Community Mental Health Journal (2019) 55:1377–1388
https://doi.org/10.1007/s10597-019-00441-5

ORIGINAL PAPER

# Attitudes of Community-Leading Occupational Groups Towards Mental Illnesses: The Sample of a City in Western Turkey

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Received: 17 July 2018 / Accepted: 11 July 2019 / Published online: 17 July 2019


**Abstract**
This descriptive study aims to determine attitudes of community-leading occupational groups towards mental illnesses. The sample of this descriptive study consisted of a total of 1100 participants from clergymen, headmen, teachers, policemen and primary healthcare professionals working in Düzce, Turkey. Data were collected using the Personal Information Form and the Beliefs Toward Mental Illness Scale-BTMIS. Occupational groups were determined to have moderate beliefs about mental diseases according to their BTMIS scale total scores. The occupational groups that had most negative beliefs toward mental illnesses were headmen, police officers, teachers, healthcare professionals and clergymen, respectively. Data were evaluated using descriptive statistics of mean, standard deviation, minimum, maximum, and percentage. Community-leading occupational groups should be actively involved in anti-stigma activities to change quickly and effectively community attitudes towards mental illnesses.

**Keywords** Stigmatization · Community-leading occupational groups · Mental illness

## Introduction

Stigmatization is deemed as the devaluation of a person in society because of his/her maladaptive behaviors inconsistent with social norms and criteria and the evaluation of him/her negatively as imperfect and discredited (Cam and Cuhadar 2011; Tel and Pinar Ertekin 2012; Korkmaz and Kucuk 2016). Changes in the emotions, thoughts and behaviors of individuals with mental illness are often regarded as abnormal and these persons are considered dangerous for society, harmful to the environment, and behaviorally unpredictable. Individuals with mental illness are stigmatized (labelled) by society due to their unacceptable behaviors (Cam et al. 2014; Salve et al. 2014; Yuksel et al. 2015). Due to the stigmatization, patients and their relatives are ostracized in social relations and condemned to difficult living conditions, which lead to decrease in their health-seeking behaviors and quality of life (Corrigan and Watson 2002; Rüsch et al. 2005; Williams et al. 2012; Gulliver et al. 2010; Corrigan et al. 2014; Svensson et al. 2014; Yilmaz and Okanli 2015).

It is inevitably necessary to fight against stigmatization in society because of negative social attitudes and beliefs towards individuals with mental illness, which deteriorates quality of their lives. Community-leading occupational groups have an important place in society because of their social influence and possibility to change quickly and effectively negative attitudes in society. In this regard, Thornicroft et al. (2008) suggests relevant training interventions for occupational groups such as healthcare professionals, police officers, teachers, clergymen and journalists.

Studies report that negative attitudes of healthcare professionals decrease quality of life in individuals with mental illness, hinder their abilities of coping with health problems and deteriorate their willingness to receive medical support (Bag and Ekinci 2005; Arkan et al. 2011; Winkler et al. 2016). Studies also report that police officers have frequent

This study was presented at the "4th World Congress on Nursing April 16–18, 2018 at Valencia, Spain".

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contacts with mentally ill individuals, are equipped with a number of official or unofficial authority to intervene in individuals with mental illness, and that the behaviors of police officers have a significant impact on the lives of people with mental illnesses (Livingston et al. 2014; Pinholf et al. 2003). Some other studies report that teachers who display positive attitudes towards students with mental illness can be role models for children and adolescents and provide significant support for risky adolescents to apply for medical assistance (Chan et al. 2009; Yamaguchi et al. 2011; Hugginsa et al. 2016; Oban and Kucuk 2012). Studies of clergymen and headmen emphasize the importance of these two professions in fighting against stigmatization, because some individuals with mental impairments in Turkey apply to clergymen to seek religious remedies (Leavey et al. 2007; Gulec et al. 2011; Yalvac et al. 2015) and headmen have duties and authorities directly related to the people (Gokus et al. 2013). Therefore, it is important to evaluate the attitudes of community-leading occupational groups towards individuals with mental illnesses, to raise awareness on this subject, and to transform negative social beliefs into positive ones (Thornicroft et al. 2008; Eker et al. 2010; Cam et al. 2014; Yuksel et al. 2015).

There are studies of stigmatization towards individuals with mental illnesses, which were carried out using different social and occupational groups such as university and high school students, healthcare professionals, police officers, clergymen and headmen. Some of these studies, which were carried out using only one occupational group, did not determine any stigmatizing beliefs and attitudes, while some other studies only evaluated the effect of information on beliefs and attitudes regarding stigmatization. This study is differ from previously conducted similar studies because all community-leading occupational groups working in a provincial center were included in the study. Stigmatization will also be noted as a major problem through the data obtained in this study, which will provide a good basis for future intervention studies.

## Materials and Method

### Aim

This descriptive study aims to determine the attitudes of community-leading occupational groups towards mental illnesses.

### Participants

Community-leading occupational groups to be used in the study were determined as clergymen, headmen, teachers, police officers and primary healthcare professionals (doctors, nurses, midwives). According to official records, there were 2984 professional members of these occupational groups working in Düzce province. According to the power analysis result, the number of professional members that should be reached for the study sample was at least 790. A proportionate stratified sampling method was used to determine the number of individuals from each occupational group. Figure 1 shows the number of occupational group members determined by proportionate stratified sampling. A total of 1100 professionals were reached in the study.

The research data were collected by three interviewers who were nursing undergraduates and had received 8-h training on mental illnesses and stigmatization. The data were collected through face-to-face interviews in participants' working environments (schools, family health centers, police stations, police headquarters, neighborhood headman units, and mosques). Members of the occupational groups were informed about the study subject and purpose and then their written and oral consents to participate in the study. At this stage, some police officers have expressed negative judgments about people with mental illness and refused to participate in the study. Therefore, the planned number of participants from police officers could not be attained.

## Data Collection

The research data were collected using the Personal Information Form and the Beliefs Toward Mental Illness Scale-BTMIS after verbal and written consents were obtained from the occupational group members who worked in Düzce and met the study inclusion criteria.

| | n | Number of people for the sample |
|---|---|---|
| Family physician | 114 | 29 |
| Midwifery | 69 | 17 |
| Nurse | 36 | 9 |
| Teacher (secondary school) | 667 | 167 |
| Teacher (high school) | 634 | 159 |
| Neighborhood headman | 67 | 17 |
| Village headman | 97 | 24 |
| Clergyman | 300 | 75 |
| Police | 1000 | 293 |
| | 2984 | 790 |

**Fig. 1** Number of people to be reached for the sample

### Personal Information Form

This form consists of 12 questions about participants' socio-demographic characteristics (age, marital status, residential area educational status, occupation, and socio-economic status), whether they have been diagnosed of mental illness, and whether they have encountered and intervened in any cases of mental illness.

