SUMMARY

Background: The stigma of mental illness has been reported as a serious barrier in the lives of people with mental illness. Besides blocking admission to mental health services, it was found associated with terminating appropriate treatment. As well as relatives, neighbours or friends, it is shown that patients face stigma from psychiatrists. The aim of this study is to evaluate stigmatizing attitudes of psychiatrists and to find out its relationship with burnout and psychological flexibility.

Subjects and methods: 256 psychiatrists all along Turkey were participated and age, gender, duration that spent as a clinician and psychotherapy training have been recorded. Acceptance and Action Questionnaire-II, Maslach Burnout Inventory and Mental Illness: Clinicians’ Attitudes (MICA) Scale were used to evaluate participants’ psychological flexibility, burnout level and stigmatizing attitudes respectively. Structural Equation Modelling (SEM) was used to assess direct and indirect influences on stigma.

Results: There were statistically significant differences between residents and senior psychiatrists in all three scales. Psychotherapy training was found significantly associated with lower levels of stigma. Stigma was found to be predicted by duration, age, and burnout levels. In SEM analyses psychological flexibility was found to predict stigma indirectly via burnout.

Conclusion: Increasing contact with the stigmatized and education are two widely used methods against stigma. In years their effects were found limited and temporary. Burnout in clinicians is an important parameter in many aspects as well as its relation with stigma. There are limited data to decrease burnout in psychiatrists. There are some evidence that shows Acceptance and Commitment Therapy is effective to decrease burnout and stigma in clinicians. In the means of additional ways when dealing with stigma, Acceptance and Commitment Therapy can be a powerful tool while it targets to increase psychological flexibility.

Key words: burnout - mental illness - stigma - psychiatrists - psychological flexibility

INTRODUCTION

The stigma of mental illness and discrimination have been reported extensively as serious barriers to the life chances of people with mental illness. In addition to blocking improvements in psychiatric treatment, it is reported as an obstacle to admission to mental health services (Byrne 2000, Sartorius 2004, Sirey et al. 2001, Schulze & Angermeyer 2003). Moreover, stigma has been found to have substantial public health implications such as: exacerbating stress and its health consequences, reinforcing differences in socio-economic status and associated health risks or terminating treatment for treatable health problems (Link & Phelan 2006, Weiss & Ramakrishna 2001).

Considering such public health implications, finding ways to reduce or eliminate stigma have been taken as a central target in various national and international health programs, such as by the 2005 WHO European Ministerial Conference on Mental Health in Helsinki (WHO 2005). One of the many anti-stigma initiatives which launched by the US National Alliance on Mental Illness (NAMI) have covered a “medicalizing” view on mental illness; such as major depression as ‘a biological, medical illness’ (NAMI 6), or schizophrenia as ‘like many other medical illnesses such as cancer or diabetes’ (NAMI 7).

Although these kinds of initiatives raise an expectation about that the more people will become knowledgeable about mental disorders, the more negative stereotypes about mentally ill people will diminish and social acceptance of people with mental illness will improve; it seems that it isn’t the case. According to Schomeurs et al’s meta-analysis about public attitudes, social acceptance of people that had defined as mentally ill have not increased since 1990; instead, recognition of people with schizophrenia as a co-worker or neighbour diminished and willing to be a friend or relative continued at low levels. It seems that even in the “brain era”, seeing mentally ill people from the biological
perspective could not transformed into better social acceptance (Schommeres et al. 2012).

Schultz and Angermeyer emphasized that exclusion and discrimination extents beyond the context of social relationships with friends, relatives, colleagues or employers to the interaction with mental health professionals (Schulze & Angermeyer 2003). According to Ucok, most studies focused on stigmatizing attitudes of psychiatrists across the world showed higher degrees of negative attitudes for psychiatrists compared to public (Ucok 2008). One of the latest studies about psychiatrists’ stigmatizing attitudes on schizophrenia have conducted in Brazil with 1414 psychiatrists and the study has revealed that psychiatrists were likely to have negative stereotypes about people with schizophrenia (Loch et al. 2011).

