disorders, including depression [22].

When respondents were asked about the helpfulness of various people, psychologists were highly rated, followed by friends and psychiatrists. The slightly lower rating of help from a psychiatrist could be due to the less severe symptoms presented by the person in the vignette. On the other hand, studies in Australia showed that a general practitioner (GP) would be recommended first, followed by a counselor and a family member [7, 8]. The difference among these results could be explained by the different organization of the health system in Serbia and Australia. In Serbia, people who experience symptoms of mental illness are under the primary care of a psychiatrist, bypassing services provided by a GP. It is notably that in Serbia, only 39 % of the patients who are treated by a psychiatrist initially visited a general practitioner [23]. Directing patients towards a GP could lead to early recognition of mental disorder and adequate treatment. The importance of social support to persons with mental disorders was shown in an earlier study in the USA [24], and the resent sample confirmed that help from friends was also highly rated in Serbia.

Ratings given for the helpfulness of various treatments are not consistent with the evidence of controlled trials, which have indicated that both antidepressants and psychotherapy are effective treatments for depression [25]. Respondents rated vitamins and healing herbs as the most helpful kind of the treatment. It seems that the general public prefer non-standard treatments over conventional medicine [26], suggesting that public do not share professionals' opinions about the efficacy of psychiatric treatment. Antidepressants were rated by 41 % as helpful and by one-third as harmful treatment. This ambivalence indicates that the general population has different opinions on their effects. Jorm and associates showed that the belief in the effectiveness of antidepressants increased between 1997 [7] to 2011 [8] attributing the change to public education programs. Negative beliefs towards medications were present in the Serbian sample, which is consistent with results from Australia [8].

The findings of the present study show that the public clearly sees the condition described in the vignette as treatable. The predominant belief that mental disorders are treatable has also been found in different studies [27, 28]. Research in Australia also showed optimism about the prospect for recovery with adequate help [7, 8].

Using AMI, it was noted that the public held moderately positive attitudes towards people with mental health disorders. However, it was indicated that with increasing age, the participants had more negative attitudes on the prejudice and exclusion subscale, which is in line with other research [29, 30]. One explanation could be that older people lived in the era of institutionalization of people with mental disorders in Serbia and hence, they had less contact with them, which might have contributed to their belief that people with mental disorders should be placed in an institution. Participants who had lower level of education held the most negative attitudes on the tolerance and support for community care subscale and the overall AMI score. Different studies suggest that individuals with higher level of education had more access to health information, better understanding of such information and greater knowledge of mental disorders [30].

Limitations of the study is that it included a convenient sample consisting mostly of young adults and the diagnostic vignette approach was used, which does not allow the entire domain of that which constitutes mental health literacy to be evaluated.

CONCLUSION

Although recognition of mental health problems in the sample was high, accurate recognition of MDD was poor. Moreover, the effectiveness of antidepressants was recognized by less than half of the sample. Furthermore, most of the participants thought that the only cause of the problems presented in the vignette was due to stressful life events. Strength in mental health literacy was seen in the rating of professional help as the most helpful, as well as the belief that the actor in the vignette could improve with adequate help. This was a pilot study on mental health literacy in Serbia that could help in the design of new research studies with focus on different variables that could contribute to mental health knowledge. In addition, the findings could help in the design of education programs to enhance knowledge about the common mental disorders, teach help-seeking skills, and mental health literacy. In the longer term, enhanced mental health literacy may be expected to result in early recognition of mental disorders and higher rates of help-seeking behavior.

Conflict of interest: None declared.

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Table 1. Distribution of the participants based on their age and sex

Parameter			Age range				Total
			17–19	20–39	40–59	60–80	
Sex	Male	Count	23	161	45	3	232
		within Sex	9.9	69.4	19.4	1.3	100%
		within Age range	50	46.9	42.9	30	46.0%
	Female	Count	23	182	60	7	272
		within Sex	8.5	66.9	22.1	2.6	100%
		within Age range	50	53.1	57.1	70	54%
Total		Count	46	343	105	10	504
		within Sex	9.1	68.1	20.8	2	100
		within Age range	100	100	100	100	100
Median							25
Mean							30.59
SD							12.23

Table 2. Assessment of the problems described in the vignette

Problem	%
MDD	40.9
Psychological problems	21.8
Psychological problems/MDD	10.1
I do not know	7.7
Problems related to work	6.0
Something else (including health problems, e.g. cancer)	3.6
Multiple causes	10.1

MDD – major depressive disorder

Table 3. Percentage of the participants' rating the causes of the person's behavior

Perceived cause	%
Stressful life events	81.7
Stressful life events and biological factors	10.3
Biological factors	6.9
Magic, evil spirits	4
Missing data	6

Table 4. Participant's ratings of the help which the person in the vignette needs

Type of help	%
Counseling or psychotherapy	23.8
Help from a psychologist	18.7
Conversation with family or friends about current problems	12.3
Engagement in some other activities (e.g., taking a summer vacation or engagement in some other pleasant activity)	6
Taking a medication	2.2
Help from a primary physician	1.6
Multiple sources of help	35.4

Table 5. The participants' evaluation of the effect of potential help (%)

Type of help	Whole sample			Participants who identified MDD		
	Helpful	Neither helpful nor harmful	Harmful	Helpful	Neither helpful nor harmful	Harmful
Help from a psychologist	81.3	16.5	2.2	81.1	14.6	4.4
Help from a close friend or a family member	76.4	19.6	4	78.2	17	4.9
Help from a psychiatrist	69	23	7.9	71	21.4	7.8
Help from a social worker or a counselor	52.2	40.7	7.1	49	44.7	6.3
Help from a primary physician	37.1	56.5	6.3	30.6	62.1	7.3
Help from a priest	28.8	50.8	20.4	26.7	50	23.3
Help from an alternative medicine specialist	25.6	48.6	25.8	27.2	49.0	23.8

MDD – major depressive disorder

Table 6. The participants' evaluation of the effect of different remedies (%)

Remedies	Whole sample			Participant who identified MDD		
	Helpful	Neither helpful or harmful	Harmful	Helpful	Neither helpful or harmful	Harmful
Vitamins and minerals	45.6	47.8	6.5	45.1	48.1	6.8
Antidepressants	41.7	23.2	35.1	40.8	21.4	37.9
Tea and healing herbs	40.5	50.6	8.9	39.3	52.4	8.3
Tranquilizers	34.1	29.4	36.5	28.2	30.6	41.3
Sleeping pills	30.8	27.6	41.7	25.2	28.6	46.1
Pain medicine (e.g., aspirin)	20.0	43.8	36.1	16.0	43.7	40.3

MDD – major depressive disorder

Table 7. Assessment of the outcome in relation to the provided help (%)

Outcome assessment	Complete recovery	Condition will worsen	Neither
What do you think will be the outcome for Maria with the help which you think is the best?	78	1.6	20.4
What do you think will be the outcome for Maria without the help which you think is the best?	13.3	55.6	31.2