



Research Article

Social Awareness of the Causes, Symptoms of Bipolar Disorder and the Review of Lay Theories

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Abstract

The study aimed to reveal the awareness of bipolar disorder in society in a Turkish sample and to evaluate the lay theories on bipolar disorder in the Turkish population. The group representing the "academic group" of the sample comprised a total of randomly selected 804(71.5%) participants, including senior and/or graduate students in the field of psychology and university graduates in the field of psychology or health. Regardless of the field of psychology and health, 320 participants (28.5%) were working in other fields, representing the sample's group of "those working in other fields other than the academic group." Study's results showed that being interested in mental illnesses plays a more significant role in awareness of both the causes and symptoms of bipolar disorder than being educated and working in the field. The participants who did research to obtain information in the field of psychology/psychiatry knew that the disorder was hereditary and didn't arise due to psychological reasons more correctly than the participants who didn't do any research. The study revealed the necessity of education and awareness studies for the overall society and people who haven't been acquainted with this disorder before regarding the importance of medical and psychological therapy to treat the disease.

Keywords: Bipolar Disorder; Social Awareness; Lay Theories; Mental Health; Bipolar Disorder Symptoms.

Background

Bipolar disorder is characterized by sporadic and recurrent episodes of extreme depression and mania, thought and behavioral disturbances that can significantly impair quality of life [1, 2]. Bipolar disorder represents a significant group of mental diseases with a lifetime incidence of 1.1% with emotional, somatic, psychomotor, and cognitive symptoms [3]. Bipolar disorder (BD) is regarded as one of the leading causes of disability worldwide. According to the World Health Organization (WHO), it is among the top 10 disorders in young adults [4-6]. Although bipolar disorder is frequently identified in young adults, symptoms and associated challenges can last throughout life, even into older years [7]. High rates of decreased well-being are observed in individuals who have been diagnosed with bipolar disorder [8, 9]. It has typically detrimental impacts on the patient's mental and physical wellness, ability to learn and work, and interpersonal connections that last a lifetime [10]. The prevalence of bipolar disorder in society is important not only for the diagnosed individual but also for society. Hence, the importance of recognizing and detecting bipolar disorder is increasing. People who suffer from mental illnesses are typically stigmatized in society. Thus, many people have misconceptions about bipolar disorder [11]. The symptoms of bipolar

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disorder are distinct. However, many individuals believe they are aware of or can identify some of these symptoms. Treatment of bipolar disorder, like all mental diseases, is critical for the individual suffering from it to continue living and adjusting to social life. Nevertheless, due to this stigma, many individuals with bipolar disorder cannot receive the necessary psychiatric treatment [12]. A study conducted in the United Kingdom investigated lay people's perceptions regarding the origins and management of bipolar disorder. The most commonly cited causes were chemical imbalances in the brain, drug use, emotional childhood trauma, and heredity. "Individuals outside the field," in other words, individuals who have not studied psychology and/or medicine and do not work in this field, emphasize the psychological, social, and familial causes of diseases more than professionals in this field, whereas they ignore the academic theories primarily based on biological and genetic causality. In mental illnesses, these people prefer psychotherapy to drug treatment due to its possible side effects [12]. Stressful life events, lifestyle/environment, and drug and alcohol abuse were cited as the most important risk factors for bipolar disorder by more than half of participants in France. Individuals with bipolar disorders are assumed to be dangerous; 29% respondents would engage in social distancing from such an individual [13]. In Pakistan, 79.2% of students were aware that bipolar disorder is a medical disease, and 89.8% were aware that both mania and depression are symptoms of bipolar disorder. Additionally, 75.4% of students saw therapy as a feasible option for bipolar disease management and treatment [14]. The study aimed to reveal the awareness of bipolar disorder in society in a Turkish sample. It has been predicted that knowledge and awareness about bipolar disorder may differ depending on the educational and professional field, interest in psychology, and diagnosis of a relative or self with bipolar disorder. In this way, it was aimed to evaluate the lay theories on bipolar disorder in the Turkish population.

Theoretical framework

Bipolar disorder is a mental illness, which manifests itself in each patient with a wide range of different features in each episode. Hence, individuals may not become aware of the seriousness of these symptoms that occur in their immediate environment. They may believe the disease will be cured by personal effort or spiritual healing methods. In this case, there may be delays in their orientation to the correct treatment methods. Delays in the treatment may cause severe psychological, physical, and/or financial damage to patients. Studies to be conducted to investigate the public awareness of bipolar disorder will contribute to informing society by helping with establishing health education policies on how and where people should receive help in case of such a disease. Future studies will also explain the negative attitudes and stigmatizing behaviors of society toward such patients from psychological and sociological perspectives and help to understand why some of the diagnosed patients

try to stay away from seeking medical help and treatment. In society, there are people who think that the causes of mental illness have a biological or psychological origin, as well as those who believe that these symptoms may be due to fate or spiritual factors. Therefore, the importance of such studies to be conducted with individuals outside the field is to pave the way for drug treatment if it is understood that diseases are of a biological origin. The concept of mental health literacy covers "knowledge and beliefs that serve the awareness and management of mental illnesses and the protection of public mental health." This concept involves recognizing diseases, knowing about their risks and causes, and knowing how to help. Increasing mental health literacy will increase the chance of early diagnosis and treatment in society. To this end, our study aimed to evaluate the social awareness of the causes and symptoms of bipolar disorder in terms of percentage in the sample of general participants and compare individuals who had/were receiving education in the field of psychiatry or psychology and were working in this field, those who had no education in this field and did not work in this field, those who had been interested in these matters and had done research and those who had not been interested in these matters and not done any research, those who or whose acquaintances had been diagnosed with this disorder, and those who or whose acquaintances had not been diagnosed with this disorder in terms of awareness of bipolar disorder. Regarding the awareness of bipolar disorder, the participants' views about both the recognition of clinical symptoms and the causes of the illness were evaluated.

