israel journal of psychiatry

The Influence of Information on Social and Occupational Outcome in Mental Illness on the Attitudes of Students in Turkey

Kemal Arikan, MD, Omer Uysal, Msci, Mustafa Senocak, MD, Ahmet Dirican, MD, Oznur Oran, MD, and Irem Erdem, MSci

Volume 37, No. 4, 2000

Isr J Psychiatry Relat Sci Vol 37 No. 4 (2000) 320-325

The Influence of Information on Social and Occupational Outcome in Mental Illness on the Attitudes of Students in Turkey

Kemal Arikan, MD,[1] Omer Uysal, Msci,[2] Mustafa Senocak, MD,[2] Ahmet Dirican, MD,[2] Oznur Oran, MD,[3] and Irem Erdem, MSci[4]

[1] *Department of Psychiatry and Consultation-Liaison Psychiatry, Cerrahpasa Medical Faculty, University of Istanbul, Turkey*
[2] *Department of Biostatistics, Cerrahpasa Medical Faculty, University of Istanbul, Turkey*
[3] *Department of Psychiatry, Cerrahpasa Medical Faculty, University of Istanbul, Turkey*
[4] *Department of Psychology, University of Istanbul, Turkey*

Abstract: Background: In this article, we have tried to evaluate the influence of a series of determinants of stigmatization of mental illness. Method: 700 final year students of a University in Istanbul were asked to read one of 14 different hypothetical case stories. The stories contained different combinations of characteristics assumed to play a role in stigmatization. Each vignette was presented to 50 students. The stories were collected after five minutes and the following scales were completed: Characteristics Scale and Skill Assessment Scale. Analysis was conducted on each scale. Results: We found a statistically significant difference among the groups given different hypothetical cases (vignettes). According to the post-hoc analysis, only the subjects given the vignette in which social and occupational outcome information were lacking showed statistically significant difference from the rest of the population. Conclusion: This study suggests that information on social and occupational outcome of mental illness influences the general perception of the mentally ill.

Introduction

Stigmatization can continue in the absence of aberrant behavior (1), so that "stigmas in mental disorders occupy a central place in both mental health theory and practice," as indicated by Witztum et al. (2). Several components of mental illness are thought to influence the public's perception of the mentally ill: effectiveness of psychiatric treatment (3), degree of contact with society (4), need for hospitalization (5) and diagnostic labeling (6). It is to be hoped that advances in biological psychiatry will have an effect on stigmatization. On the basis of one of our previous reports suggesting a de-stigmatizing effect of routine use of CEEG in psychiatry (7), we attempted to evaluate this effect. It has been claimed that witnessing the aberrant behaviors of mentally ill patients leads to more negative reactions towards the mentally ill (8).

It is also likely that there are cultural differences in attitudes towards mentally ill (9). Therefore, it seems that cultural differences need to be considered when researching the factors in stigmatization and formulating policy to overcome the problem.

In this study, we evaluated the impact of each of the above features on the evaluation

Address for correspondence: Dr. Kemal Arikan, Emirhan Cad. 127/14, Dikilitas, Besiktas, 80700 Istanbul, Turkey. E-mail: mkarikan@istanbul.edu.tr

of the stigmatization of mental illness in the cultural context of Turkey.

Methods

Of 14 vignettes distributed, six were of a range of medical diagnoses, seven were of schizophrenia, while one had no diagnosis. The following parameters were randomly included in the vignettes: *diagnosis*: given or not given; *treatment setting*: hospitalized or out-patient; *therapy result*: all positive; *social and occupational functioning after treatment*: information given or not given; *symptomatology*: given or not given; *use of EEG for diagnosis and monitorization*: given or not given; *continuation of psychotherapeutic intervention*: information given or not given. The subjects of the research were 700 final year students in the Management and Economy Department of the University of Marmara, Istanbul. Subjects were given one of 14 different vignettes describing a hypothetical individual, based on those used by Penn et al. (8). Each subject read only one vignette, and each vignette was randomly distributed to 50 students. Characteristics of the vignettes were as follows:

