ORIGINAL PAPER

Erol Ozmen · Kultegin Ogel · Tamer Aker · Afsın Sagduyu · Defne Tamar · Cumhur Boratav

Public attitudes to depression in urban Turkey

The influence of perceptions and causal attributions on social distance towards individuals suffering from depression

Accepted: 22 June 2004

■ **Abstract** Background The aim of this study was to determine public attitudes towards patients with depression and the influence of perception and causal attributions on social distance towards individuals suffering from depression in urban areas. Methods This study was carried out with a representative sample in Istanbul which is the biggest metropolis in Turkey. Seven hundred and seven subjects completed the public survey form which consisted of ten items screening the demographic features and health status of the participants, and 32 items rating attitudes towards depression. Results The respondents' attitudes towards depression were very negative and nearly half of the subjects perceived people with depression as dangerous. More than half of

the subjects stated that they would not marry a person with depression, and nearly half of the subjects stated that they would not rent their house to a person with depression. One-quarter of the subjects stated that depressive patients should not be free in the community. The subjects who considered depression as a disease and who believed that weakness of personality and social problems cause depression had negative attitudes towards depression. *Conclusions* In Istanbul, people recognise depression well, but their attitudes towards it are fairly negative. The urban public has unfavourable attitudes towards depression and a tendency to isolate patients from the society. Notwithstanding the high prevalence, there is still considerable stigmatisation associated with depression.

■ **Key words** depression – public attitude – stigmatisation

E. Ozmen, MD Celal Bayar University Medical School Dept. of Psychiatry Manisa, Turkey

E. Ozmen, MD (☒) 200 sokak, No:76, D:3 Hatay – Izmir – Turkey Tel.: +90-236/2376404 E-Mail: erolozmen@yahoo.com

K. Ogel, MD

Bakirköy State Hospital for Psychiatric and Neurological Diseases Istanbul, Turkey

T. Aker, MD Kocaeli University Medical School Dept. of Psychiatry Izmit, Turkey

A. Sagduyu, MD Baskent University Medical School Dept. of Psychiatry Ankara, Turkey

D. Tamar, MD Bakirköy State Hospital for Psychiatric and Neurological Diseases Istanbul, Turkey

C. Boratav, MD Kirikkale University Medical School Dept. of Psychiatry Kirikkale, Turkey

Introduction

Public attitudes towards mental illness and mentally ill people have been the subject of scientific investigation for decades. It is widely reported that public attitudes towards mental illness are more rejecting than accepting (Nieradzig and Cochrane 1985).

There is considerable evidence that variables such as age, sex, education, socio-economic level, direct experience with a psychiatric patient, psychopathology type and labelling are likely to have some influence on attitudes towards mental illness. It is a common opinion that the older, less well educated subjects from low socio-economic levels are much less tolerant to mentally ill patients (Rabkin 1981). It has also been determined that social rejection increases with increasing severity of disturbance in behaviour and that the label 'mentally ill' activates negative attitudes (Nieradzik and Cochrane 1985).

Evidence shows that public attitudes towards mental illness and the mentally ill are far from being uniform

and there is no consensus on the factors that determine public attitudes. Besides, there is a need to differentiate the various components and characteristics of stigma on specific mental disorders and to find out the crosscultural perspectives of stigma.

Although attitudes towards depression are better than those towards schizophrenia, there are negative attitudes towards depression that interfere with its presentation, recognition and treatment (Eker and Arkar 1991; Raguram et al. 1996; Paykel et al. 1997; Angermeyer and Matschinger 1997; Jorm et al. 1999; Searle 1999; Link et al. 1999; Crisp et al. 2000; Wolpert 2001). It has been found that stigma was widespread among depressed primary care patients and that it was more common for depression than for medical conditions, but less than for HIV (Roeloffs et al. 2003). In Great Britain, the figure of approximately 10% expressing the negative perception that depressed people are often mad or unstable did not change during the Defeat Depression Campaign (Paykel et al. 1998). The most unfavourable attitudes towards depression are towards its treatment and the use of antidepressants (Paykel et al. 1997; Jorm et al. 1997a). People believe that antidepressants are addictive and harmful (Priest et al. 1996; Paykel et al. 1997; Jorm et al. 1997a). On the other hand, beliefs about the efficacy of antidepressants promote their use (Jorm et al. 2000). Depression was believed to be due to life events (Priest et al. 1996; Jorm et al. 1997b; Ozmen et al. 2003a), but the type of cause did not make a significant difference to the attitudes expressed towards anxiety neurosis/depression (Arkar and Eker 1996). Negative attitudes affect depressed patients and perceived stigma is common in depressed patients (Roeloffs et al. 2003). Patients' perceptions of stigma at the onset of treatment influence their subsequent treatment behaviour (Sirey et al. 2001).