### Beliefs Toward Mental Illness Scale (BTMIS)

The Beliefs Toward Mental Illness Scale (BTMIS) was developed in the USA by Hirai and Clum (2000). The Turkish validity and reliability study of the scale was conducted by Bilge and Cam (2008). There were 262 adults who participated in the research. Factor analysis was conducted for the test of the construct validity of BMI and three factors were determined. BTMIS consists of 21 items made by BTMIS. BTMIS is a 6-point Likert type scale with the following options; I definitely disagree: 0, I disagree: 1, I partially disagree: 2, I partially agree: 3, I mostly agree: 4, I definitely agree: The scale is interpreted using both total and subscale scores, where a higher score indicates negative belief toward mental illness. BTMIS consists of three subscales: "Dangerousness" subscale consists of 8 items about the beliefs toward the dangerous characteristics of mental disorders and patients with mental disorder, and the score to be taken on this subscale ranges between 0 and 40. "Desperation and Deterioration of Interpersonal Relationships" subscale is composed of 11 items about the beliefs toward the effects of mental illnesses on interpersonal relationships and regarding desperation experiences, and expresses individuals' avoidance from interaction with mentally ill persons and the desperation they experience during such interaction. The score to be taken on this subscale ranges between 0 and 55. "Shame" Subscale consists of 2 items indicating that mental illness is a situation to be ashamed. The score to be taken on this subscale ranges between 0 and 10. The scale's Cronbach alpha was found to be 0.82 and the subscales were between 0.69 and 0.80.

### Ethical Considerations

The study was approved by Düzce University Local Ethics Committee (decision no: 2017/97). Official permissions were obtained from all the institutions where the study was conducted (Provincial National Education Directorate, Provincial Security Directorate, Provincial Health Directorate, and Provincial Directorate of Religious Affairs).

### Data Analysis

All data were evaluated using descriptive statistics of mean, standard deviation, minimum, maximum, and percentage. Normality hypothesis of the quantitative variables used in the study was examined using Kolmogorov–Smirnov test. One way ANOVA (post hoc: LSD test), Welch (post hoc: Games Howell test) and Kruskal–Wallis (post hoc: Dunn test) tests were used in the inter-group comparisons. Pearson Chi Square and Fisher-Freeman-Halton (post hoc: Bonferroni method) tests were used to examine the relations between categorical variables. Statistical evaluations were performed using SPSS 22 program. The values of $p < 0.05$ were considered statistically significant.

## Results

Of the participants, 35% were in the 35–44 age group, 84.7% were college graduates, and 55.8% were teachers. Table 1 shows the distribution and comparison of participants' some socio-demographic characteristics by occupational groups. A statistically significant difference was found between occupational groups by age groups, education level, marital status, income status, longest living place, working experience, any diagnosis of mental illness in relatives, situation of getting support in own diagnosis of mental illness, cases of encountering with mentally ill individuals and having occupational intervention in such case ($p < 0.05$, Table 1). No statistically significant difference was found between occupational groups by situation of being diagnosed of mental illness ($p > 0.05$, Table 1).

The percentage of police officers (3.8%) who had relatives diagnosed of mental illness was significantly lower than the percentages of healthcare professionals (27.1%), teachers (16.5%) and clergymen (16.4%) who had relatives diagnosed of mental illness (for each $p < 0.05$). The percentage of healthcare professionals (27.1%) who had relatives diagnosed of mental illness was significantly higher than the percentages of teachers (16.5%), headmen (6.1%) and police officers (3.8%) who had relatives diagnosed of mental illness (for each $p < 0.05$).

The percentage of teachers (92%) who would consider getting support from a psychiatrist/psychologist in case of having a mental illness was significantly higher than the percentages of clergymen (82.1%), police officers (75.9%), and headmen (63.6%) who would consider getting support from a psychiatrist/psychologist in case of having a mental illness (for each $p < 0.05$). The percentage of headmen (63.6%) who would consider getting support from a psychiatrist/psychologist in case of having a mental illness was significantly lower than the percentages of clergymen (82.1%), healthcare professionals (86.5%) and teachers (92%) who would

**Table 1** Distribution and comparison of some sociodemographic characteristics of participants by occupational groups

| | Occupation | | | | | | | | | | | p |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Teacher | | Clergyman | | Headman | | Healthcare professionals | | Police | | Total | |
| | n | % | n | % | n | % | n | % | n | % | n | |
| Age groups | | | | | | | | | | | | |
| 19–24 | 29 | 38.7 | 1 | 1.3 | 1 | 1.3 | 34 | 45.3 | 10 | 13.3 | 75 | **< 0.001*** |
| 25–29 | 72 | 63.7 | 10 | 8.8 | 0 | 0.0 | 14 | 12.4 | 17 | 15.0 | 113 | |
| 30–34 | 138 | 74.2 | 7 | 3.8 | 0 | 0.0 | 16 | 8.6 | 25 | 13.4 | 186 | |
| 35–44 | 227 | 61.5 | 44 | 11.9 | 4 | 1.1 | 34 | 9.2 | 60 | 16.3 | 369 | |
| 45+ | 123 | 39.4 | 72 | 23.1 | 61 | 19.6 | 35 | 11.2 | 21 | 6.7 | 312 | |
| Education level | | | | | | | | | | | | |
| Primary school | 0 | 0.0 | 0 | 0.0 | 27 | 100.0 | 0 | 0.0 | 0 | 0.0 | 27 | **< 0.001#** |
| Secondary school | 0 | 0.0 | 0 | 0.0 | 22 | 100.0 | 0 | 0.0 | 0 | 0.0 | 22 | |
| High school | 0 | 0.0 | 22 | 23.9 | 14 | 15.2 | 49 | 53.3 | 7 | 7.6 | 92 | |
| College | 589 | 64.4 | 112 | 12.3 | 3 | 0.3 | 84 | 9.2 | 126 | 13.8 | 914 | |
| Marital status | | | | | | | | | | | | |
| Married | 483 | 55.9 | 130 | 15.0 | 58 | 6.7 | 87 | 10.1 | 106 | 12.3 | 864 | **<0.001#** |
| Single | 91 | 53.2 | 4 | 2.3 | 7 | 4.1 | 42 | 24.6 | 27 | 15.8 | 171 | |
| Separated-widow-divorced | 15 | 75.0 | 0 | 0.0 | 1 | 5.0 | 4 | 20.0 | 0 | 0.0 | 20 | |
| Income level | | | | | | | | | | | | |
| Revenues = expenses | 280 | 52.7 | 87 | 16.4 | 36 | 6.8 | 58 | 10.9 | 70 | 13.2 | 531 | **<0.001*** |
| Revenues < expenses | 128 | 51.8 | 16 | 6.5 | 24 | 9.7 | 52 | 21.1 | 27 | 10.9 | 247 | |
| Revenues > expenses | 181 | 65.3 | 31 | 11.2 | 6 | 2.2 | 23 | 8.3 | 36 | 13.0 | 277 | |
| Longest living place | | | | | | | | | | | | |
| City | 473 | 61.9 | 73 | 9.6 | 21 | 2.7 | 92 | 12.0 | 105 | 13.7 | 764 | **<0.001*** |
| County | 77 | 56.2 | 11 | 8.0 | 7 | 5.1 | 25 | 18.2 | 17 | 12.4 | 137 | |
| Village | 39 | 25.3 | 50 | 32.5 | 38 | 24.7 | 16 | 10.4 | 11 | 7.1 | 154 | |
| Working experience (year) | | | | | | | | | | | | |
| 0–9 | 221 | 52.2 | 43 | 10.2 | 42 | 9.9 | 64 | 15.1 | 53 | 12.5 | 423 | **<0.001*** |
| 10–19 | 247 | 63.7 | 25 | 6.4 | 16 | 4.1 | 43 | 11.1 | 57 | 14.7 | 388 | |
| 20–29 | 90 | 49.7 | 42 | 23.2 | 6 | 3.3 | 21 | 11.6 | 22 | 12.2 | 181 | |
| 30+ | 31 | 49.2 | 24 | 38.1 | 2 | 3.2 | 5 | 7.9 | 1 | 1.6 | 63 | |
| Being diagnosed of mental illness | | | | | | | | | | | | |
| Yes | 30 | 44.1 | 12 | 17.6 | 7 | 10.3 | 13 | 19.1 | 6 | 8.8 | 68 | 0.080* |
| No | 559 | 56.6 | 122 | 12.4 | 59 | 6.0 | 120 | 12.2 | 127 | 12.9 | 987 | |
| Diagnosis of mental illness in relatives | | | | | | | | | | | | |
| Yes | 97 | 59.1 | 22 | 13.4 | 4 | 2.4 | 36 | 22.0 | 5 | 3.0 | 164 | **< 0.001*** |
| No | 492 | 55.2 | 112 | 12.6 | 62 | 7.0 | 97 | 10.9 | 128 | 14.4 | 891 | |
| Getting support in diagnosis | | | | | | | | | | | | |
| Yes | 542 | 59.6 | 110 | 12.1 | 42 | 4.6 | 115 | 12.6 | 101 | 11.1 | 910 | **< 0.001*** |
| No | 47 | 32.4 | 24 | 16.6 | 24 | 16.6 | 18 | 12.4 | 32 | 22.1 | 145 | |
| Encountering a person with a mental problem | | | | | | | | | | | | |
| Frequently | 149 | 51.2 | 12 | 4.1 | 5 | 1.7 | 73 | 25.1 | 52 | 17.9 | 291 | **< 0.001*** |
| Rarely | 409 | 59.4 | 111 | 16.1 | 47 | 6.8 | 54 | 7.8 | 68 | 9.9 | 689 | |
| No | 31 | 41.3 | 11 | 14.7 | 14 | 18.7 | 6 | 8.0 | 13 | 17.3 | 75 | |
| Having professional initiative | | | | | | | | | | | | |
| Yes | 265 | 51.1 | 83 | 16.0 | 35 | 6.7 | 73 | 14.1 | 63 | 12.1 | 519 | **0.004*** |
| No | 324 | 60.4 | 51 | 9.5 | 31 | 5.8 | 60 | 11.2 | 70 | 13.1 | 536 | |