Vignette #	Diagnosis	Hospitalization	Therapy Response	SPAC	Symptom-atology	Psycho therapy	Use of EEG
1	Depression	+	+	+	Not Given	–	–
2	Schizophrenia	+	+	+	Not Given	–	–
3	Schizophrenia	+	+	+	Given	–	–
4	Schizophrenia	+	+	+	Not Given	+	–
5	Schizophrenia	+	+	+	Given	+	–
6	Schizophrenia	+	+	–	Given	–	–
7	Diabetes	+	+	+	Not Given	–	–
8	Avitaminosis	+	+	+	Not Given	–	–
9	Epilepsy	+	+	+	Not Given	–	–
10	Cancer	+	+	+	Not Given	–	–
11	Schizophrenia	–	+	+	Not Given	–	–
12	Not Given	–	+	+	Given	–	–
13	Schizophrenia	+	+	+	Not Given	+	+
14	Schizophrenia	+	+	+	Given	+	+

SPAC: social-accessibility, peer relationship, ability to function outside the family and capacity to form socio-sexual ties
EEG: Use of EEG for diagnosis and follow-up

Although all of the stories ended with a good therapeutic outcome, only one of them (Vignette 6) had no information about the social interactions of the patient. The stories were collected after five minutes and the following scales were completed: Characteristics Scale and Skill Assessment Scale.

The Characteristics Scale contains 20

items that assess impressions of the personality and behavioral attributes of the individual in the vignette on a 7-point semantic differential scale. The items consisted of 20 bipolar adjective pairs: Strong-Weak, Boring-Interesting, Insensitive-Sensitive, Sophisticated-Naïve, Bold-Shy, Sociable-Unsociable, Emotional-Rational, Cruel-Kind, Poised-Awkward, Unintelligent-Intelligent, Sad-Happy, Unsuccessful-Successful, Enthusiastic-Unenthusiastic, Insecure-Secure, Open-Defensive, Cold-Warm, Untrustworthy-Trustworthy, Effective-Ineffective. The scale was adapted from Oberlander (10). The Skill Assessment Scale has eight items describing various abilities that were not overtly stated in the vignette. Thus the subject had to go beyond the information given to make a judgment of the described individual's skill level. Each item was rated on a 7-point Likert scale from strongly agree to strongly disagree with neutral being the midpoint. The response levels of the items of each scales were adjusted in such a way that the more the level of response is, the more negative the evaluation. Only these scales were used because they were considered most relevant measures to the topic of the effect of stigmatization on the employability of the mentally ill people. The questions of the scale are as follows:

Skill Assessment Scale

Based on the description of Hasan Yilmaz, rate him on the following skills:

1. He is able to control his temper
2. He can hear and speak clearly
3. He can express positive emotions
4. He is able solve everyday problems
5. He can maintain a job
6. He has good social skills
7. He behaves predictably
8. He demonstrates initiative

Results

The internal consistency of the Characteristics Scales, and Skill Assessment Scale were 0,83, and 0,78 respectively in Crohnbach's Alpha.

To assess overlap between dependent measures, a Pearson correlational analysis was conducted. Both dependent measures were significantly correlated with one another, a finding likely to be associated with both shared variance and large sample size.

Correlation Coefficients	Skill Assessment Scale
Characteristics Scales	0,5715 (n=608) P=0,000

Since the number of respondents for each vignette was equally distributed, and the fitness to the normal distribution of each group was verified by Lilliefors test, parametric one way ANOVA is used to compare the means of total scores of each scales obtained from different vignette groups. Post hoc analyses were performed with Tukey's HSD and the level of significance was accepted as 0.05.

The number of respondents who completed the questionnaires on the basis of the vignettes given were as follows; Vignette 1: 42; Vignette 2: 42; Vignette 3: 45; Vignette 4: 45; Vignette 5: 48; Vignette 6: 50; Vignette 7: 50; Vignette 8: 47; Vignette 9: 49; Vignette 10: 46; Vignette 11: 48; Vignette 12: 44; Vignette 13: 49; Vignette 14: 46. Mean scores, and standard deviations of the scales obtained from each vignette are shown in Table1. Missing value analysis did not show any particular reason to explain why some students did not complete the scales.