Masuda et al in 2009 investigated the effects of stigmatizing attitudes on stigmatizer. They found that stigmatizing attitudes were also related with negative outcomes for the stigmatizers and they further emphasized the role of stigmatizer’s personal psychological distress in the process of stigma (Masuda et al. 2009). Beyond that, there are numerous studies which evaluated job related stress in psychiatrists (eg. Fothergill et al. 2004) and more specific sources of stress have been identified; such as dealing with violent people, patient suicide (Chemtob et al. 1998), role conflict and ambiguity. Other detected non-specific stress factors are time management, inadequate working conditions, safety issues and low payments (Edwards et al. 2000). These aforementioned aspects were found to be associated with burnout in psychiatrists. Moreover, Guthrie et al reported that junior psychiatrists experience much higher levels of psychological distress and job related stress. The authors emphasized the high levels of burnout in junior psychiatrists compared to consultants. (Guthrie et al. 1999).

There are currently three widely used categories of interventions for stigma reduction: to confront stigmatizer with negative attitudes, providing appropriate education, and contact with stigmatized individuals along with education (Corrigan & Penn 1999). Although education and contact-based education programs have shown to be beneficial (e.g., Corrigan et al. 2001, 2002), their effects can be small and temporary (Corrigan 2004). Furthermore, question about ways of reducing stigma in psychiatrists who have sufficient knowledge about disorders and have more contact with patients remain unanswered.

In recent years, the psychological flexibility model has been applied to the issues related to stigma and prejudice. The psychological flexibility model is the core model of the Acceptance and Commitment Therapy (ACT, Hayes et al. 2006). ACT is an intervention strategy, which aims to increase psychological flexibility (Hayes et al. 2012) and it is derived from Relational Frame Theory (RFT), which is a pragmatic theory of human language and behaviour (Hayes et al. 2001). Although research on the application of the psychological flexibility model to stigma and prejudice is still in its early stages, there are several studies, which have investigated it’s applicability to various forms of stigma and prejudice (Masuda et al. 2012). In another study, Masuda et al. in 2009 conducted a research which barrows ACT model to evaluate stigma and stigma related processes. They found that psychological flexibility was negatively correlated with mental health stigma. They further emphasized that besides diminishing the distance between stigmatizer and stigmatized and focusing specific content of thoughts; psychological flexibility should be taken into account while fighting against stigma (Masuda 2009).

In this context, this study aims to research stigmatizing attitudes of psychiatrists towards people who have any kind of mental disorders, and focuses on relationships between stigma, burnout and psychological flexibility. One of the main aims of this study is to unveil further domains of interventions against stigma beside education and personal contact in a population consist of only clinicians.

SUBJECTS AND METHODS

Data from 256 psychiatrists all along Turkey were collected. Psychiatrists were grouped as senior psychiatrists and residents. Residents were included if at least one month had passed since they started residential training.

With a socio-demographic form age, marital status, gender and type of profession (resident/senior; child-adolescent/adult psychiatry) were recorded. Participants were also asked whether they had any psychiatric disorder, any psychiatric disorder in their family and any kind of psychotherapy training or not. At the same time, data about how long the participants have been working as a psychiatrist was recorded.

To assess psychological flexibility, stigma and burnout levels below questionnaires were used.

Acceptance and Action Questionnaire-II (AAQ-II)

This scale was first developed by Hayes et al. to evaluate experiential avoidance and psychological flexibility levels (Hayes et al. 2004). A second version of this scale was developed and better results were seen as internal validity, \( \alpha = 0.84 \) (Bond et al. 2011). Turkish version of AAQ-II has seven items with seven points Likert type. High points show higher levels of experiential avoidance and lower levels show higher levels of psychological flexibility and acceptance. Turkish validity and reliability study was made by Yavuz et al. (2016).

The Mental Illness: Clinicians’ Attitude Scale V.4 (MICA4)

This scale was developed to evaluate students’ and clinicians’ attitude towards mental illness and designed by Gabbidon et al. (2013). The Cronbach’s alpha was found as 0.72. The scale has 16 questions with a Likert
type with six points (strongly agree to strongly disagree) and higher points show higher levels of stigmatizing attitudes.