Theoretical Model

The population of this study consisted of individuals over the age of 18 living in Turkey. The group representing the "academic group" of the sample comprised a total of randomly selected 804 (71.5%) participants, including 681 senior and/or graduate students in the field of psychology and 123 people who were university graduates in the field of psychology or health. Regardless of the field of psychology and health, 320 participants (28.5%) were working in other fields, representing the sample's group of "those working in other fields other than the academic group." This group is defined as "ordinary" individuals or "lay" individuals in this study.

Hypotheses

H1- Individuals outside the field ignore academic theories based on biological and genetic causality by keeping psychological, social, and familial causes more responsible among the causes of bipolar disorder compared to individuals working in the field (academic group).

H2- Individuals outside the field defend the view that bipolar disorder will be overcome by willpower or patients will spontaneously recover at a higher rate compared to individuals working in the field (academic group)."

H3- Individuals outside the field are less aware of the clinical symptoms of bipolar disorder compared to individuals working in the field (academic group).

H4- Individuals who are interested and do extensive reading and academic research know more about the causes of bipolar disorder.

H5- Individuals who are interested and do extensive reading and academic research have a greater understanding of the symptoms of bipolar disorder.

H6- Individuals who are interested and do extensive reading and academic research have a better idea about the treatment of bipolar disorder.

H7- Individuals who have experienced the symptoms of bipolar disorder in themselves or an acquaintance know more about the causes of the illness.

H8- Individuals who have experienced the symptoms of bipolar disorder in themselves or an acquaintance have a better idea about the symptoms and treatment of the illness.

Methods

Study design and setting

This study used a cross-sectional design since data were collected at a single point of time. The data were obtained after the uploaded questionnaires were filled out online by randomly selected participants or after the questionnaires were applied face to face and filled out by randomly selected senior and/or graduate students in the field of psychology. All participants were required to be over 18 years of age and volunteer.

Measuring instruments

The validity and reliability test of the original version of the Mood Disorder Questionnaire was conducted by [15]. The validity and reliability study of the Turkish version of the Mood Disorder Questionnaire in screening the symptoms of bipolar disorder was carried out by [16]. The Mood Disorder Questionnaire consists of 13 subscales and 15 items. Through the questionnaire, Activity, Distractibility, Energy, Flight of ideas, Fast speech, Insomnia, Irritability, Libido, Increase in self-esteem, Spending money, Risky behavior, Social activity, and High mood signs are screened. They are rated with yes/no responses. Very few environmental and psychological (negative life events related to childhood, etc.) causes have been shown among the causes of bipolar disorder, and mostly genetic-based causes are indicated [17]. In this study, to evaluate social awareness of the causes and symptoms of bipolar disorder, a questionnaire that we prepared using the items in the subscales of Activity, Distractibility, Energy, Flight of ideas, Fast speech, Insomnia, Irritability, Libido, Increase in self-esteem, Spending money, Risky behavior, Social activity, and High mood and included items to

question the awareness of the possible psychological and genetic causes of the disorder was used. This questionnaire was used to screen the symptoms in the Mood Disorder Questionnaire [16]. The participants were requested to mark these items as "correct" or "incorrect" after reading them. In this questionnaire we prepared, the awareness items questioning the causes of bipolar disorder corresponded to items 1, 3, 14, and 15 of our questionnaires. The awareness items questioning the clinical symptoms of bipolar disorder corresponded to items 2, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13 of our questionnaires. In addition to the questionnaire, the participants were asked the question, "Have you or anyone you know been diagnosed with bipolar disorder?" and were requested to respond to it as "yes" or "no." Finally, in the questionnaire, the participants were asked the question "whether they acquired knowledge by researching books/journals and/or the internet about the topics in the field of psychology and/or psychiatric diseases" and asked to rate it from 1 to 5.

Evaluation of the questionnaire responses about the causes or symptoms of the disorder:

Items 1, 6, 9, 14, and 15 were the items in which the responses marked as "incorrect" in our questionnaire were evaluated in favor of "correct" in terms of awareness. The items in our questionnaire, in which the responses marked as "correct" were evaluated as "correct responses" in favor of awareness, are items 2, 3, 4, 5, 7, 8, 10, 11, 12, and 13.

Statistical analyses

Percentage and frequency values were used to analyze the descriptive data. In data analysis, the chi-square test was used. SPSS version 25.0 was used for statistical analysis.

Findings

Table 1 contains findings regarding the participants' demographic characteristics. One thousand one hundred twenty-four participants were included in the research. The group representing the "academic group" comprised a total of 804 (71.5%) participants, including 681 senior and/or graduate students in the field of psychology and 123 people who were university graduates in the field of psychology or health. Regardless of the field of psychology and health, 320 participants (28.5%) were working in other fields, representing the group of "those working in other fields other than the academic group." This group is defined as "ordinary" individuals or "lay" individuals in this study.

Table 2 presents the responses given to the questionnaire created, for the percentage examination of the awareness of bipolar disorder in the sample of general participants. According to the questionnaire responses: Items 1, 3, 14, and 15 measure the causes of bipolar disorder, whereas items 2, 4, 5-13 aim to measure the clinical symptoms of bipolar disorder.