Mentally ill people are met with a great deal of rejection by the public, although the German and US public has shown a lower desire to socially distance patients with major depressive disorders than to distance patients with alcohol dependence or schizophrenia (Angermeyer and Matschinger 1997; Link et al. 1999). Nevertheless, even today, the social acceptance of individuals suffering from depression is not sufficient.

Studies assessing public attitudes towards depression in Turkey are few. In this context, a project titled "Searching Public Attitudes Towards Mental Diseases" is being conducted by the Center for Psychiatric Research and Education. Some findings of this project have been previously reported, in which the influence of socio-demographic features and the personal experience of mental disorder on social distance towards individuals suffering from depression was assessed. The project has found that marital status, occupation, socio-economical level and personal experiences with mental disorders of the subjects had no influence on the social distance towards individuals suffering from depression. On the other hand, age, gender, and the education level of the subjects had some influence on the social distance towards individuals suffering from depression. Older and less well educated respondents thought that individuals suffering from depression were aggressive and should not be free in the community, and male respondents thought that individuals suffering from depression were aggressive. These results suggest that socio-demographic characteristics have a minimal impact on attitudes towards depression (Ozmen et al. 2003b). In this study, by referring to the findings of the above-mentioned project, we will report the attitudes of the urban public towards depression and the influence of perception and causal attributions on the social distance towards individuals suffering from depression.

Subjects and methods

Subjects

This study was carried out with a representative sample in Istanbul, the most highly populated metropolis in Turkey. The inclusion criteria were being over 15 years old and having physical and mental competence to answer the questions. The sample was constituted in three stages using a random-route procedure. Sample points were determined in the first stage and households in the second stage. In the third stage, all the individual households which met the inclusion criteria were selected. We determined 719 subjects, 12 (1.7%) of whom refused to participate in the study. Thus, 707 subjects finally constituted the sample of this study.

Materials

A questionnaire designed by the Center for Psychiatric Research and Education for rating attitudes towards depression was used. Face-toface interviews were made with each participant to fill in the questionnaire. The questionnaire consisted of ten items screening the demographic features and the health status of the participants, and 32 items rating attitudes towards depression. The second section of the form consisted of two major parts. In the first part, the subjects were asked to reply to six questions related to a case vignette describing a person who met DSM-IV diagnostic criteria for major depressive disorder with the symptoms depressive mood, markedly diminished interest, decrease in appetite, weight loss, insomnia and fatigue (American Psychiatric Association 1994). The respondents were asked to reply to the 26 questions in the second part, following an explanation that the case vignette was a sample of depression. These 26 questions were mainly focused on the subjects' knowledge of depression in terms of definition, aetiology and treatment, and on their attitudes in terms of social distance. Four of the questions in the first part and 24 of the questions in the second part were Likert-type rated as "I agree", "I tend to agree", "I tend to disagree", "I disagree", and "I have no idea".

Statistics

In addition to the descriptive analyses, logistic regression analysis was performed to explain the effects of knowledge and attitudes towards depression with respect to social distance.

In the logistic regression analysis, the answers "I agree" and "I tend to agree" were evaluated together as "I agree", and the choices "I tend to disagree" and "I disagree" were considered together as "I disagree". The answer "I have no idea" was included in the descriptive analyses, but excluded from the regression analysis. The procedure of recoding was performed for the regression analysis. In this analysis, each item of the questionnaire concerning social distance was accepted as a dependent variable. For each item on social distance which was accepted as a dependent variable, the items about the aetiology of depression and about the recognition of depression were grouped

separately and accepted as independent variables. Finally, the analysis was performed by the "enter" method.

Results

Characteristics of the subjects

Table 1 displays the demographic characteristics of the subjects and their personal and familial medical history of mental disorder.