**Maslach Burnout Inventory (MBI)**

This scale, which developed by Maslach and Jackson, consists of 22 items and three subscales. It was designed to measure the three components of burnout: emotional exhaustion, depersonalization and personal accomplishment (Maslach & Jackson 1981). Ergin conducted the Turkish validity and reliability study of MBI (Ergin 1991). Turkish version of MBI is designed to evaluate intensity in five degrees as 1=never to 6=everyday. Each of the subscales is assessed separately and there is no cut-off point available. For the Emotional Exhaustion and Depersonalization subscales, higher scores show higher levels of burnout while for the Personal Accomplishment subscale, lower scores are related with higher burnout levels.

**Procedure**

This study conducted with face-to-face interviews (n=148, 59%) as well as Internet surveys (n=103, 41%) all along Turkey. Five participants who had missing data were excluded from statistical analysis. The study was completed with 251 psychiatrists.

Data collection was took place during year 2014 and provided with self-reports. To maintain privacy and confidentiality, each psychiatrist responded anonymously to the questionnaires. Before data were collected, permissions were obtained from the Ethical Committee of Bakirkoy Mental Health and Neurological Diseases Research and Training Hospital. Additionally, a written consent form was taken from each participant.

**Statistics**

After descriptive statistics, we used student t-test for assessing group differences. Pearson Correlation analyses conducted to assess continuous variables and simultaneous regression analyses were used for predictors of stigma. Above statistics were made with SPSS.20.

Afterwards we conducted a structural equation modelling using AMOS 23.0.0. Analysing of the sample for kurtosis/skewness statistics revealed that the sample showed approximately normal distribution. Maximum likelihood estimation approach was used. To assess goodness of fit the Comparative Fit Index (CFI) and Root Mean Square Error of Approximation (RMSEA) were used as noncentrality fit statistics and Bentler-Bonett Normed Fit Index (NFI) as a relative fit index. We took scores indicating good model fit (CFI 0.95, NFI 0.95 and RMSEA 0.06) as recommended by Hu and Bentler when interpreting fit statistics (Hu & Bentler 1999). Ultimate cut-off scores has not been used because of their accuracy may vary depending on a variety of factors (Marsh et al. 2004).

**RESULTS**

Out of 251 participants, 157 (62.5%) were female. There were 96 (38.2%) senior psychiatrists, 126 (50.2%) psychiatry residents, 13 (5.2%) senior child and adolescent psychiatrists and 16 (6.4%) child and adolescent psychiatry residents. The mean age of participants was 32.85 (24-65). The mean duration of which participants have spent in their profession was 77.76 months (1-456) (Table 1).

125 (50%) of participants had taken any kinds of psychotherapy training while 125 (50%) of participants were solely biologically oriented. Figure 1 shows participants' psychotherapy training status according to their profession type (Figure 1).

There were no statistically significant difference between male and female participants in the means of MBI (p=0.590), AAQ-II (p=0.143) and MICA (p=0.542). However there were statistically significant differences between residents and senior psychiatrists in all three scales (MBI; p<0.001, AAQ-II; p=0.001; and MICA p<0.001). Baseline correlations are shown in table 2.