Bold values indicate statistical significance ($p < 0.05$)

*Pearson Chi Square test

#Fisher–Freeman–Halton test

consider getting support from a psychiatrist/psychologist in case of having a mental illness (for each $p < 0.05$).

The percentage of teachers (25.3%) who have often encountered with mentally ill individuals was significantly higher than the percentages of clergymen (9%) and headmen (7.6%) who have often encountered with mentally ill individuals (for each $p < 0.05$). The percentage of teachers (25.3%) who have often encountered with mentally ill individuals was significantly lower than the percentages of police officers (39.1%) and healthcare professionals (54.9%) who have often encountered with mentally ill individuals (for each $p < 0.05$). The percentage of healthcare professionals (54.9%) who have often encountered with mentally ill individuals was significantly higher than the percentages of teachers (25.3%), clergymen (9%) and headmen (7.6%) who have often encountered with mentally ill individuals (for each $p < 0.05$). In addition, the percentage of teachers (51.1%) who were involved in professional intervention in persons with mental problems was significantly lower than the percentages of clergymen (61.9%) who were involved in professional intervention in persons with mental problems ($p < 0.05$).

Table 2 presents the descriptive statistics and comparison results of BTMIS scale total and subscale scores by occupational groups.

No statistically significant difference was found between occupational groups' mean scores on entire BTMIS and subscales of dangerousness and desperation ($p > 0.05$, Table 2). A statistically significant difference was found only between occupational groups' mean scores on entire BTMIS and shame subscale ($p < 0.05$, Table 2). Headmen's mean score on shame subscale was significantly higher than the mean scores of teachers, clergymen and police officers on shame subscale (for each $p < 0.05$).

The descriptive statistics and comparison results for BTMIS total scale and subscale scores by sociodemographic characteristics are given in Tables 3 and 4.

No statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and subscales of dangerousness and desperation by age groups ($p > 0.05$, Tables 3, 4). However, a statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and shame subscale by age groups ($p < 0.05$, Table 4). The shame subscale mean score of participants in the 34–44 age group was significantly lower than the shame subscale mean scores of those in the 19–24 and 45 + age groups (for each $p < 0.05$, Table 3). The shame subscale mean score of participants in the 19–24 age group was significantly higher than the shame subscale mean scores of those in the 25–29 and 34–44 age groups (for each $p < 0.05$, Table 4).

A statistically significant difference was found between occupational groups' mean scores on shame subscale by educational levels ($p > 0.05$, Table 4). However, no statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and subscales of dangerousness and desperation by educational levels ($p > 0.05$, Tables 3, 4). The college graduates' mean score on shame subscale was significantly lower than the mean scores of high, secondary and elementary school graduates (respectively, $p = 0.004$, $p = 0.018$, $p = 0.003$, Table 4).

**Table 2** Descriptive statistics and comparison results of BTMIS scale total and subscale scores by occupational groups

| | Occupation | | | | | p |
|---|---|---|---|---|---|---|
| | Teacher | Clergyman | Headman | Healthcare professionals | Police | |
| Total score | | | | | | |
| Mean ± SD | 51.2 ± 16.8 | 49.4 ± 15.5 | 52.6 ± 18.3 | 50.1 ± 19.8 | 51.4 ± 15.0 | 0.665[#] |
| M (min–max) | 51(5–105) | 48 (4–83) | 51 (0–102) | 48 (11–105) | 52 (15–87) | |
| Dangerousness | | | | | | |
| Mean ± SD | 23.5 ± 6.7 | 21.4 ± 7.4 | 22.2 ± 7.4 | 23.1 ± 7.5 | 22.7 ± 6.9 | 0.057* |
| M (min–max) | 23 (4–40) | 22 (0–37) | 24 (0–37) | 23 (6–40) | 23 (6–39) | |
| Desperation | | | | | | |
| Mean ± SD | 26.1 ± 10.3 | 26.4 ± 9.4 | 27.3 ± 10.8 | 24.7 ± 11.8 | 27.3 ± 9.8 | 0.165* |
| M (min–max) | 26 (0–55) | 27(3–45) | 27 (0–55) | 23 (3–55) | 27 (1–51) | |
| Shame | | | | | | |
| Mean ± SD | 1.6 ± 2.1 | 1.7 ± 2.2 | 3.1 ± 3.1 | 2.3 ± 2.9 | 1.5 ± 2.3 | **< 0.001*** |
| M (min–max) | 1 (0–10) | 1 (0–10) | 2 (0–10) | 1 (0–10) | 0 (0–10) | |

Bold values indicate statistical significance ($p < 0.05$)

*SD* standard deviation, *M (min–max)* median (minimum–maximum)

*Kruskal–Wallis test

[#]Welch test, for [Police-headman] $p < 0.001$; for [teacher-headman] $p = 0.002$; [Clergyman–Headman] $p = 0.025$