Closeness and social relations to patients with depression

Of the whole sample, 23% (n = 161) stated that patients with depression should not be free in the community, and 28% (n = 195) stated that they would feel uncomfortable having a neighbour with depression. Also, 40% (n = 284) said they did not want to work with such patients, and 43% (n = 304) stated they would not rent

Table 1 Demographic features of the sample

	n	%	
Age			
18–25	183	25.9	
26–35	256	36.2	
36–45	145	20.5	
46–55	76	10.7	
55 and over	47	6.7	
Gender			
Female	343	48.5	
Male	364	51.5	
Marital status			
Married	503	71.1	
Widow/separated/divorced	29	4.2	
Single	175	24.7	
Occupation			
Employed	373	52.8	
Housewife	233	32.9	
Unemployed	31	4.5	
Retired	35	4.9	
Student	35	4.9	
Education			
Primary school graduate	27	3.8	
Secondary school graduate	325	46.0	
High school graduate	108	15.3	
University graduate	247	34.9	
Socio-economical level			
High	67	9.5	
Medium	508	71.8	
Low	132	18.7	
Psychiatric treatment	.52		
Yes	47	6.6	
No	660	93.4	
Mental disorder in relatives	000)J. T	
Yes	77	10.9	
res No	77 630	10.9 89.1	
INU	030	89.1	

their house to a patient with depression. Moreover, 65% (n=457) indicated that they would not get married to such patients. In all, 43% (n=306) of the participants thought that persons with depression were aggressive (Table 2).

Perceptions of depression

A total of 79 % (n = 558) of the subjects defined the case vignette as a mental disease ("ruhsal hastalık"). Of the 707 subjects, 63.8 % (n = 451) stated that depression was a disease and 14.3 % (n = 101) stated that the persons with depression were mentally ill ("akıl hastası"). Also, 76.2 % (n = 539) of the subjects thought that depression was a condition of mental weakness (Table 3).

Beliefs about the causes of depression

In all, 87% (n=612) of all subjects indicated that the symptoms of the case vignette were due to social problems and 68.2% (n=482) to weakness of personality; 90% (n=636) stated that depression was due to social problems (Table 3).

The effects of perceptions of depression on social distance

"Depression is a disease" was among the items that influenced attitudes about social distance most. There is an association between the belief that depression is a disease and both higher perceptions of aggression and higher levels of social distance. The subjects who thought depression is a disease have a tendency not to rent their house to, not to get married to, and not to work with a person with depression. They also thought that persons with depression cannot make correct decisions about their own lives.

The items "the patients with depression are mentally ill" ("akıl hastası") and "depression is a condition of mental weakness" have an association with higher levels of social distance. Subjects who thought that persons with depression are mentally ill ("akıl hastası") were more likely to describe the patients as aggressive and to think that persons with depression should not be free in the community. The subjects who thought that depression is a condition of mental weakness have a tendency not to rent their house to and not to work with a person with depression.

The subjects who stated that the patient in the case vignette has a mental disease ("ruhsal hastalık") thought that persons with depression cannot make correct decisions about their own lives and should not be free in the community.

The subjects who thought that a depressive condition is a somatic disease showed no aversion to renting their houses or getting married to a person with depression,

Table 2 The items about social distance to the patients with depression

	l agree		I disag	I disagree		I have no idea	
	n	%	n	%	n	%	
Patients with depression shouldn't be free in the community	161	22.8	510	72.1	36	5.1	
I can work with a person with depression	380	53.7	284	40.2	43	6.1	
I can get married to a person with depression	197	27.9	457	64.6	53	7.5	
Having a neighbour with depression does not irritate me	481	68	195	27.6	31	4.4	
I would not rent my house to a person with depression	304	43	333	47.1	70	9.9	
Persons with depression are aggressive	306	43.3	317	44.8	84	11.9	
Persons with depression cannot make correct decisions about their own lives	545	77.1	128	18.1	34	4.8	