Table 1: Demographic Characteristics of the Participants

Variable	Groups	n	%
Gender	Female	735	65.4
	Male	369	32.8
	Other	20	1.8
Age	18-24 Years	718	63.9
	25-45 Years	193	17.2
	46-65 Years	204	18.1
	66+ Years	9	0.8
Educational Status	Primary School Graduate	10	0.9
	Secondary School Graduate	7	0.6
	High School Graduate	77	6.9
	Bachelor's/Associate Degree (To date)	636	56.6
	Bachelor's/Associate Degree Holder	269	23.9
	Master's Degree (To date)	6	0.5
	Master's Degree Holder	77	6.9
	Ph.D. and Higher	42	3.7
Field of Work	Field students	681	
	Field employees	123	
	Total: 804		71.5
	Employees in other fields	320	28.5

In the awareness items related to the causes of the illness, it was revealed that more than 50% of the participants were aware that bipolar disorder was not related to not being able to cope with the difficulties of daily life, patients did not behave in that way because they wanted to look different, and the illness was not related to being raised in a wrong way by parents. However, it was determined that the number of people who knew correctly that the illness was hereditary was below 50%. In the awareness items regarding the symptoms of the illness, the symptoms correctly recognized by 75% and more of the participants were that the patient could start a fight or argument very quickly, patients could not get out of the depression or manic episodes themselves, thoughts could not be stopped and it would be difficult to focus during an episode, they could not control themselves if they wanted to, they could be more active, nervous, and energetic, and bipolar disorder was accompanied by manic and/or depression episodes. The symptom that patients were more interested in sexuality than normal during the episodes was found to be the least recognized symptom among the participants at a rate of 51.1%. The remaining symptoms were recognized by less than 75% of the participants.

Table 3 presents the chi-square analysis results regarding the comparison of bipolar disorder awareness in the academic group (field students/employees) and employees in other fields (outside the field). The analysis results are as follows:

Individuals in the academic group knew the item "Individuals with bipolar disorder can start a fight or argument very quickly during the illness period." significantly more correctly compared to the individuals in other fields (lay individuals).

Individuals in other fields (lay individuals) knew the item "Individuals with bipolar disorder sometimes have more self-confidence than ever before." significantly more correctly compared to the academic group.

Individuals in other fields (lay individuals) knew the item "Bipolar disorder results from the wrong upbringing of children by parents." significantly more correctly compared to the academic group. The hypothesis "H1-Individuals outside the field ignore academic theories based on biological and genetic causality by keeping psychological, social, and familial causes more responsible among the causes of bipolar disorder compared to individuals in the academic group." was not confirmed. The hypothesis "H2- Individuals outside the field defend the view that bipolar disorder will be overcome by willpower or patients will spontaneously recover at a higher rate compared to individuals working in the academic group." was not confirmed, and no significant difference was identified between the two groups in this regard.

The hypothesis "H3- Individuals outside the field are less aware of the clinical symptoms of bipolar disorder compared

Table 2: Percentage Examination of the Awareness of Bipolar Disorder in the Sample of General Participants

Items	Responses	n	(%)
1. Individuals who cannot cope with the difficulties of daily life become bipolar patients.	Incorrect	789	70.2
	Correct	335	29.8
2. Individuals with bipolar disorder feel very well beyond normal and overjoyed during the illness period.	Incorrect	413	36.7
	Correct	711	63.3
3. Bipolar disorder is genetic, that is, hereditary.	Incorrect	702	62.5
	Correct	422	37.5
4. Individuals with bipolar disorder can start a fight or argument very quickly during the illness period.	Incorrect	108	9.6
	Correct	1016	90.4
5. Individuals with bipolar disorder sometimes have more self-confidence than ever before.	Incorrect	288	25.6
	Correct	836	74.4
6. When individuals with bipolar disorder are depressed or have manic episodes, they can easily get out of this condition themselves.	Incorrect	986	87.7
	Correct	138	12.3
7. Individuals with bipolar disorder do not suffer from insomnia although they sleep less during the illness period and talk much more or faster than before.	Incorrect	345	30.7
	Correct	779	69.3
8. Individuals with bipolar disorder cannot stop their thoughts during the illness period, have trouble focusing, and are distracted.	Incorrect	97	8.6
	Correct	1027	91.4
9. Individuals with bipolar disorder can control themselves if they want to during the illness period.	Incorrect	952	84.7
	Correct	172	15.3
10. Individuals with bipolar disorder may be more active, nervous, and energetic during the illness period than before.	Incorrect	104	9.3
	Correct	1020	90.7
11. Individuals with bipolar disorder are much more sociable during the illness period and often go out. For example, they may call their friends in the middle of the night and suggest making a plan to have fun.	Incorrect	421	37.5
	Correct	703	62.5
12. Individuals with bipolar disorder are more interested in sexuality than usual during the illness period.	Incorrect	550	48.9
	Correct	574	51.1
13. Bipolar disorder is an illness in which mania (excessive mood) and/or depression episodes are experienced.	Incorrect	135	12
	Correct	989	88
14. Individuals with bipolar disorder behave this way because they want to look different.	Incorrect	947	84.3
	Correct	177	15.7
15. Bipolar disorder results from the wrong upbringing of children by parents.	Incorrect	842	74.9
	Correct	282	25.1

Table 3: Chi-Square Analysis Results Regarding the Comparison of Bipolar Disorder Awareness in the Academic Group (Field Students/ Employees) and Employees in Other Fields (Outside the Field)