**Table 3** Descriptive statistics and comparison results of BTMIS total scale and dangerousness subscale scores by sociodemographic characteristics

| | Total score | | | Dangerousness | | | |
|---|---|---|---|---|---|---|---|
| | Mean | M | Min–max | Mean | M | Min–max | p |
| Age groups | | | | | | | |
| 19–24 | 54.0 ± 19.4 | 50 | 14–105 | 24.4 ± 6.1 | 24 | 7–40 | 0.487£,* |
| 25–29 | 49.1 ± 17.5 | 48 | 10–101 | 22.1 ± 6.8 | 22 | 3–38 | 0.179$,* |
| 30–34 | 50.9 ± 16.8 | 51.5 | 5–105 | 23.3 ± 6.9 | 23 | 4–40 | |
| 35–44 | 50.4 ± 15.6 | 50 | 11–94 | 23.1 ± 6.8 | 23 | 6–39 | |
| 45+ | 51.5 ± 17.5 | 50 | 0–102 | 22.6 ± 7.4 | 23 | 0–39 | |
| Education level | | | | | | | |
| Primary school | 55.1 ± 19.5 | 53 | 0–97 | 23.4 ± 7.3 | 25 | 0–34 | 0.128£,& |
| Secondary school | 55.0 ± 17.7 | 56 | 32–102 | 22.7 ± 8.0 | 23 | 9–37 | 0.889$,* |
| High school | 53.4 ± 19.2 | 50 | 4–105 | 23.1 ± 7.8 | 24 | 0–40 | |
| College | 50.5 ± 16.5 | 50 | 5–105 | 23.0 ± 6.9 | 23 | 3–40 | |
| Marital status | | | | | | | |
| Married | 50.8 ± 16.4 | 50 | 4–98 | 22.9 ± 7.0 | 23 | 0–40 | 0.978£,* |
| Single | 51.7 ± 19.6 | 50 | 0–105 | 23.3 ± 7.1 | 23 | 0–40 | 0.572$,* |
| Separated-widow-divorced | 50.7 ± 15.3 | 51.5 | 13–74 | 24.0 ± 6.8 | 22.5 | 7–33 | |
| Income level | | | | | | | |
| Revenues = expenses | 49.6 ± 16.0 | 49 | 0–96 | 22.3 ± 6.7 | 22 | 0–40 | 0.026£,# |
| Revenues < expenses | 53.1 ± 18.9 | 51 | 13–105 | 23.6 ± 7.7 | 24 | 4–40 | 0.004$,* |
| Revenues > expenses | 51.6 ± 16.6 | 51 | 5–105 | 23.8 ± 6.6 | 24 | 3–40 | |
| Longest living place | | | | | | | |
| City | 51.0 ± 16.9 | 50 | 0–105 | 23.1 ± 7.0 | 23 | 0–40 | 0.928£,& |
| County | 50.4 ± 17.8 | 50 | 13–101 | 23.0 ± 6.8 | 23 | 4–40 | 0.523$,* |
| Village | 51.0 ± 16.4 | 50 | 10–105 | 22.4 ± 6.7 | 23 | 3–40 | |
| Working experience (year) | | | | | | | |
| 0–9 | 50.7 ± 17.1 | 50 | 0–102 | 22.9 ± 6.7 | 23 | 0–40 | 0.077£,& |
| 10–19 | 52.0 ± 16.8 | 51 | 11–105 | 23.5 ± 7.1 | 24 | 6–40 | 0.021$,* |
| 20–29 | 50.8 ± 16.2 | 49 | 4–86 | 22.8 ± 7.2 | 23 | 0–39 | |
| 30+ | 46.1 ± 17.6 | 45 | 11–93 | 20.6 ± 6.8 | 21 | 4–39 | |
| Being diagnosed of mental illness | | | | | | | |
| Yes | 43.9 ± 18.7 | 39.5 | 11–95 | 20.6 ± 7.0 | 21 | 7–38 | < 0.001£,* |
| | | | | | | | 0.003$,* |
| No | 51.4 ± 16.7 | 51 | 0–105 | 23.1 ± 6.9 | 23 | 0–40 | |
| Diagnosis of mental illness in relatives | | | | | | | |
| Yes | 48.9 ± 17.2 | 47 | 11–105 | 22.1 ± 6.8 | 22 | 6–40 | 0.037£,* |
| No | 51.3 ± 16.8 | 51 | 0–105 | 23.1 ± 7.0 | 23 | 0–40 | 0.045$,* |
| Getting support in diagnosis | | | | | | | |
| Yes | 50.8 ± 16.6 | 50 | 4–105 | 23.1 ± 6.8 | 23 | 0–40 | 0.126£,* |
| No | 51.9 ± 18.6 | 52 | 0–88 | 22.6 ± 7.9 | 24 | 0–38 | 0.991$,* |
| Encountering a person with a mental problem | | | | | | | |
| Frequently | 51.3 ± 17.2 | 51 | 11–105 | 23.1 ± 7.1 | 23 | 7–40 | 0.122£,& |
| Rarely | 50.4 ± 16.6 | 50 | 4–105 | 22.8 ± 6.9 | 23 | 0–40 | 0.524$,* |
| No | 54.5 ± 18.2 | 52 | 0–101 | 23.9 ± 6.8 | 24 | 0–40 | |
| Having professional initiative | | | | | | | |
| Yes | 49.0 ± 16.3 | 48 | 10–101 | 22.1 ± 6.8 | 22 | 3–39 | <0.001* |
| No | 52.8 ± 17.3 | 52.5 | 0–105 | 23.8 ± 7.0 | 24 | 0–40 | <0.001$,* |

£Belongs to BTMIS scale total score

$Belongs to BTMIS dangerousness subscale

*Kruskal–Wallis test

&One Way ANOVA

#Welch test

**Table 4** Descriptive statistics and comparison results of BTMIS total scale and desperation and shame subscale scores by sociodemographic characteristics