Table 3 Perceptions of depression and causal attributions of depression

	l agree		I disag	l disagree		I have no idea	
	n	%	n	%	n	%	
Perception of depression							
Mrs. Fatma has a somatic disease	202	28.6	428	60.5	77	10.9	
Mrs. Fatma has a mental disease ("ruhsal hastalık")	558	78.9	98	13.9	51	7.2	
Depression is a condition of extreme worry	624	88.3	53	7.5	30	4.2	
Depression is a condition of mental weakness	539	76.2	115	16.3	53	7.5	
Patients with depression are mentally ill ("akıl hastalığı")	101	14.3	568	80.3	38	5.4	
Depression is a disease	451	63.8	219	31	37	5.2	
Causal attributions of depression							
Mrs. Fatma's condition is due to the weakness of her personality	482	68.2	158	22.3	67	9.5	
Mrs. Fatma's condition is due to her social problems (unemployment, poverty, family problems, etc.)	612	86.5	60	8.5	35	5.0	
Depression is due to social problems (unemployment, poverty, family problems, etc.)	636	90	50	7	21	3.0	
Depression is a contagious condition	33	4.7	643	90.9	31	4.4	

but they also thought that patients with depression should not be free in the community (Table 4).

The effects of beliefs about the causes of depression on social distance

The items "depression is due to social problems" and "Mrs Fatma's condition is due to weakness of her personality" had an association with higher levels of social distance.

"Depression is due to social problems" was also one of the items which most strongly correlated with attitudes about social distance. The subjects who stated that depression is due to social problems showed a tendency not to get married to, not to be a neighbour of and not to work with a person with depression, and they also thought that persons with depression cannot make correct decisions about their own lives.

The subjects who stated that a depressive condition is due to weakness of personality showed a tendency not to work with a person with depression and thought that persons with depression cannot make correct decisions concerning their lives.

Discussion

This study disclosed that most of the subjects recognised the mental disease described in the vignette, but the subjects' attitudes towards depression were highly negative. The participants perceived depression as a condition of extreme worry and mental weakness. There was a strong tendency among the urban lay public to consider social problems as responsible for the development of depression. Perceptions and beliefs about the causes of depression had some effect on attitudes towards depression.

Table 4 Other items of the survey that affect the social distance

	Р	В	R	OR	95 % CI
Patients with depression shouldn't be free in the community					
Mrs. Fatma has a somatic disease	0.0110	0.5873	0.902	1.7990	1.1437-2.8298
Mrs. Fatma has a mental disease ("ruhsal hastalık")	0.0238	-0.6716	-0.0753	0.5109	0.2853-0.9146
Patients with depression are mentally ill	0.0001	1.1407	0.1588	3.1288	1.7834-5.4891
Depression is a contagious condition	0.0064	1.0722	0.0942	2.9217	1.3514-6.3167
I could work with a Person with depression					
Mrs. Fatma has a somatic disease	0.0072	0.5584	0.0857	1.7479	1.1634-2.6263
Depression is a condition of mental weakness	0.0078	-0.6630	-0.0845	0.5153	0.3162-0.8398
Depression is a disease	0.0117	-0.5048	-0.0783	0.6037	0.4078-0.8937
Mrs. Fatma's condition is due to the weakness of her personality	0.0167	-0.4935	-0.0694	0.6105	0.4075-0.9145
Depression is due to social problems	0.0251	-0.8866	-0.0624	0.4120	0.1897-0.8950
I could marry a person with depression					
Depression is a disease	0.0000	-0.9633	-0.1747	0.3816	0.2540-0.5734
Depression is due to social problems	0.0032	-1.1000	-0.0986	0.3329	0.1601-0.6919
Depression is a contagious condition	0.0102	-1.9353	-0.0817	0.1444	0.0330-0.6326
Having a neighbour with depression does not make me uneasy					
Depression is due to social problems	0.0353	-0.9973	-0.0590	0.3689	0.1457-0.9337
I would not rent my house to a person with depression					
Mrs. Fatma has a somatic disease	0.0003	-0.7526	-0.1255	0.4712	0.3121-0.7112
Depression is a condition of mental weakness	0.0341	0.5317	0.0602	1.7019	1.0408-2.7828
Depression is a disease	0.0010	0.6764	0.1131	1.9667	1.3140-2.9436
Persons with depression are aggressive					
Patients with depression are mentally ill ("akıl hastalığı")	0.0199	0.6946	0.0705	2.0028	1.1161-3.5940
Depression is a disease	0.0034	0.5844	0.0976	1.7940	1.2128-2.6538
Depression is a contagious condition	0.0019	1.4792	0.1005	4.3893	1.7227-11.1835
Persons with depression cannot make correct decisions about their own lives					
Mrs. Fatma has a mental disease ("ruhsal hastalık")	0.0059	0.8169	0.1042	2.2635	1.2657-4.0478
Depression is a disease	0.0001	0.8976	0.1554	2.4537	1.5439-3.8995
Mrs. Fatma's condition is due to the weakness of her personality	0.0085	0.6227	0.0934	1.8639	1.1725-2.9630
Depression is due to social problems	0.0044	1.0709	0.1038	2.9180	1.3954-6.1020