Items	Diagnosis	Incorrect n(%)	Correct n(%)	$\chi^2_{(df)}$	p
1. Individuals who cannot cope with the difficulties of daily life become bipolar patients.	Employees in the Field	563 (71.4%)	226 (28.6%)	$\chi^2_{(1)} = .039$	0.843
	Other	241 (71.9%)	94 (28.1%)		
2. Individuals with bipolar disorder feel very well beyond normal and overjoyed during the illness period.	Employees in the Field	296 (71.7%)	117 (28.3%)	$\chi^2_{(1)} = .006$	0.937
	Other	508 (71.4%)	203 (28.6%)		
3. Bipolar disorder is genetic, that is, hereditary.	Employees in the Field	505 (71.9%)	196 (28.1%)	$\chi^2_{(1)} = .152$	0.696
	Other	299 (70.9%)	123 (29.1%)		
4. Individuals with bipolar disorder can start a fight or argument very quickly during the illness period.	Employees in the Field	68 (63.0%)	40 (37.0%)	$\chi^2_{(1)} = 4.306$.038*
	Other	736 (72.4%)	280 (27.6%)		
5. Individuals with bipolar disorder sometimes have more self-confidence than ever before.	Employees in the Field	228 (79.2%)	60 (20.8%)	$\chi^2_{(1)} = 11.08$.001**
	Other	576 (68.9%)	260 (31.1%)		
6. When individuals with bipolar disorder are depressed or have manic episodes, they can easily get out of this condition themselves.	Employees in the Field	702 (71.2%)	284 (28.8%)	$\chi^2_{(1)} = .439$	0.508
	Other	102 (73.9%)	26.1 (26.1%)		
7. Individuals with bipolar disorder do not suffer from insomnia although they sleep less during the illness period and talk much more or faster than before.	Employees in the Field	255 (73.9%)	90 (26.1%)	$\chi^2_{(1)} = 1.388$	0.239
	Other	549 (70.5%)	230 (29.5%)		
8. Individuals with bipolar disorder cannot stop their thoughts during the illness period, have trouble focusing, and are distracted.	Employees in the Field	71 (73.2%)	26 (26.8%)	$\chi^2_{(1)} = .145$	0.704
	Other	733 (71.4%)	294 (28.6%)		
9. Individuals with bipolar disorder can control themselves if they want to during the illness period.	Employees in the Field	682 (71.6%)	270 (28.4%)	$\chi^2_{(1)} = .036$	0.85
	Other	122 (70.9%)	50 (29.1%)		
10. Individuals with bipolar disorder may be more active, nervous, and energetic during the illness period than before.	Employees in the Field	77 (74.0%)	27 (26.0%)	$\chi^2_{(1)} = .354$	0.552
	Other	727 (71.3%)	293 (28.7%)		
11. Individuals with bipolar disorder are much more sociable during the illness period and often go out. For example, they may call their friends in the middle of the night and suggest making a plan to have fun.	Employees in the Field	308 (73.2%)	113 (26.8%)	$\chi^2_{(1)} = .866$	0.379
	Other	496 (70.6%)	207 (29.4%)		
12. Individuals with bipolar disorder are more interested in sexuality than usual during the illness period.	Employees in the Field	406 (73.8%)	144 (26.2%)	$\chi^2_{(1)} = 2.769$	0.096
	Other	398 (69.3%)	176 (30.7%)		
13. Bipolar disorder is an illness in which mania (excessive mood) and/or depression episodes are experienced.	Employees in the Field	98 (72.6%)	37 (27.4%)	$\chi^2_{(1)} = .085$	0.771
	Other	706 (71.4%)	283 (28.6%)		
14. Individuals with bipolar disorder behave this way because they want to look different.	Employees in the Field	677 (71.5%)	270 (28.5%)	$\chi^2_{(1)} = .005$	0.943
	Other	127 (71.8%)	50 (28.2%)		
15. Bipolar disorder results from the wrong upbringing of children by parents.	Employees in the Field	580 (68.9%)	262 (31.1%)	$\chi^2_{(1)} = 11.544$.001**
	Other	224 (79.4%)	58 (20.6%)		

* p < .05. **p < .01

to individuals in the academic group." was only confirmed with respect to the item "Individuals with bipolar disorder can start a fight or argument very quickly during the illness period." and was not confirmed in terms of other clinical symptoms.

Table 4 contains the chi-square analysis results on the comparison of bipolar disorder awareness according to individuals who did and did not do research on topics in the field of psychology and/or psychiatric diseases. The analysis results are as follows: It was elucidated that the

participants who did research to obtain information in the field of psychology/psychiatry regarding bipolar disorder knew the awareness items about the causes of the disease (the disorder is genetically based) more correctly than the participants who did not do such a research. It was revealed that the participants who did research to obtain information in the field of psychology/psychiatry regarding bipolar disorder knew all the awareness items related to the symptoms of the disorder better than the participants who did not do such a research, except for the item "not knowing that patients cannot

Table 4: Chi-Square Analysis Results on the Comparison of Bipolar Disorder Awareness According to Individuals Who Did and Did Not Do Research on Topics in the Field of Psychology and/or Psychiatric Diseases