| | Desperation | | | Shame | | | p |
|---|---|---|---|---|---|---|---|
| | Mean | M | Min–max | Mean | M | Min–max | |
| Age groups | | | | | | | |
| 19–24 | 26.6 ± 12.1 | 23.0 | 4–55 | 3.0 ± 3.3 | 2.0 | 0–10 | 0.768£,* |
| 25–29 | 25.5 ± 10.9 | 24.0 | 3–54 | 1.5 ± 2.3 | 0.0 | 0–10 | < 0.001$,* |
| 30–34 | 25.8 ± 10.3 | 26.0 | 0–55 | 1.8 ± 2.3 | 1.0 | 0–10 | |
| 35–44 | 26.0 ± 9.7 | 26.0 | 3–52 | 1.3 ± 1.9 | 0.0 | 0–10 | |
| 45+ | 26.8 ± 10.6 | 27.0 | 0–55 | 2.2 ± 2.5 | 1.0 | 0–10 | |
| Education level | | | | | | | |
| Primary school | 28.1 ± 12.1 | 28.0 | 0–55 | 3.7 ± 3.3 | 3.0 | 0–10 | 0.303£,* |
| Secondary school | 29.1 ± 9.8 | 29.0 | 15–55 | 3.2 ± 2.9 | 2.5 | 0–10 | < 0.001$,* |
| High school | 27.6 ± 11.1 | 26.0 | 3–55 | 2.8 ± 3.1 | 1.0 | 0–10 | |
| College | 25.9 ± 10.3 | 26.0 | 0–55 | 1.6 ± 2.2 | 1.0 | 0–10 | |
| Marital status | | | | | | | |
| Married | 26.2 ± 10.1 | 26.0 | 0–55 | 1.7 ± 2.2 | 1.0 | 0–10 | 0.887£,* |
| Single | 26.3 ± 11.7 | 24.0 | 0–55 | 2.2 ± 3.0 | 1.0 | 0–10 | 0.282$,* |
| Separated-widow-divorced | 25.9 ± 9.2 | 27.0 | 6–42 | 0.9 ± 1.2 | 0.0 | 0–4 | |
| Income level | | | | | | | |
| Revenues = expenses | 25.7 ± 9.9 | 26.0 | 0–52 | 1.6 ± 2.2 | 1.0 | 0–10 | 0.246£,* |
| Revenues < expenses | 27.4 ± 11.4 | 26.0 | 3–55 | 2.1 ± 2.6 | 1.0 | 0–10 | 0.191$,* |
| Revenues > expenses | 26.1 ± 10.2 | 26.0 | 0–55 | 1.7 ± 2.4 | 1.0 | 0–10 | |
| Longest living place | | | | | | | |
| City | 26.3 ± 10.2 | 26.0 | 0–55 | 1.7 ± 2.2 | 1.0 | 0–10 | 0.433£,* |
| County | 25.3 ± 11.1 | 24.0 | 3–54 | 2.1 ± 2.7 | 1.0 | 0–10 | 0.185$,* |
| Village | 26.5 ± 10.4 | 27.0 | 1–55 | 2.0 ± 2.6 | 1.0 | 0–10 | |
| Working experience (year) | | | | | | | |
| 0–9 | 25.9 ± 10.5 | 26.0 | 0–55 | 1.9 ± 2.5 | 1.0 | 0–10 | 0.15£,& |
| 10–19 | 26.8 ± 10.1 | 27.0 | 1–55 | 1.7 ± 2.3 | .5 | 0–10 | 0.554$,* |
| 20–29 | 26.2 ± 10.0 | 27.0 | 4–52 | 1.7 ± 2.2 | 1.0 | 0–10 | |
| 30+ | 23.8 ± 11.8 | 23.0 | 3–53 | 1.7 ± 2.2 | 1.0 | 0–8 | |
| Being diagnosed of mental illness | | | | | | | |
| Yes | 21.8 ± 11.9 | 21.0 | 3–51 | 1.6 ± 2.5 | 0.0 | 0–10 | < 0.001£,* |
| No | 26.5 ± 10.2 | 26.0 | 0–55 | 1.8 ± 2.4 | 1.0 | 0–10 | 0.136$,* |
| Diagnosis of mental illness in relatives | | | | | | | |
| Yes | 25.0 ± 10.6 | 23.0 | 3–55 | 1.8 ± 2.4 | 1.0 | 0–10 | 0.065£,* |
| No | 26.4 ± 10.3 | 27.0 | 0–55 | 1.8 ± 2.4 | 1.0 | 0–10 | 0.893$,* |
| Getting support in diagnosis | | | | | | | |
| Yes | 26.1 ± 10.3 | 26.0 | 0–55 | 1.6 ± 2.3 | 0.0 | 0–10 | 0.334£,* |
| No | 26.6 ± 10.7 | 27.0 | 0–50 | 2.7 ± 2.7 | 2.0 | 0–10 | < 0.001$,* |
| Encountering a person with a mental problem | | | | | | | |
| Frequently | 26.6 ± 10.6 | 27.0 | 3–55 | 1.5 ± 2.3 | 0.0 | 0–10 | 0.167£,* |
| Rarely | 25.8 ± 10.2 | 26.0 | 0–55 | 1.8 ± 2.3 | 1.0 | 0–10 | 0.009$,* |
| No | 27.9 ± 10.9 | 26.0 | 0–55 | 2.7 ± 3.1 | 2.0 | 0–10 | |
| Having professional initiative | | | | | | | |
| Yes | 25.5 ± 10.2 | 25.0 | 2–55 | 1.4 ± 2.2 | 0.0 | 0–10 | < 0.001£,* |
| No | 26.9 ± 10.5 | 27.0 | 0–55 | 2.1 ± 2.5 | 1.0 | 0–10 | < 0.001$,* |

£Belongs to BTMIS desperation subscale score

$Belongs to BTMIS shame subscale score

*Kruskal–Wallis test

&One Way ANOVA

No statistically significant difference was found between occupational groups' mean scores on entire BTMIS and all subscales by marital status ($p > 0.05$, Tables 3, 4).

A statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and dangerousness subscale by income levels ($p < 0.05$, Table 4). However, no statistically significant difference was found between occupational groups' mean scores on subscales of desperation and shame by income levels ($p > 0.05$, Table 4). The BTMIS mean score of participants who had revenue equal to expenditure was significantly lower than the BTMIS mean score of participants who had revenue lower than expenditure ($p = 0.032$, Table 3). In addition, the dangerousness subscale mean score of participants who had revenue equal to expenditure was significantly lower than the dangerousness subscale mean score of participants who had revenue lower than expenditure and of those who had revenue higher than expenditure (respectively, $p = 0.031$ $p = 0.012$, Table 3).

No statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and subscales of desperation and shame by working experience ($p > 0.05$, Tables 3, 4). The dangerousness subscale mean score of participants with 10–19 years of working experience was significantly higher than the dangerousness subscale mean score of participants with 30 and more years of working experience ($p = 0.012$, Table 4).

A statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and all subscales by status of having own diagnosis of mental illness ($p < 0.05$, Tables 3, 4).

The mean scores of participants diagnosed of mental illness on the entire BTMIS and subscales of dangerousness and shame were significantly lower than the mean scores of participants who were not diagnosed of mental illness. A statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and dangerousness subscale by condition of having relative diagnosed of mental illness ($p < 0.05$, Tables 3, 4). The mean scores of participants with relatives diagnosed of mental illness on the entire BTMIS and dangerousness subscales were significantly lower than the mean scores of participants without relative diagnosed of mental illness.

A statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and subscales of dangerousness and desperation by whether to consider getting support from a psychiatrist/psychologist in case of having mental illness ($p < 0.05$, Tables 3, 4). The shame subscale mean score of participants who would consider getting support from a psychiatrist/psychologist in case of having mental illness was significantly higher than the shame subscale mean score of participants who would not consider getting support from a psychiatrist/psychologist in case of having mental illness.

No statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and subscales of dangerousness and desperation by situation of encountering mentally ill persons ($p > 0.05$, Tables 3, 4). The shame subscale mean score of participants who have often encountered mentally ill persons was significantly lower than the shame subscale mean score of participants who have not often encountered mentally ill persons ($p = 0.009$, Table 4).

A statistically significant difference was found between occupational groups' mean scores on both entire BTMIS and all subscales by situation of involving in professional intervention in persons with mental problems ($p < 0.05$ Table 3, 4). The mean scores of participants, who were involved in professional intervention in persons with mental problems, on both entire BTMIS and all subscales was significantly lower than the mean scores of participants who were not involved in professional intervention in persons with mental problems.