When analysis was conducted on each scale, we found a statistically significant difference among the groups given different hypothetical cases (vignettes).

Table 1

	Characteristics (min-max: 20-140)	Skill Assessment (min-max: 8-56)
Vignette 1 (mean±SD) (n) (95% CI)	73.2±12.5 (40) (69.1 to 77.2)	28.3±7.6 (42) (25.9 to 30.7)
Vignette 2 (mean±SD) (n) (95% CI)	69.2±12.6 (39) (65.0 to 73.3)	27.2±9.0 (41) (24.3 to 30.0)
Vignette 3 (mean±SD) (n) (95% CI)	75.7±12.3 (45) (72.0 to 79.4)	28.5±9.3 (45) (25.7 to 31.3)
Vignette 4 (mean±SD) (n) (95% CI)	70.6±13.6 (45) (66.5 to 74.7)	28.2±7.8 (45) (25.8 to 30.5)
Vignette 5 (mean±SD) (n) (95% CI)	74.3±11.8 (48) (70.8 to 77.8)	27.3±8.3 (48) (24.9 to 29.8)
Vignette 6 (mean±SD) (n) (95% CI)	86.2±14.4 (46) (81.9 to 90.5)	34.4±7.7 (47) (32.2 to 36.7)
Vignette 7 (mean±SD) (n) (95% CI)	67.2±11.3 (44) (63.7 to 70.6)	24.5±8.5 (49) (22.1 to 27.0)
Vignette 8 (mean±SD) (n) (95% CI)	71.6±14.3 (43) (67.2 to 76.0)	25.1±7.8 (45) (32.7 to 27.5)
Vignette 9 (mean±SD) (n) (95% CI)	68.0±13.0 (44) (64.0 to 72.0)	26.1±8.0 (48) (23.8 to 28.5)
Vignette 10 (mean±SD) (n) (95% CI)	65.0±10.9 (43) (61.6 to 68.4)	22.9±7.9 (44) (20.5 to 25.3)
Vignette 11 (mean±SD) (n) (95% CI)	75.5±14.4 (41) (70.9 to 80.1)	26.9±7.5 (45) (24.7 to 29.2)
Vignette 12 (mean±SD) (n) (95% CI)	72.8±13.8 (41) (68.4 to 77.1)	25.6±6.3 (43) (23.6 to 27.5)
Vignette 13 (mean±SD) (n) (95% CI)	70.6±14.5 (48) (66.3 to 74.8)	25.7±7.7 (49) (23.5 to 27.9)
Vignette 14 (mean±SD) (n) (95% CI)	71.1±15.5 (45) (66.5 to 75.8)	24.6±8.4 (44) (24.1 to 29.2)
1-Way ANOVA F, P	F=6.49 P=0.0000	F=5.02 P=0.0000

The results of the statistical analyses are shown in detail. Since the number of respondents of each vignettes was equally distributed, and the fitness to the normal distribution of each group was verified by Lilliefors test, parametric one way ANOVA is used to compare the means of total scores of each scales obtained from different vignette groups.

The results of one way ANOVA of which the details are given in Table 1 were as follows:

- Characteristics Scales ($P<0.0001$);
- Skill Assessment Scale ($P<0.0001$)

When the post-hoc analyses were conducted on each scale, we found that the evaluation of Vignette 6 was statistically significantly different from the other different hypothetical cases (vignettes) in each scale.

In summary, the results of this study are:

1. Lack of information about the patient's ability to play his or her social role and remain in contact with society is associated with a less favorable view of patient characteristics. Information about diagnosis, successful treatment, treatment setting (hospitalization or not), symptomatology, being under professional control and maintenance of psychotherapeutic intervention and the existence of biological markers did not have a similar effect on the evaluation.
2. The subjects' awareness of the patients' functional capacity is more influential than any other information in this study.