**Figure 1. Psychotherapy training according to professions**
Table 1. Socio-demographic characteristics

<table>
<thead>
<tr>
<th>Gender</th>
<th>Profession</th>
<th>N (%)</th>
<th>Age</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Adult Psychiatrists</td>
<td>52 (20.7%)</td>
<td>38 (30-55)</td>
<td>134.52 (48-300)</td>
</tr>
<tr>
<td></td>
<td>Adult Psychiatry Residents</td>
<td>83 (33%)</td>
<td>27.73 (24-45)</td>
<td>25.22 (1-60)</td>
</tr>
<tr>
<td></td>
<td>Adolescent and Child Psychiatrists</td>
<td>10 (4%)</td>
<td>38.40 (26-51)</td>
<td>133.2 (48-300)</td>
</tr>
<tr>
<td></td>
<td>Adolescent and Child Psychiatry Residents</td>
<td>12 (4.8%)</td>
<td>26.15 (24-36)</td>
<td>14.38 (3-36)</td>
</tr>
<tr>
<td>Male</td>
<td>Adult Psychiatrists</td>
<td>44 (17.5%)</td>
<td>41.48 (29-65)</td>
<td>168.82 (48-456)</td>
</tr>
<tr>
<td></td>
<td>Adult Psychiatry Residents</td>
<td>43 (17.1%)</td>
<td>28.44 (24-42)</td>
<td>23.15 (1-60)</td>
</tr>
<tr>
<td></td>
<td>Adolescent and Child Psychiatrists</td>
<td>3 (1.2%)</td>
<td>38.67 (34-46)</td>
<td>144 (96-216)</td>
</tr>
<tr>
<td></td>
<td>Adolescent and Child Psychiatry Residents</td>
<td>4 (1.6%)</td>
<td>27 (25-30)</td>
<td>19.5 (12-24)</td>
</tr>
</tbody>
</table>

Table 2. Baseline correlations

<table>
<thead>
<tr>
<th></th>
<th>AAQ-II</th>
<th>MICA</th>
<th>MBI</th>
<th>Age</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAQ-II</td>
<td>1</td>
<td>p&lt;0.001; r=-0.282</td>
<td>p&lt;0.001; r=0.437</td>
<td>p&lt;0.001; r=-0.230</td>
<td>p&lt;0.001; r=-0.246</td>
</tr>
<tr>
<td>MICA</td>
<td>1</td>
<td>p&lt;0.001; r=0.509</td>
<td>p&lt;0.001; r=-0.331</td>
<td>p&lt;0.001; r=-0.343</td>
<td>p&lt;0.001; r=-0.343</td>
</tr>
<tr>
<td>MBI</td>
<td>1</td>
<td>p&lt;0.001; r=-0.324</td>
<td>p&lt;0.001; r=-0.324</td>
<td>p&lt;0.001; r=-0.324</td>
<td>p&lt;0.001; r=-0.324</td>
</tr>
</tbody>
</table>

AAQ-II - Acceptance and Action Questionnaire; MICA - The Mental Illness: Clinicians’ Attitude Scale; MBI - Maslach Burnout Inventory. Second lines show Pearson correlation coefficient.

Psychotherapy training was found significantly associated with lower levels of MICA (p<0.001). Whereas this was observed in resident group significantly (p=0.032), it wasn’t found significant in senior psychiatrists (p=0.594). In all participants, psychotherapy training was not found significantly associated with MBI (p=0.380) and AAQ-II (p=0.335).

Having a family member who has any kind of psychiatric disorder in their lifetime was found significantly associated with high levels of AAQ-II points in our study group (p=0.049). This association was not observed for MBI (p=0.369) or MICA (p=0.082). Having any kind of psychiatric disorder was found significantly related with AAQ-II (p=0.002), MBI (p=0.038) and MICA (p=0.004).
Simultaneous regression analysis was conducted to find estimates of MICA. Although age and duration were found significantly correlated with MICA, we did not include age in the model because of its high multicollinearity with duration. We preferred duration instead of age because of the robust data in favour of contact in the means of less stigmatizing attitudes (eg: Corrigan et al. 2001). Finally, in our model we found that MICA was predicted by MBI and duration ($\beta=0.428$, $P<0.001$; $\beta=-0.273$, $P<0.001$). AAQ-II was not found to be predicting stigma significantly ($\beta=0.041$, $P=0.497$). In a separate model, we calculated the estimates of MBI and found that burnout was predicted by AAQ-II ($\beta=0.304$, $P<0.001$).

After that, a structural equation modelling was conducted to find estimations for MICA (Figure 1). The model intends to evaluate a better understanding of direct and indirect effects of AAQ-II, duration and MBI on MICA. Because of the low model fit at the beginning, two subscales of MBI other than emotional exhaustion were removed from the model. After that, the model fit was as CFI=0.890; GFI=0.869; NFI=0.775; RMSEA=0.053.