Recognition of the presence of a mental disease in the depression vignette was high (78.9%) in our population. Recognition of mental disorder in depression vignettes by the community is a common result of previous studies. In a survey of the public's ability to recognise mental disorder in Australia, 72 % of respondents stated that the depression vignette had to be placed in a category of mental health (Jorm et al. 1997a). Angermeyer and Matschinger (1999), who compared public attitudes in the eastern and western parts of Germany, reported that 60.5% of the participants in the west and 46.8% of the participants in the east attributed the behaviour described in the depression vignette to a specific psychiatric diagnosis ("depression", "depressive illness") or a psychiatric illness. In a study conducted in the United States, it was seen that 69% of the participants designated a vignette describing major depressive disorder as representing mental illness (Link et al. 1999). Although methodological differences may affect the results, these findings suggest that people in the community can recognise mental disorder in depressive patients, whatever their cultural characteristics are.

The most frequently reported causes for depression in this study were psychosocial stress and weakness of personality. According to the subjects' opinions, the disease was due to social problems both in the case vignette and in the depressive person. This result is in accordance with many studies on schizophrenia and depression (Priest et al. 1996; Jorm et al. 1997b; Paykel et al. 1998; Angermeyer and Matschinger 1999; Angermeyer et al. 1999; Link et al. 1999; Taskin et al. 2003). These findings point to the fact that people in the community have a tendency to relate mental disorders with social and psychological reasons, whatever their cultural characteristics are.

A significant finding in this study was that public attitudes towards depression were fairly negative and that the respondents have high levels of social distance towards persons suffering from depression. More than half of the subjects stated that they would not get married to a person with depression, nearly half of the subjects stated that they would not rent their house to and work with a person with depression, and one-quarter of the subjects stated that depressive patients should not be free in the community. In Germany, it has been seen that the percentages of respondents refusing to enter into relationships with depressed patients was 13.4% for a neighbour, 16.4% for a co-worker, and 34.4% for renting

out a room (Angermeyer and Matschinger 1997). These results show that the urban community in Turkey has a stronger tendency to reject patients with depression.

The subjects prefer to avoid these patients and the tendency to reject them worsens in a situation requiring personal intimacy, such as getting married to, working with, or being the neighbour of a person with depression. These findings are consistent with the data of previous research investigating attitudes towards schizophrenia and depression (Rabkin 1981; Bhugra 1989; Arkar 1991; Karanci and Kokdemir 1995; Jorm et al. 1997a; Angermeyer and Matschinger 1997; Taskin et al. 2003). The common opinion in these studies was that there was a greater tendency to acceptance in situations which were relatively public and impersonal.

Nearly half of the subjects stated that depressive patients were aggressive. This finding is inconsistent with the data of previous research investigating the perceived dangerousness of depressive patients. In a survey of a large representative sample of the population of Great Britain, 22.9% of the respondents rated a depressive condition as dangerous to others (Crisp et al. 2000). Angermeyer and Matschinger (2003) found that 14.2% of people in Germany perceived depressive patients as dangerous and 22% of them perceived such patients as aggressive. In the United States, 33% of people associate depressive conditions with beliefs about violence (Link et al. 1999). Perceived dangerousness is highest in Turkey, but the results may be influenced by features of the vignettes described in the different studies.

Urban people in Turkey may have a tendency to think of all psychiatric disorders in a broad concept such as "mental illness" and to see all psychiatric patients as "mentally ill". Recognition of the person depicted in the vignette as being "mentally ill" may affect people's desire for social distance and their perception of aggressiveness.