Items	Diagnosis	Incorrect n(%)	Correct n(%)	$\chi^2_{(df)}$	p
1. Individuals who cannot cope with the difficulties of daily life become bipolar patients.	Those who did not do research	190 (24.0%)	599 (75.9%)	$\chi^2_{(1)} = 6.407$.011*
	Those who did research	105 (31.3%)	230 (68.7%)		
2. Individuals with bipolar disorder feel very well beyond normal and overjoyed during the illness period.	Those who did not do research	132 (32.0%)	281 (68.0%)	$\chi^2_{(1)} = 11.09$.001**
	Those who did research	163 (22.9%)	548 (77.1%)		
3. Bipolar disorder is genetic, that is, hereditary.	Those who did not do research	206 (29.3%)	496 (70.7%)	$\chi^2_{(1)} = 9.278$.002**
	Those who did research	89 (21.1%)	333 (78.9%)		
4. Individuals with bipolar disorder can start a fight or argument very quickly during the illness period.	Those who did not do research	38 (35.2%)	70 (64.8%)	$\chi^2_{(1)} = 4.933$.026*
	Those who did research	257 (25.3%)	759 (74.7%)		
5. Individuals with bipolar disorder sometimes have more self-confidence than ever before.	Those who did not do research	101 (35.1%)	187 (64.9%)	$\chi^2_{(1)} = 15.575$.000**
	Those who did research	194 (23.2%)	642 (76.8%)		
6. When individuals with bipolar disorder are depressed or have manic episodes, they can easily get out of this condition themselves.	Those who did not do research	255 (25.9%)	731 (74.1%)	$\chi^2_{(1)} = .610$	0.435
	Those who did research	40 (29.0%)	98 (71.0%)		
7. Individuals with bipolar disorder do not suffer from insomnia even though they sleep less during the illness period and talk much more or faster than before.	Those who did not do research	108 (31.3%)	237 (68.7%)	$\chi^2_{(1)} = 6.581$.010*
	Those who did research	187 (24.0%)	592 (76.0%)		
8. Individuals with bipolar disorder cannot stop their thoughts during the illness period, have trouble focusing, and are distracted.	Those who did not do research	43 (44.3%)	54 (55.7%)	$\chi^2_{(1)} = 17.936$.000**
	Those who did research	252 (24.5%)	775 (75.5%)		
9. Individuals with bipolar disorder can control themselves if they want to during the illness period.	Those who did not do research	239 (25.1%)	713 (74.9%)	$\chi^2_{(1)} = 4.181$.041*
	Those who did research	56 (32.6%)	116 (67.4%)		
10. Individuals with bipolar disorder may be more active, nervous, and energetic during the illness period than before.	Those who did not do research	36 (34.6%)	68 (65.4%)	$\chi^2_{(1)} = 4.148$.042*
	Those who did research	259 (25.4%)	761 (74.6%)		
11. Individuals with bipolar disorder are much more sociable during the illness period and often go out. For example, they may call their friends in the middle of the night and suggest making a plan to have fun.	Those who did not do research	130 (30.9%)	291 (69.1%)	$\chi^2_{(1)} = 7.465$.006**
	Those who did research	165 (23.5%)	538 (76.35%)		
12. Individuals with bipolar disorder are more interested in sexuality than usual during the illness period.	Those who did not do research	171 (31.1%)	379 (68.9%)	$\chi^2_{(1)} = 13.062$.000**
	Those who did research	124 (21.6%)	450 (78.4%)		

13. Bipolar disorder is an illness in which mania (excessive mood) and/or depression episodes are experienced.	Those who did not do research	48 (35.6%)	87 (64.4%)	$\chi^2_{(1)} = 6.870$.009*
	Those who did research	247 (25.0%)	742 (75.0%)		
14. Individuals with bipolar disorder behave this way because they want to look different.	Those who did not do research	242 (25.6%)	705 (74.4%)	$\chi^2_{(1)} = 1.484$	0.223
	Those who did research	53 (29.9%)	124 (70.1%)		
15. Bipolar disorder results from the wrong upbringing of children by parents.	Those who did not do research	207 (24.6%)	635 (75.4%)	$\chi^2_{(1)} = 4.785$.029*
	Those who did research	88 (31.2%)	194 (68.8%)		

Table 5: Chi-Square Analysis Results Regarding the Comparison of Bipolar Disorder Awareness According to Whether The Participants Were/Their Acquaintances Were Diagnosed with Bipolar Disorder

Items	Diagnosis	Incorrect n(%)	Correct n(%)	$\chi^2 (\sigma\delta)$	p
1. Individuals who cannot cope with the difficulties of daily life become bipolar patients.	Yes	159 (77.6%)	46 (22.4%)	$\chi^2_{(1)} = 6.501$.011*
	No	630 (68.6%)	289 (31.4%)		
2. Individuals with bipolar disorder feel very well beyond normal and overjoyed during the illness period.	Yes	58 (28.3%)	147 (71.7%)	$\chi^2_{(1)} = 7.704$.006**
	No	355 (38.6%)	564 (61.4%)		
3. Bipolar disorder is genetic, that is, hereditary.	Yes	104 (50.7%)	101 (49.3%)	$\chi^2_{(1)} = 14.697$.000**
	No	598 (65.1%)	321 (34.9%)		
4. Individuals with bipolar disorder can start a fight or argument very quickly during the illness period.	Yes	17 (8.3%)	188 (91.7%)	$\chi^2_{(1)} = .500$	0.48
	No	91 (9.9%)	82 (90.4%)		
5. Individuals with bipolar disorder sometimes have more self-confidence than ever before.	Yes	32 (15.6%)	173 (84.4%)	$\chi^2_{(1)} = 13.191$.000**
	No	256 (27.9%)	663 (72.1%)		
6. When individuals with bipolar disorder are depressed or have manic episodes, they can easily get out of this condition themselves.	Yes	186 (90.7%)	19 (9.3%)	$\chi^2_{(1)} = 2.108$	0.174
	No	800 (87.1%)	119 (12.9%)		
7. Individuals with bipolar disorder do not suffer from insomnia even though they sleep less during the illness period and talk much more or faster than before.	Yes	39 (19.0%)	166 (81.0%)	$\chi^2_{(1)} = 16.051$.000**
	No	306 (33.3%)	613 (66.7%)		
8. Individuals with bipolar disorder cannot stop their thoughts during the illness period, have trouble focusing, and are distracted.	Yes	15 (7.3%)	190 (92.7%)	$\chi^2_{(1)} = 548$	0.459
	No	82 (8.9%)	837 (91.1%)		
9. Individuals with bipolar disorder can control themselves if they want to during the illness period.	Yes	186 (90.7%)	19 (9.3%)	$\chi^2_{(1)} = 7.044$.008**
	No	766 (83.4%)	153 (16.6%)		
10. Individuals with bipolar disorder may be more active, nervous, and energetic during the illness period than before.	Yes	11 (5.4%)	194 (94.6%)	$\chi^2_{(1)} = 4.511$.034*
	No	93 (10.1%)	826 (89.9%)		
11. Individuals with bipolar disorder are much more sociable during the illness period and often go out. For example, they may call their friends in the middle of the night and suggest making a plan to have fun.	Yes	50 (24.4%)	155 (75.6%)	$\chi^2_{(1)} = 18.270$.000**
	No	371 (40.4%)	548 (59.6%)		
12. Individuals with bipolar disorder are more interested in sexuality than usual during the illness period.	Yes	73 (35.6%)	132 (64.4%)	$\chi^2_{(1)} = 17.809$.000**
	No	477 (51.9%)	442 (48.1%)		