## Discussion

Knowing of the beliefs and attitudes of community-leading groups on mental illness is important both for the treatment and rehabilitation of mental diseases and the organization of activities to be conducted for making positive and correct changes in their attitudes.

A statistically significant difference was found between occupational groups by age groups, education level, marital status, income status, longest living place, working experience, any diagnosis of mental illness in relatives, situation of getting support in diagnosis, cases of encountering with a mentally ill person and having a professional initiative in such case. This result may be explained by the fact that each of the occupational groups included in the study sample may have different educational background, starting age of employment, income level and cultural characteristics.

The percentage of headmen who would consider getting support from a psychiatrist/psychologist in case of having a mental illness was significantly lower than the percentages of clergymen, health professionals and teachers who would consider getting support from a psychiatrist/psychologist in case of having a mental illness. Fear of being stigmatized and disapproved is one of the important obstacles for individuals with mental illness to receive medical assistance (Patrick et al. 2002; Sarikoc et al. 2015). Headmen represent and have close connection with the population who live in the neighborhood/village where they are elected. Headmen may not want to receive medical assistance and care for their own mental problems because of their close connection with

the population, their reputation to be influenced by community value judgment, possibility of losing leadership position, and concerns for lack of acceptance in the community due to mental illness label. Studies of headmen in Turkey report that 33.3% of the headman defined individuals with mental illness as unstable, inconsistent and aggressive people with different speech and movements (Cam et al. 2014). This supports the present study result suggesting that headmen constituted the occupational group experienced sense of shame at most. Because people with higher perception of people with mental illness as unbalanced and unstable have higher prejudice and shame towards them.

A statistically significant difference was found between the occupational groups by the cases of encountering individuals with mental problems. This result suggests that each occupational group more or less frequently encounter individuals with mental impairment in their working areas. The occupational groups most frequently encountered with mental impairment were healthcare professionals, police officers, teachers, clergymen and headmen, respectively. Police officers often encounter individuals with mental impairment during periods in which these individuals suffer from severe symptoms of mental illness and during the criminal proceedings of these patients. In addition, police officers often encounter individuals with mental impairment because they work long hours (7/24) and involve in official intervention regarding individuals with mental impairment such as substance use problems, homelessness and transfer them to hospital. A study of police officers report that 48% of the participants did not want to deal with psychiatric patients and 50% did not want to work in psychiatric hospitals (Kimhi et al. 1998). After being informed of the study subject and purpose, some police officers directly refused to participate in this study during data collection process. This can be regarded as a limitation in terms of statistical results when the police officers, who exhibit a positive attitude towards mental illness, are considered to participate in the study. Therefore, it is important to consider police officers as a sensitive group in all trainings and guidance activities on mental illnesses. Lamb et al. (2002) stated that police officers wanted to know about mental illnesses and have training on intervention in individuals with mental disorder. Pinholf et al. (2003) reported that interpersonal communication of police officers was positively affected after such training, and that police officers could be more confident in providing support for individuals with mental illness through short trainings.

The percentage of clergymen who were involved in professional intervention in persons with mental problems was significantly higher than the percentages of teachers who were involved in professional intervention in persons with mental problems. Defining individuals with mental illnesses as “strange”, “aggressive”, “dangerous” in the society may lead them to seek non-medical remedies (Tang et al. 2007; Sarikoc et al. 2015). Studies examining health seeking behaviors in patients report that individuals with mental disorder resort to clergymen for religious-magical treatment purposes (Gulec et al. 2011; Naik et al. 2012; Yalvac et al. 2015). Due to this kind of patient motivations and tendencies to seek religious-magical treatment, the role of clergymen is important in informing patients about and directing them to medical practices. Considering that they are role models especially in rural areas, positive attitudes of clergymen toward individuals with mental disorders may lead these patients to receive medical care and can make a significant contribution to the acceptance of them in society.

No statistically significant difference was found between BTMIS total scores of occupational groups. Although the BTMIS total scores of occupational groups were close to each other, the occupational groups that had most negative views on mental illnesses were headmen, police officers, teachers, healthcare professionals and clergymen, respectively. At the same time, headmen, who ranked at first for having negative attitudes towards individuals with mental illness, were found to have lower percentage of getting support in case of being diagnosed of a mental illness and higher shame subscale mean score than that of other occupational groups. Considering that they are the leader of the region they represent and they have significant influence on the people in the region, there is a need for studies to change negative beliefs and attitudes of headmen toward individuals with mental illness. A study report that the shame subscale mean score of headmen in Turkey decreased after they had received a training on stigmatization of mental illness (Cam et al. 2014). It was seen that police officers (Watson et al. 2004), clergymen (Igbinomwanhia et al. 2013), teachers (Aghukwa 2009), healthcare professionals (Björkman et al. 2008; Hori et al. 2011) exhibit negative attitudes to mental illness in many countries.

Although the healthcare professionals in the study reported to get knowledge about mental illnesses through vocational training, and to often contact with mentally ill patients during treatment process, they had BTMIS total score similar to other occupational groups. Studies emphasize that having contact with mentally ill persons and receiving training on mental illnesses positively affect fighting against stigmatization. The mean BTMIS total score of healthcare professionals in Turkey was found as $60.16 \pm 14.83$ for nurses (Cam and Arabaci Baysan 2014), $35.95 \pm 13.10$ for psychiatrists and $47.29 \pm 19.40$ for mental healthcare professionals other than psychiatrists (Ozer et al. 2017). The present study and other studies suggest that high BTMIS scores of healthcare professionals indicate that stigmatization is a complicated phenomenon which cannot be explained only by education/training and contact with patients.

Participants in the 19–24 age group had statistically significantly higher total score on the shame subscale. In other words, the young group is more ashamed of mental illness. Studies of high school and university students in Turkey and other countries report that adolescents exhibit negative attitudes toward mental illness (Javed et al. 2006; Oban and Kucuk 2011). Considering that most mental illnesses are diagnosed during adolescence/adulthood period, the percentage of applying to mental health services during this period may decrease due to sense of shame in this risky group (Rickwood et al. 2007). The lack of getting medical assistance due to stigmatization refers to chronicity of the disease and worse prognosis. Therefore, better access to mental health services may refer to better mental health among young people (Gulliver et al. 2010; Yamaguchi et al. 2011; Sakellari et al. 2011; Hugginsa et al. 2016; Dardas et al. 2017). It will be proper to conduct studies targeting adolescents in anti-stigma programs to encourage them to seek medical support. It should not be forgotten that psychiatric nurses and teachers who have very close relationship with students can take an active role in these studies, cooperating with each other.

Participants with college degree were found to have a significantly lower mean score on the shame subscale. Studies found different results regarding the relationship between education level and stigmatization. Ozbas et al. (2008) conducted a study of patient families, and found that patient relatives with higher educational level had higher level of stigmatization toward patients. Sagduyu et al. (2001) conducted a study of the public opinion toward mental illness, and found that individuals with high school or lower degree had more negative knowledge, attitudes and approaches about schizophrenia than those with college or university degree. Bag and Ekinci (2005) determined that healthcare personnel with a high level of education had more well-intentioned attitudes towards individuals with mental problems. In this study, college graduates were found to be less ashamed of mental illness.