According to the model, it was found that AAQ-II ($P=0.001$; $\beta=0.029$) and duration ($P=0.016$; $\beta=-0.001$) predicted emotional exhaustion and emotional exhaustion predicted MICA ($P<0.001$; $\beta=0.475$). Additionally, duration was found significantly predicted MICA directly ($P=0.001$; $\beta=-0.001$) whereas AAQ-II was not ($P=0.284$; $\beta=0.006$). Nonetheless, bootstrapping estimate revealed a significant indirect ($P=0.001$; $\beta=0.176$) and total effect ($P=0.002$; $\beta=0.250$) of AAQ-II on MICA. The model explained 36% of the variance in stigma.

**DISCUSSION**

We found in our study that psychiatry residents, compared to their senior counterparts, have more stigmatized attitudes. It can be said that being older and/or more experienced in proficiency could yield less stigmatizing attitudes in psychiatrists. Having more contact as clinicians naturally get through their practise can be an important factor as known from literature in this aspect. Also, training can play an important role in this result as junior psychiatrists are expected to have less training compared to seniors and in the means of fighting against stigma, early training to young psychiatrists could be helpful.

In the area of education, a special kind of training is worth to mention. We found that therapy training has a role to reduce stigmatizing attitudes and it was especially significant in residents. In literature there are some studies, which compared different education backgrounds and stigma (e.g. Dietz 1985, Ghaemi & McHugh 2008). According to these studies, more easily access to biological knowledge in young psychiatrists, contrary to expected, may contribute to stigmatizing attitudes (Read et al. 2006, Harland et al. 2009, Bennet et al. 2008). More recently, Loch et al emphasized that although having more knowledge about disorders, psychiatrists have similar or more stigmatizing attitudes than public (Loch et al. 2013). Consequently, early engagement of therapy training in young psychiatrists could be an important way to reduce stigma in this population.

In the studies that targeted public, although contact and education were both found to be effective, their effects were relatively small and temporary (Corrigan 2004). Moreover, education was found ineffective in some studies (Thornton & Wahl 1996). Therefore, it seems important to find additional ways to reduce stigma because, besides the need especially for clinicians who assumed to have already enough education and contact, these aforementioned interventions yield limited outcomes. In this aspect, Masuda et al. in 2007 emphasized that ACT could be a better intervention method to reduce stigma. Authors compared education, which targeted to change biased beliefs about mentally ill and brief ACT intervention aimed to increase psychological flexibility and found both methods effective. After one month, they found the effects had been continued and more importantly, they also found that in the group who were less psychologically flexible, education was ineffective. In this study ACT was found effective independently from the participants’ psychological flexibility levels (Masuda et al. 2007).

In SEM analyses, we found emotional burnout has the highest degree of prediction for stigma. Thus, while fighting against stigma, burnout should be taken into account and new strategies targeting to reduce stigma in clinicians should involve burnout. In this regard, we found in SEM analyses that, although relatively small direct affect, psychological flexibility has an important role on stigma indirectly via emotional burnout. Hayes et al. in 2004 conducted a study, and compared ACT training and Multi-cultural training (MCT), which is known as one of the most widely used intervention method for reducing stigma in substance abuse counselors. They grouped ninety addiction counsellors as one group with 6 hours one-day ACT training, one group with 6 hours MCT and a control group with biologically oriented training. They have found that the two training methods were effective for reducing stigma. More importantly, they also found that in the ACT group, participants had less burnout experience and these effects continued through three months (Hayes et al. 2004). With these conclusions we can claim that ACT training, with its ability to promote psychological flexibility could be a powerful tool, particularly for young psychiatrists, to reduce stigmatizing attitudes and burnout.