Conclusion

In this study, we found that in our sample of students in Turkey, in comparison to the other determinants, the effect of lack of awareness of the social-role-taking ability of a patient with mental disorder has a crucial role in stigmatization.

As shown in an earlier study, effectiveness of treatment is not enough to reduce stigmatization (3). Similarly, keeping the patients in constant contact with society seems not to influence stigmatization (4). It could be proposed that an important component of mental health work should be to encourage patients to remain in contact with society at working places as a strategy to influence social stigma.

It could be claimed that the negative evaluation of functioning associated with mental illness is correct, as schizophrenia is often followed by post-psychotic decline in social and occupational functioning. Nevertheless, many return to high levels of functioning and the poor expectations of other people may have a negative impact on the recovering patient (11).

Although the findings of this study do not tell us that the other aspects of mental illness have no impact, they suggest that social and occupational visibility may reduce stigmatization. Contact with a mentally ill person in itself did not reduce stigmatization in a study in Turkey (4), nor is an awareness of treatment efficacy enough to de-stigmatize the mentally ill (3). Therefore, it seems it is imperative that people need to be aware that mental illnesses can be treated to the level that patients can participate in social networks and can return to their socially expected responsibilities.

However, our student population may not be representative of the general population, and the results may be biased by a social desirability response set. Further, people's stated attitudes may not be correlated with actual behavior. Therefore any conclusion drawn about the population as a whole should be tentative. One must also be cautious when reading the data that considering the patients less functional does not necessarily mean that they are functional. Additionally, one might consider that, in terms of the methodology of this study, scoring may reflect a "don't know" on the basis of no information. Since the questions in the scales required that the subjects go beyond the information given to make a judgment of the vignette individual's skill level and characteristics, their ratings will reflect their perception of what is considered successful treatment. Therefore, the ratings will not be based on absence of knowledge even if there is no information about the

specific features of social and occupational functioning in the patients' successful outcome.

In summary, our study suggests that society ascribes less stigma to people with mental disorders if their ability to participate in daily social and economic life is apparent.

Acknowledgement

This study has been supported by the Research Fund of University of Istanbul, project 683/201099.

References

1. Piner KE, Kahle LR. Adapting to the stigmatizing label of mental illness: Foregone but not forgotten. J Pers Soc Psychol 1984;47: 805-811.
2. Witztum E, Margolin J, Bar-On R, Levy A. Labeling and stigma in psychiatric misdiagnosis. Isr J Psychiatry Relat Sci 1992;29:2, 77-88.
3. Arikan K, Uysal O, Cetin G. Public awareness of the effectiveness of psychiatric treatment may reduce stigma. Isr J Psychiatry Relat Sci 1999;36:95-99.
4. Arikan K, Uysal O. Emotional reactions to the mentally ill are positively influenced by personal acquaintance. Isr J Psychiatry Relat Sci 1999;36:100-104.
5. Pang J Jr. Partial hospitalization. Psychiatr Clin North Am 1985;8:3, 587-595.
6. Lieberman PB, Baker FM. The reliability of psychiatric diagnosis in the emergency room. Hosp Community Psychiatry 1985; 36:3, 291-293.
7. Arikan MK, Senocak M, Cetin G, Uysal O. Destigmatizing effect of the use of CEEG/DBM methodology in daily practice. Annual Meeting of American Psychiatric Electrophysiology Assoc., Toronto, 1998, Clinical EEG.
8. Penn DL, Guynan K, Daily T, et al. Dispelling the stigma of schizophrenia: What sort of information is best? Schizophrenia Bull 1994;20:567-577.
9. Angel R, Thoits P. The impact of culture on the cognitive structure of illness. Cult Med Psychiatry 1987;11:4, 465-494.
10. Oberlander LB. The impact of stereotypes on clinical decision making patterns among mental health professionals An empirical demonstration. Unpublished doctoral dissertation, University of Nebraska, Lincoln, 1990.
11. Greenberg JS, Greenley JR, Benedict P. Contributions of persons with serious mental illness to their families. Hosp Community Psychiatry 1994;45:5, 475-480.