Participants who were diagnosed of mental illness or had relatives diagnosed of mental illness had significantly lower mean scores on the subscales of dangerousness and shame than the participants who were not diagnosed of mental illness or did not have relatives diagnosed of mental illness, which is consistent with the literature (Unal et al. 2010; Oban and Kucuk 2011). One of the most important reasons for stigmatization is lack of knowledge about mental illnesses. Studies emphasized that having information about, training on and contacting with mentally ill individuals had significantly positive effect on development of positive attitudes toward mental illnesses (Oban and Kucuk 2012; Cam et al. 2014; Ke et al. 2015).

## Conclusion

Occupational groups were determined to have moderate beliefs about mental diseases according to their BTMIS scale total scores. The occupational groups that had most negative views on mental illnesses were headmen, police officers, teachers, healthcare professionals and clergymen, respectively. The occupational groups that most frequently encounter individuals with mental illness were healthcare professionals, police officers, teachers, clergymen, and headmen respectively. Headmen constituted the occupational group who would consider to receive the least support from psychiatrist/psychologist in case of being diagnosed of mental illness. In addition, the BTMIS shame subscale mean score of headmen were higher than the BTMIS shame subscale mean score of other occupational groups, and also the BTMIS shame subscale mean score of headmen in the 19–24 age group were higher than the BTMIS shame subscale mean score of headmen in the other age groups. The occupational group members who were diagnosed of mental illness or had relatives diagnosed of mental illness had significantly lower mean scores on the subscales of dangerousness and shame than the occupational group members who were not diagnosed of mental illness or did not have relatives diagnosed of mental illness.

Community-leading occupational groups should be actively involved in anti-stigmatization activities to change quickly and effectively community attitudes towards mental illnesses. Community mental health nurses can provide training on mental health and illnesses in cooperation with community-leading occupational groups. This study was carried out within the scope of a project conducted to prevent stigmatization against mental illnesses. In line with this study results, training activities were carried out in cooperation with the institutions to which the occupational groups were affiliated. Each occupational group member was watched and discussed video/documentary including information about mental illnesses, training on anti-stigma activities for mental illnesses, problems experienced by individuals with mental illness and stigmatization themes. Brochures and educational booklets were distributed at the end of the training. It may be suggested to make planning for and continue steadily to implement anti-stigma strategies and activities, taking into account that false beliefs and prejudices towards mental illnesses may take a long time to change in communities.

**Acknowledgements** The authors would like to thank all participated in the study.

**Author Contributions** Study design: KA, AF, CS. Data collection: KA, AF. Data analysis: CS. Manuscript writing: KA, AF, CS.

**Funding** This project is supported by Duzce University Research Fund Project Number: 2017.16.01.605.

## Compliance with Ethical Standards

**Conflict of interest** All authors declare that they have no conflict of interest.

## References


Aghukwa, N. C. (2009). Secondary school teachers' attitude to mental illness in Ogun State, Nigeria. *African Journal of Psychiatry, 12*(1), 59–63.

Arkan, B., Bademli, K., & Duman Cetinkaya, Z. (2011). Attitudes of health professionals towards mental disorders: Studies in Turkey during the last decade. *Current Approaches in Psychiatry, 3*(2), 214–231.

Bag, B., & Ekinci, M. (2005). Examining of attitudes towards mentally ill people in a sample health professionals working. *Electronic Journal of Social Sciences, 3*(11), 107–127.

Bilge, A., & Cam, O. (2008). Validity and reliability of beliefs towards Mental Illness Scale. *Anatolian Journal of Psychiatry, 9*(2), 91.

Björkman, T., Angelman, T., & Jönsson, M. (2008). Attitudes towards people with mental illness: A cross-sectional study among nursing staff in psychiatric and somatic care. *Scandinavian Journal of Caring Sciences, 22*(2), 170–177.

Cam, O., & Arabaci Baysan, L. (2014). The nurses beliefs toward mental ilnesses working in regional psychiatric hospital and affecting factors. *Turkiye Klinikleri Journal of Nursing Sciences, 6*(1), 13–25.

Cam, O., Bilge, A., Engin, E., Akmese Baykal, Z., Turgut Öztürk, E., & Cakir, N. (2014). Investigating the effectiveness of education of the fight against stigma on mental illness to headmen. *Journal of Psychiatric Nursing, 5*(3), 129–136.

Cam, O., & Cuhadar, D. (2011). Stigma process and internalized stigma among individuals with mental illness. *Journal of Psychiatric Nursing, 2*(3), 136–140.

Chan, J. Y., Mak, W. W., & Law, L. S. (2009). Combining education and video-based contact to reduce stigma of mental illness: "The same or not the same" anti-stigma program for secondary schools in Hong Kong. *Social Science and Medicine, 68*(8), 1521–1526.

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest, 15*(2), 37–70.

Corrigan, P. W., & Watson, A. C. (2002). Understanding the impact of stigma on people with mental illness". *World Psychiatry, 1,* 1.

Dardas, L. A., Silva, S. G., Smoski, J. M., Noonan, D., & Simmons, L. A. (2017). Personal and perceived depression stigma among Arab adolescents: Associations with depression severity and personal characteristics. *Archives of Psychiatric Nursing, 31*(5), 499–506.

Eker, F., Oner, O., & Sahin, S. (2010). Knowledge and attitudes of religious officials towards schizophrenia (example of Düzce, Turkey). *Journal of Psychiatric Nursing, 1*(2), 63–70.

Gokus, M., Bayrakçi, E., & Alpturker, H. (2013). Neighborhood management and evaluation of neighborhood mukhtars by citizens. *Suleyman Demirel University The Journal of Faculty of Economics and Administrative Sciences, 18*(2), 31–45.

Gulec, G., Yenilmez, C., & Ay, F. (2011). Patients' who admitted to psychiatry clinic in a anatolian city explanation models for their illness and help-seeking behavior. *Klinik Psikiyatri, 14,* 131–142.

Gulliver, A., Griffiths, K. M., & Christensen, H. (2010). Perceived barriers and facilitators to mental health help-seeking in young people: A systematic review. *BMC Psychiatry, 10,* 113.

Hirai, M., & Clum, G. A. (2000). Development, reliability, and validity of the beliefs toward mental illness scale. *Journal of Psychopathology and Behavioral Assessment*, *22*(3), 221–236.

Hori, H., Richards, M., Kawamoto, Y., & Kunugi, H. (2011). Attitudes toward schizophrenia in the general population, psychiatric staff, physicians, and psychiatrists: A web-based survey in Japan. *Psychiatric Research, 186*(2–3), 183–189.

Hugginsa, A., Weistb, M. D., McCallb, M., Kloosb, B., Millerb, E., & Georgeb, M. W. (2016). Qualitative analysis of key informant interviews about adolescent stigma surrounding use of school mental health services. *International Journal of Mental Health Promotion, 18*(1), 21–32.

Igbinomwanhia, N. G., James, B. O., & Omoaregba, J. O. (2013). The attitudes of clergy in Benin City, Nigeria towards persons with mental illness. *African Journal of Psychiatry, 16*(3), 196–200.

Javed, Z., Naeem, F., Kingdon, D., Irfan, M., Izhar, N., & Ayub, M. (2006). Attitude of the university students and teachers towards mentally ill, in Lahore, Pakistan. *Journal of Ayub Medical College Abbottabad, 18*(3), 55–58.