Data on the influence of perceptions and causal attributions on social distance towards individuals suffering from depression are lacking. The findings of this study indicate that participants who considered depression as a disease had negative attitudes towards depression. On the other hand, participants who perceived depression as a somatic illness had more positive attitudes towards depression, although they also had some negative attitudes. These results suggest that, in the case of depression, subjects associate the term "disease" with "mental disease". The positive attitudes of people who thought of a depressive condition as a somatic illness support this view.

The participants who believed that depression was a condition of mental weakness and indicated that weakness of personality and social problems caused depression had negative attitudes towards depression. These are somewhat unexpected findings, because there is a general tendency in the community to consider mental patients as victims of psychosocial problems. It was expected that this tendency would create positive attitudes. This result suggests that labelling and stigmatisa-

tion of people with mental disorders activates negative attitudes whatever the attributed cause of the disorder is. In previous studies, it was reported that, although most of the participants of various research projects had a tendency to relate mental disorder with social and psychological reasons, they also had negative attitudes towards psychiatric patients (Priest et al. 1996; Jorm et al. 1997b; Paykel et al. 1998; Angermeyer and Matschinger 1999; Angermeyer et al. 1999; Taskin et al. 2003). However, in another study conducted in Turkey, Arkar and Erker (1996) found that there was no significant difference in attitudes towards the anxiety neurosis/depression vignette according to the cause of the disease. The relationship between attitudes and the cause of depression has not yet been adequately investigated. These results emphasise that there is a need to explore the influence of beliefs about the causes of mental disorders on attitudes towards mental disorders.

Two terms, "ruhsal hastalık" and "akıl hastalığı", are used for psychiatric disorders in Turkey. Although both of these terms semantically mean mental illness, interestingly, while the subjects who defined depression as *"akıl hastalığı"* had negative attitudes, subjects who labelled the depression vignette as "ruhsal hastalık" had some positive attitudes. In Turkish, "ruhsal hastalık" is used for all kinds of psychiatric disorders, mostly the ones with less deviant behaviour, and "akil hastaliği" is used mostly for patients who have serious deviant behaviour, or as a synonym for insanity. While the label of "mentally ill" has been discussed widely in previous studies, two different labels given by the participants for the same vignette were compared in the present study. Consistent with the findings of Socall and Holtgraves (1992), this result suggests that the labels given by the participants affect their attitudes towards mental illness and that negative reactions to the mentally ill are not exclusively due to behaviour.

In conclusion, there is greater stigma associated with depression in Turkey than in parts of Europe and North America. Urban people recognise depression well, but they have higher levels of social distance towards persons suffering from depression. Depression is associated in the public's mind with social and psychological aetiologies, extreme worry, mental weakness, personality weakness and dangerousness. Understanding depression as a disease, understanding depression as a condition of mental weakness, and social and psychological attributions about its cause all negatively affect people's desire for social distance.

The results suggest that interventions aimed at reducing the stigma of depression should primarily focus on misconceptions about depression and on the stereotype of dangerousness in Turkey. In anti-stigma programmes, psychiatric disorders should not be examined as a single entity ("mental illness"), rather, knowledge about the differences between psychiatric disorders should be enhanced.