13. Bipolar disorder is an illness in which mania (excessive mood) and/or depression episodes are experienced.	Yes	20 (9.8%)	185 (90.2%)	$\chi^2_{(1)} = 1.206$	0.272
	No	115 (12.5%)	804 (87.5%)		
14. Individuals with bipolar disorder behave this way because they want to look different.	Yes	182 (88.8%)	23 (11.2%)	$\chi^2_{(1)} = 3.874$.049*
	No	765 (83.2%)	154 (16.8%)		
15. Bipolar disorder results from the wrong upbringing of children by parents.	Yes	168 (82.0%)	37 (18.0%)	$\chi^2_{(1)} = 6.612$.010*
	No	674 (74.9%)	245 (26.7%)		

* p < .05. **p < .01

easily get out of depression and manic episodes themselves." The hypothesis "H4- Individuals who are interested and do extensive reading and academic research know more about the causes of bipolar disorder." was confirmed. The hypothesis "H5- Individuals who are interested and do extensive reading and academic research have a greater understanding of the symptoms of bipolar disorder." was confirmed except for the item "not knowing that patients can easily get out of depression and manic episodes themselves." The hypothesis "H6- Individuals who are interested and do extensive reading and academic research have a better idea about the treatment of bipolar disorder." was not confirmed. Individuals who read and did research could not know the item "patients cannot easily get out of depression and manic episodes themselves" significantly more correctly.

Table 5 contains the chi-square analysis results regarding the comparison of bipolar disorder awareness according to whether the participants were/their acquaintances were diagnosed with bipolar disorder. The analysis results are as follows: It was observed that the participants who were/whose acquaintances were diagnosed with bipolar disorder knew the awareness items related to the causes of the disease (the disease is genetically based), more correctly than the participants who were not/whose acquaintances were not diagnosed with bipolar disorder.

The hypothesis "H7-Individuals who have experienced the symptoms of bipolar disorder in themselves or an acquaintance know more about the causes of the illness." was confirmed. Our hypothesis "H8- Individuals who have experienced the symptoms of bipolar disorder in themselves or an acquaintance have a better idea about the symptoms and treatment of the illness." was only confirmed in relation to the symptoms of feeling very good and overjoyed during the episodes, having more self-confidence, sleeping less but not suffering from insomnia, and talking much more and faster than before, not being able to control themselves voluntarily, being much more active, nervous, and energetic, being much more social, going out frequently and making night plans, and being more interested in sexuality than usual, and it was not confirmed for other symptoms.

Discussion

[12] investigated which of the views outweighed in participants consisting of ordinary (outside the field) people. In their research, the concept of ordinary (outside the field) people was defined as people who had no education in mental diseases and psychology or in the field of internal medicine (111 individuals). The academic group consisted of individuals who received formal education in internal medicine, psychology, or psychiatry for at least one year (63 individuals). The rate of correct recognition of bipolar disorder was evaluated as 43.4%. It was reported that the number of people who claimed that psychosocial causes were among the causes of bipolar disorder was close to the number of people who claimed that it was based on biological causes. They stated that people with lower interest and knowledge about mental illnesses attributed both the cause of the disorder and treatment methods to psychosocial causes. [12] Suggested that being a person outside the field was not predictive of the awareness of the symptoms of bipolar disorder, and academic education did not make a difference in recognizing the symptoms of mental illnesses. Our results showed that more than 50% of our sample group knew that bipolar disorder did not arise from psychological reasons (faulty parental attitude, difficult life conditions, and one's own desire). However, it was found that the number of people who knew that the disease was hereditary was only 37.5%. Reviewing the publications on this subject, [18]; suggested that the probable causes of bipolar disorder were work/school stress, pressures of modern society and childhood traumas in South Koreans. Consistent with this finding, in their study investigating the general knowledge level of society about the causes of mental illnesses, [19] asserted that the belief that mental illnesses occurred due to psychosocial stressors and psychotherapy was more effective in treatment outweighed. [13]; reported that the belief in the prominence of psychosocial factors in the etiology of bipolar disorder was widespread. [11] Published the results indicating that half of the participants thought supernatural beliefs and fate were related to the causes of bipolar disorder in the Saudi Arabian sample. In the literature, there are no studies clinically investigating in detail the extent to which each unique symptom of bipolar disorder is

recognized in society. Therefore, this research is a pioneering study in this regard. Concerning this matter, [13] conducted a study on a sample of 1000 adults. They stated that 43% of the participants could identify some of the characteristics of bipolar disorder, whereas 53% of the participants could identify some of the symptoms of schizophrenia.