Hayes et al. (2006) explained psychological flexibility as “the ability to contact the present moment fully as a conscious human being, and to change or persist in behavior when doing so serves valued ends” (p. 7). Psychological flexibility is the activity of engaging with
private psychological events (e.g., thoughts, feelings) without trying to judge, evaluate, alter or change them (Hayes et al. 2011). ACT is a relatively new therapy, which aims not to change or eliminate disturbing emotions and thoughts, rather to establish new skills to accept these kind of unwanted private events non-judgmentally. From ACT point of view, stigma is generalized verbal processes that involve normal and adaptive human language and these processes include objectification and dehumanization of self or others as they participated in normal verbal activity of categorization, association and evaluation (Hayes et al. 2001). This normal verbal process of categorizing, associating and evaluating can happen in almost every context and although it is generally helpful (Macrae et al. 1994), it can be seen in the area of stigma and cause denial of people of any kind of group such as “Muslim”; “gay”; “sick” (Hayes et al. 2002). Thoughts and emotions attributed to stigma are found to be rigid; meaning that new ideas are met with resistance (Moxon et al. 1993) and paradoxically, efforts to suppress these kinds of thoughts could increase their frequency and intensity (Wenzlaff & Wegner 2000). Given the rigid nature of stigmatizing thoughts and beliefs, the achievability of directly changing stigmatizing thoughts have been questioned (Wilson et al. 2000) and this might be one of the reasons for the limited success of education for reducing stigma. At this point, instead of trying to change stigmatizing thoughts, cognitive defusion techniques might provide better outcomes. As one of the core processes in ACT model, defusion techniques are aimed to reduce the automatic literal affect of language upon behavior and encouraging people for making closer contact with language as they really are, rather than what they say they are (Hayes 2011).

Once established, burnout is a difficult problem to manage. As a frequently recommended and highly studied strategy for dealing with burnout in this area, the effectiveness of Stress Management Programs were found controversial. A systematic review found no evidence of effectiveness of Brief Stress Management Training interventions, but it found low quality evidence of Stress Management Training Of Moderate Intensity (six hours contact over a month), though it did not comprise specifically interventions for doctors. On the other hand, this latter strategy was found to be effective only for short term. This review also mentioned about strong levels of evidence of Intensive and Long-Term Stress Management Training programs (Van Wyk 2010). A recent systematic review also acknowledged that while it was important to focus stress management at an individual level, it is also crucial to fit physician and work environment for preventing burnout (Lee 2013). In Ruotsalainen et al’s review, authors grouped intervention strategies into two as related with individual and workplace. They emphasized that interventions that targeted either group has limited evidence of efficacy. They further stressed out that a mindfulness-based strategy was found to be effective with short-term and sustained improvements among doctors (Ruotsalainen 2014). In his review Kumar, 2016 speculate that an intense stress management program with booster sessions carried over a longer period could be effective in long term while mindfulness-based strategies might be promising (Kumar 2016).

Besides acceptance and defusion, ACT uses mindfulness practices to increase psychological flexibility (Hayes 2011). Thus, according to the above studies, we can claim that ACT might be helpful to decrease burnout among doctors.

There are several limitations in this study. First of all, all three instruments of measurement, which used in this study, are self-reports. Data were collected by face-to-face interviews and by Internet survey; this could generate a selection bias, as such the sample of psychiatrists selected would represent only the ones showed willingness to attend a study. Furthermore, this method could also stimulate socially desirable answers as this study also made by psychiatrists and this could distort the evaluation of stigmatizing attitudes. Moreover this study included only Turkish psychiatrists and this limits to generalize the results. Another limitation is we did not specify therapy trainings. Study group included participants who have therapy trainings in various kinds such as psychoanalytic, behavioral, cognitive-behavioral, existential and other. Moreover participants level of education and hour of supervision in a given therapy training could also be important. Unfortunately present data did not allow evaluating the relationship between various therapy training and stigma. Although this issue was beyond the scope of the present study, this relationship could be another topic for different studies.

**CONCLUSION**

Given the previous studies that above mentioned denying, ignoring, trying to control or change; efforts to reduce emotions and thoughts contributed to stigma and burnout have limited support of effectiveness. To sum up of the findings of this study, we can say that older age, being more experienced, taking therapy training, having less burnout and being more psychologically flexible are factors can be associated with less stigmatizing attitudes in psychiatrists. Instead of waiting young psychiatrists to being older and more experienced (or having more contact with stigmatized people), interventions that aim to increase psychological flexibility in psychiatrists may produce better outcomes for stigma and burnout and Acceptance and Commitment Therapy can be a powerful tool in this area.
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Conflict of interest: None to declare.

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