References

- American Psychiatric Association (1994) Diagnostic and Statistical Manual of Mental Disorders, ed 4. Am Psychiatr Assoc, Washington
- Angermeyer MC, Matschinger H (1997) Social distance towards the mentally ill: results of representative surveys in the Federal Republic of Germany. Psychol Med 27:131–141
- Angermeyer MC, Matschinger H, Riedel-Heller SG (1999) Whom to ask for help in case of a mental disorder? Preferences of the lay public. Soc Psychiatry Psychiatr Epidemiol 34:202–210
- Angermeyer MC, Matschinger H (1999) Lay beliefs about mental disorders: a comparison between the western and the eastern parts of Germany. Soc Psychiatry Psychiatr Epidemiol 34: 275–281
- Angermeyer MC, Matschinger H (2003) Public beliefs about schizophrenia and depression: similarities and differences. Soc Psychiatry Psychiatr Epidemiol 38:526–534
- Arkar H (1991) Social rejection of mentally ill. Dusunen Adam 4:6-9 (Turkish)
- 7. Arkar H, Eker D (1996) Attitudes toward mental illness: the effect of type of cause. Turk Psikiyatri Derg 7:191–197 (Turkish)
- 8. Bhugra D (1989) Attitudes towards mental illness: a review. Acta Psychiatr Scand 80:1–12
- Crisp AH, Gelder MG, Rix S, Meltzer HI, Rowlands OJ (2000) Stigmatisation of people with mental illnesses. Br J Psychiatry 177: 4-7
- Eker D, Arkar H (1991) Experienced Turkish nurses attitudes towards mental illness and predictor variables of their attitudes. Int J Soc Psychiatry 37:214–222
- 11. Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P (1997a) "Mental health literacy": a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Med J Aust 166:182–186
- Jorm AF, Korten AE, Jacomb PA, Christensen H, Rodgers B, Pollitt P (1997b) Public beliefs about causes and risk factors for depression and schizophrenia. Soc Psychiatry Psychiatr Epidemiol 32:143–148
- 13. Jorm AF, Korten AE, Jacomb PA, Christensen H, Henderson S (1999) Attitudes towards people with a mental disorder: a survey of the Australian public and health professionals. Aust N Z J Psychiatry 33:77–83
- Jorm AF, Medway J, Christensen H, Korten AE, Jacomb PA, Rodgers B (2000) Public beliefs about the helpfulness of interventions for depression: effects on actions taken when experiencing anxiety and depression symptoms. Aust N Z J Psychiatry 34:619–626

- Karanci AN, Kokdemir D (1995) Mentally ill: Description, burden and coping with problems. Crisis 3:237–240 (Turkish)
- Link BG, Phelan JC, Bresnahan M, Stueve A, Pescosolido BA (1999) Public conceptions of mental illness: labels, causes, dangerousness, and social distance. Am J Public Health 89: 1328–1333
- 17. Nieradzig K, Cochrane R (1985) Public attitudes towards mental illness the effects of behaviour, roles and psychiatric labels. Int J Soc Psychiatry 31:23–33
- Ozmen E, Ozmen D, Taskin EO, Demet MM (2003a) The attitude of the students of Health School toward depression. Anatol J Psychiatry 4:87–97 (Turkish)
- 19. Ozmen E, Ogel K, Boratav C, Sağduyu A, Aker T, Tamar D (2003b) The knowledge and attitudes of the public towards depression: an Istanbul population sample. Turk Psikiyatri Derg 14:89–100 (Turkish)
- Paykel ES, Tylee A, Wright A, Priest RG, Rix S, Hart D (1997) The Defeat Depression Campaign: psychiatry in the public arena. Am J Psychiatry 154:59–65
- Paykel ES, Hart DH, Priest RG (1998) Changes in public attitudes to depression during the Defeat Depression Campaign. Br J Psychiatry 173:519–522
- Priest GP, Vize C, Roberts A, Roberts M, Tylee A (1996) Lay people's attitudes to treatment of depression: results of opinion poll for Defeat Depression Campaign just before its launch. BMJ 313: 858–859
- Rabkın JG (1981) Public attitudes: New research directions. Hosp Community Psychiatry 32:157
- Raguram R, Weiss MG, Channabasavanna SM, Devins GM (1996) Stigma, depression, and somatization in South India. Am J Psychiatry 153:1043–1049
- Roeloffs C, Sherbourne C, Unützer J, Fink A, Tang L, Wells K (2003) Stigma and depression among primary care patients. Gen Hosp Psychiatry 25:311–315
- Searle GF (1999) Stigma and depression: a double whammy. Int J Clin Pract 53:473–475
- 27. Sirey JA, Bruce ML, Alexopoulos GS, Perlick DA, Raue P, Friedman SJ, Meyers BS (2001) Perceived stigma as a predictor of treatment discontinuation in young and older outpatients with depression. Am J Psychiatry 158:479–481
- Socall DW, Holtgraves T (1992) Attitudes toward the mentally ill: The effects of label and beliefs. The Social Quarterly 33:435–445
- Taskin EO, Sen FS, Aydemir O, Demet MM, Ozmen E, Icelli I (2003) Public attitudes to schizophrenia in rural Turkey. Soc Psychiatry Psychiatr Epidemiol 38:586–592
- Wolpert L (2001) Stigma of depression a personal view. Br Med Bull 57:221–224