In our study, in the awareness items concerning the symptoms of the illness, the symptoms correctly recognized by 75% and more of the participants shows that the majority of our sample group knew that bipolar disorder progressed with manic and/or depression episodes, patients had problems focusing, patients were active and experienced difficulty in controlling themselves, they tended to argue and fight, and they could not get out of this condition on their own. The fact that more than 75% of the participants correctly knew that patients could not get out of the episode on their own and could not control themselves if they wanted to contradicts the study results by [13] reporting that the belief that the course of bipolar disorder might be positive even if it was untreated was dominant among the participants. The symptom that patients were more interested in sexuality than normal during the episodes was found to be the least recognized symptom among the participants at a rate of 51.1%. Less social awareness of sexual symptoms may suggest that sexuality is seen as taboo in society.

In our study, the symptoms that less than 75% of the participants knew correctly, indicates that there is less social awareness of the fact that tolerance for sleeplessness, excessive and fast speech, increased social extroversion, being extremely self-confident and overjoyed are among the clinical symptoms of bipolar disorder. People who have not been acquainted with mental illnesses emphasize that familial, social, and psychological causes play a role in the occurrence of illnesses and may overlook the possibility that an academically possible biological and genetic origin may be among the causes of the illness [12]. In support of this finding, it was observed in this study that the participants who were/whose acquaintances were diagnosed with bipolar disorder knew the awareness items related to the causes of the disease (the disease is genetically based), more correctly than the participants who were not/whose acquaintances were not diagnosed with bipolar disorder. Accordingly, it was found that the participants who were/whose acquaintances were diagnosed with bipolar disorder knew that the disease was hereditary and did not occur due to psychological reasons more correctly than the participants who were not/whose acquaintances were not diagnosed with bipolar disease. In the awareness items concerning the symptoms of the disorder, it was determined that the participants who were/whose acquaintances were diagnosed with bipolar disorder knew the symptoms of feeling very good and overjoyed during the manic episodes, feeling more self-confident, sleeping less but not suffering from insomnia, and talking much more

and faster than before, not being able to control themselves voluntarily, being much more active, nervous, and energetic, being much more social, going out frequently and making night plans, and being more interested in sexuality than usual more correctly compared to those who were not/whose acquaintances were not diagnosed with bipolar disorder. Reviewing the general analyses, it is a remarkable aspect of this study that these items related to the awareness of bipolar disorder were known by less than 75% of the sample group, whereas they were more known by the participants who were/whose acquaintances were diagnosed with bipolar disorder compared to those who were not. Accordingly, it was revealed that people who had previously been acquainted with bipolar disorder had a higher level of awareness of the tolerance for sleeplessness, excessive and fast speech, increased social extroversion, being extremely self-confident and overjoyed, and the tendency to be more interested in sexuality than usual. Moreover, the finding that individuals who had previously been acquainted with bipolar disorder knew more correctly that bipolar patients could not control themselves if they wanted to compared to individuals who had not been acquainted with the disorder is parallel with the study results by [18]; showing that individuals who neither had been diagnosed with bipolar disorder nor had an acquaintance diagnosed sought belief-based recovery rather than professional therapy.

It was suggested that information-based opinions about the nature, causes, and treatment methods of mental illnesses are widely attributed to reading, academic education, and/or close contact with individuals with mental illnesses [20]. The results of this study also support these data, as stated above. This study elucidated that the participants who did research to obtain information in the field of psychology/psychiatry knew that the disorder was hereditary and did not arise due to psychological reasons more correctly than the participants who did not do any research. In general, these results of the study are in parallel with the results obtained by [20]. This study revealed that the participants who did research to obtain information in the field of psychology/psychiatry regarding bipolar disorder knew all the awareness items concerning the symptoms of the disorder more correctly than the participants who did not do any research, except for the item "not knowing that patients cannot easily get out of depression and manic episodes themselves." Individuals working in the field knew the item "Individuals with bipolar disorder can start a fight or argument very quickly during the illness period." significantly more correctly than other individuals (lay individuals). This result suggests that the dysphoric face of manic episodes is generally less known in society, and the awareness on this matter is better known by people who conduct academic studies on this subject and indicates the need for education to increase social awareness of "dysphoric manic episodes"

in other words, the clinical picture of getting angry and involving in fight easily. The arguments and fights arising from this condition have a certain place in our daily life, and the development of social awareness regarding the presence of such a disease can serve to prevent social violence.

According to the literature, it has been suggested that "individuals outside the field" believe that willpower will overcome mental illnesses. In diseases with a high risk perception, it is believed that drug treatment is effective. Since the risk perception in bipolar disorder is not fully known, it is predicted that ordinary individuals outside the field will assert that the disease will improve without drug therapy [12]. In contrast, this study found no statistically significant difference between individuals outside the field and individuals who worked in the field and received education regarding the awareness of the items "When individuals with bipolar disorder are depressed or have manic episodes, they can easily get out of this condition themselves." and "Individuals with bipolar disorder can control themselves if they want to during the illness period." The present research revealed that the item "not knowing that patients cannot easily get out of depression or manic episodes" was the only item that was not known more correctly by the participants who did research to obtain information in the field of psychology/psychiatry about bipolar disorder compared to the group that did not do any research. This finding, as indicated in the study by [18], is parallel with the data suggesting that South Korean people think they can recover from Bipolar Disorder by themselves. [21] Claimed that since the cause of mental illnesses is not known by society, people could not go to the right addresses in search of treatment and could not adhere to appropriate treatment rules. [22] Suggested that many patients with mental illnesses preferred to resort primarily to spiritual healers, which might adversely affect the course of bipolar disorder due to delayed psychiatric application. These results of our study indicated that even if people did research to obtain information in the field of psychology/psychiatry, they did not know the place of professional support in the medical and psychological field for the treatment of bipolar disorder very well and showed the necessity of social education and awareness studies regarding the importance of medical and psychological therapy in the treatment of the disorder. Furthermore, [23]; asserted that more intense medically-biologically oriented beliefs about the causes of bipolar disorder in society caused the social stigmatization of these patients and reduced the tendency of people to stay away from them. Therefore, health policies aiming to educate society on bipolar disorder will prevent these patients from being stigmatized as people who should be avoided in society. Individuals outside the field knew the items "Individuals with bipolar disorder sometimes have more self-confidence than ever before." and "Bipolar disorder results from the