Ke, S., Lai, J., Sun, T., Yung, M. H. M., Wang, J. C. C., & Austin, J. (2015). Healthy young minds: The effects of a 1-hour classroom workshop on mental illness stigma in high school students. *Community Mental Health Journal, 51,* 329–337.

Kimhi, R., Barak, Y., Gutman, J., Melamed, Y., Zohar, M., & Barak, I. (1998). Police attitudes toward mental illness and psychiatric patients in Israel. *Journal of the American Academy of Psychiatry and the Law, 26*(4), 625–630.

Korkmaz, G., & Kucuk, L. (2016). Internalized stigma and perceived family support in acute psychiatric in patient units. *Archives of Psychiatric Nursing, 30,* 55–61.

Lamb, H. R., Weinberger, L. E., & DeCuir, W. J. (2002). The police and mental health. *Psychiatric Services, 53,* 1266–1271.

Leavey, G., Loewenthal, K., & King, M. (2007). Challenges to sanctuary: The clergy as a resource for mental health care in the community. *Social Science and Medicine, 65*(3), 548–559.

Livingston, J. D., Desmarais, S. L., Verdun-Jones, S., Parent, R., Michalak, E., & Brink, J. (2014). Perceptions and experiences of people with mental illness regarding their interactions with police. *International Journal of Law and Psychiatry, 37*(4), 334–340.

Naik, S. K., Pattanayak, S., Gupta, C. S., & Pattanayak, R. D. (2012). Help seeking behaviors among caregivers of schizophrenia and other psychotic patients: A hospital-based study in two geographically and culturally distinct Indian cities. *Indian Journal of Psychological Medicine, 34,* 338–345.

Oban, G., & Kucuk, L. (2011). Factors affecting stigmatization about mental disorders among adolescents. *Journal of Psychiatric Nursing, 2*(1), 31–39.

Oban, G., & Kucuk, L. (2012). Stigma starts early: The role of education among young people combating stigma about mental illnesses. *Journal of Psychiatric Nursing, 2*(3), 141–148.

Ozbas, D., Kucuk, L., & Buzlu, S. (2008). Attitudes of families towards mental disorders who have family members with mental disorders. *The Journal of Psychiatry and Neurological Sciences, 21*(1–4), 14–23.

Ozer, U., Varlik, C., Ceri, V., Ince, B., & Arslan, Delice M. (2017). Change starts with us: Stigmatizing attitudes towards mental illnesses and the use of stigmatizing language among mental health professionals. *The Journal of Psychiatry and Neurological Sciences, 30,* 224–232.

Patrick, W., Corrigan, A. M. Y., & Watson, C. (2002). Understanding the impact of stigma on people with mental illness. *World Psychiatry, 1,* 1.

Pinholf, V., Huxley, P., Thornicroft, G., Farmer, P., Toulmin, H., & Graham, T. (2003). Reducing psychiatric stigma and discrimination evaluating an educational intervention with the police force in England. *Social Psychiatry and Psychiatric Epidemiology, 38,* 337–344.

Rickwood, D. J., Deane, F. P., & Wilson, C. J. (2007). When and how do young people seek professional help for mental health problems? *Medical Journal of Australia, 187*(7), S35.

Rüsch, N., Angermeyer, C. M., & Corrigan, P. W. (2005). Mental illness stigma: Concepts, consequences, and initiatives to reduce stigma. *European Psychiatry, 20,* 529–539.

Sagduyu, A., Aker, T., Ozmen, E., Ogel, K., & Tamar, D. (2001). An epidemiologic investigation of the public's attitudes towards schizophrenia. *Turkish Journal of Psychiatry, 12*(2), 99–110.

Sakellari, E., Leino-Kilpi, H., & Kalokerinou-Anagnostopoulou, A. (2011). Educational interventions in secondary education aiming to affect pupils' attitudes towards mental illness: A review of the literature. *Journal of Psychiatric and Mental Health Nursing, 18,* 166–176.

Salve, H. R., Babu, S., Rai, S. K., Sagara, R., & Kant, S. (2014). Attitude about mental illness of health care providers and community leaders in rural Haryana, North India. *Indian Journal of Community Health, 26*(04), 374–378.

Sarikoc, G., Demiralp, M., Ozsahin, A., & Açikel, C. (2015). Help seeking in mental illness: A research on patients' relatives attitudes. *Balikesir Saglik Bilimleri Dergisi, 4*(1), 32–38.

Svensson, B., Brunt, D., Bejerholm, U., Eklund, M., Gyllensten, A. L., Leufstadius, C., et al. (2014). Health care students' attitudes towards people with schizophrenia—A survey of eight university training programs. *Open Journal of Psychiatry, 04*(04), 309–316.

Tang, Y. L., Sevigny, R., Mao, P. X., Jiang, F., & Cai, Z. (2007). Help-seeking behaviors of Chinese patients with schizophrenia admitted to a psychiatric hospital. *Administration and Policy in Mental Health and Mental Health Services Research, 34*(2), 101–107.

Tel, H., & Pinar Ertekin, Ş. (2012). Internalized stigma and self-esteem in outpatients with psychiatric illness. *Journal of Psychiatric Nursing, 3*(2), 61–66.

Thornicroft, G., Brohan, E., Kassam, A., & Lewis-Holmes, E. (2008). Reducing stigma and discrimination: Candidate interventions. *International Journal of Mental Health Systems, 2*(1), 3.

Unal, S., Hisar, F., Celik, B., & Ozguven, Z. (2010). Beliefs of university students on mental illness. *The Journal of Psychiatry and Neurological Sciencesi, 23,* 145–150.

Watson, A. C., Corrigan, P. W., & Ottari, V. (2004). Police officers' attitudes toward and decisions about persons with mental illness. *Psychiatric Services, 55,* 49–53.

Williams, M. T., Domanico, J., Marques, L., Leblanc, J. L., & Turkheimer, L. (2012). Barriers to treatment among African Americans with obsessive-compulsive disorder. *Journal of Anxiety Disorders, 26*(4), 555–563.

Winkler, P., Mladá, K., Janoušková, M., Weissová, A., Tušková, E., Csémy, L., et al. (2016). Attitudes towards the people with mental illness: Comparison between Czech medical doctors and general population. *Social Psychiatry and Psychiatric Epidemiology, 51*(9), 1265–1273.

Yalvac, D. H., Kotan, Z., & Unal, S. (2015). Help seeking behavior and related factors in schizophrenia patients: A comparative study of two populations from eastern and western Turkey. *The Journal of Psychiatry and Neurological Sciences, 28,* 154–161.

Yamaguchi, S., Mino, Y., & Uddin, S. (2011). Strategies and future attempts to reduce stigmatization and increase awareness of mental health problems among young people: A narrative review of educational interventions. *Psychiatry and Clinical Neurosciences, 65*(5), 405–415.

Yilmaz, E., & Okanli, A. (2015). The effect of internalized stigma on the adherence to treatment in patientswith schizophrenia. *Archives of Psychiatric Nursing, 29,* 297–301.

Yuksel, N., Yilmaz, M., & Temel Orekici, G. (2015). Opinions of faculty members regarding mental illnesses and patients. *Journal of Psychiatric Nursing, 6*(1), 26–32.