wrong upbringing of children by parents" significantly more correctly than individuals working in the field. The fact that individuals working in the field had less awareness of these two items, which were both related to the causes of the disorder and its symptoms, compared to individuals outside the field and that the participants who did research to obtain information in the field of psychology/psychiatry knew these two items more correctly than the participants who did not do research is consistent with the study results of [12], who suggested that being interested in mental illnesses played a more significant role in the awareness of bipolar disorder rather than being educated and working in the field. Another study supporting this result of our study is the study by [24]. In this study, the researchers put forward a result that mental health professionals who were not physicians felt ready for counseling about bipolar disorder, but they thought that they had little knowledge about medical treatment and its results and that they would benefit from extra education on effective treatment approaches in this respect.

Implications for practice and research

In the general social awareness research on bipolar disorder, the fact that not all clinical symptoms are well known and the hereditary burden of the disorder is not sufficiently known may adversely affect the perspective on drug therapy, which takes a very important place in the treatment of this disorder. Therefore, planning education on this subject within the scope of social projects will increase health literacy and help people turn to the right treatment and cooperation. According to the results of this study, it was revealed that being interested in mental illnesses plays a more significant role in awareness of both the causes and symptoms of bipolar disorder than being educated and working in the field. Thus, providing education to increase social awareness will increase the knowledge level of society by enhancing the interest and research on bipolar disorder. It was determined that the participants who did research to obtain information in the field of psychology/psychiatry knew that the disorder was hereditary and did not arise due to psychological reasons more correctly than the participants who did not do any research. Even in the sample of people who had not been acquainted with bipolar disorder before and who had done research in the field of psychology/psychiatry, it was found that the importance of professional support in the medical and psychological field to treat bipolar disorder is not well known, and the study revealed the necessity of education and awareness studies for the overall society and people who have not been acquainted with this disorder before, regarding the importance of medical and psychological therapy to treat the disease. It was elucidated that, in society, the awareness of the dysphoric face of manic episodes was better known by individuals who had received academic education on this subject or who worked in the field, and it was determined that the signs of dysphoric manic

episodes were not well known by individuals outside the field. However, people having dysphoric manic episodes can easily start arguments and fights. It is assumed that increasing social awareness on this issue will increase social peace by reducing the number of aggressive individuals. This study is among the pioneering studies in the field in terms of evaluating social awareness of both the causes of bipolar disorder and its clinical manifestations. In bipolar disorder, the fact that the episodes are not similar to each other causes the symptoms to reflect on the behaviors in different ways. This may cause a difference in the frequency of recognizing the symptoms. Although the prevalence of mental illnesses increases the recognition rates in society, it is believed that studies that will evaluate the opinions of individuals outside the field about the causes and symptoms of mental illnesses will enhance social awareness and contribute to the psychiatric literacy of society by enriching the knowledge of individuals outside the field about mental illnesses. In the future, the use of Likert scales in survey questions in studies with larger participation and consisting of samples in which the numbers of participants working inside and outside the field are closer to each other will allow conducting correlation analyses between the variables.

Conclusion

This study shows that to increase literacy on mental illnesses, it is important to attract the attention of people outside the field to matters related to mental illnesses and encourage them to do research and read on these matters. Therefore, it is important to regularly evaluate the knowledge levels of people outside the field regarding mental illnesses and monitor how their knowledge levels vary over time. Increasing mental health literacy levels to the highest will provide people outside the field with a medical perspective and will ensure a healthier attitude toward mental illnesses in society. Accordingly, it will be ensured that people with mental illnesses apply to the right addresses in time and are treated appropriately without causing individual and/or social harm and without wasting time.

Limitations

The facts that the numbers of participants working in and outside the field could not be formed at similar rates in the sample of this study, the number of the participants working in the field was higher, and no Likert scales were used in the questionnaire items are among the study's limitations.

Declarations

Ethical Considerations

The research was evaluated and approved by the Rectorate of Beykent University, the Scientific Research and Publication Ethics Committee for Social and Human Sciences of Beykent University on 20.12.2021. The participants

provided informed consent via the electronic data collection platform prior to completing the survey.

The protocol for this clinical research has been approved by the Ethics Committee for Social and Human Sciences of Beykent University. This article has been conducted in accordance with the Helsinki Declaration of Principles, and has received ethical and legal permission. All the participants included in the study signed the Informed Consent Form.

Consent for publication

Agreed

Competing interests

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Authors' contributions

Neslim GÜVENDEĞER DOKSAT – Wrote the paper, Conceived and designed the analysis, Performed the analysis

Mahi ASLAN - Wrote the paper, Conceived and designed the analysis, Performed the analysis

Oğuz POLAT - Wrote the paper, Conceived and designed the analysis

Gözde MASATCIOĞLU – Collected the data

Mehmet Kerem DOKSAT - Collected the data

Cem UYSAL - Contributed data and analysis tools

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