

## Symptoms of Turkish Patients with Depression in Ankara and Berlin

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**Abstract** Numerous studies have investigated the potential impact of migration on psychiatric morbidity levels. Relatively little research has studied how the symptom profiles of patients with similar disorders and similar backgrounds are linked to the culture in which they live. Such research requires comparisons of immigrant patient samples with samples of patient who remain in their country of origin. In this study we compared symptoms in Turkish patients with depression living in Ankara, Turkey, and Berlin, Germany. To understand symptoms of patients with depression, not only the culture of origin but also the cultural context in which patients have been living needs to be considered as an important factor. The new culture can be associated with distinct, and not necessarily more serious, symptom profiles.

**Keywords** Depression · Immigrant mental health · Turkish mental health · Germany · Symptoms

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## Introduction: Migration and Mental Illness

Migration is increasing throughout the world. As a consequence, mental health services everywhere must face the challenge of providing appropriate and effective care for immigrant populations who differ culturally from the host country (e.g., Gaines 1999; Nathan 1994; Vega et al. 2001; Westermeyer 1989). In general, mental illness is seen as an increasing burden on the world's population, especially in low-income countries where economic and political issues are often prominent in their genesis (Desjarlais et al. 1995). Numerous studies have investigated morbidity levels in immigrant populations (e.g., LeTouze and Watters 2003; Watters 2003). Rates of mental disorders among immigrants are often higher than in the general population of the host country. Yet this is not consistently so, and does not apply to all immigrant populations.

While much literature focuses on rates of disorders, less research has studied distinct symptom profiles in immigrant populations. However, to understand the symptomatology of immigrant patients, clinicians should be in a position to consider what symptom patterns may be specific to the context in which the patients have been living (Akbiyik et al. 1999). This focus may lead to some novel ideas about affliction in immigrant contexts.

It is widely accepted that the cultural background of a patient needs to be considered to understand the symptomatology, yet the cultural context for immigrant populations is different from that of the culture of origin. Immigrants experience a complex combination of factors that stem from the culture of origin, the culture of the host country and the interplay of those two cultures in a process of adaptation. Research to identify the specific cultural factors affecting the symptomatology of immigrant groups should therefore compare symptoms of immigrants with those of similar patients in the country of origin. Ideally, such comparisons should use the same methods for the assessment of the two groups so that differences found are not confounded by methodological inconsistencies.

We attempt this effort by focusing on a major immigrant population in Europe, the Turkish people who moved to Germany, originally as so-called *gastarbeiter* or “guest workers.” The major movement began in the 1960s and has continued into the new millennium (Council of Europe 2003). Currently, more than 2.75 million Turkish people live in Germany. More than 200,000 live in Berlin alone, making it the fourth largest Turkish city. These Turkish immigrants did not necessarily aim at full assimilation in Germany, and many planned to return to Turkey sooner or later. Indeed, given the cultural ideology of identity in place in Germany, full assimilation would have been impossible (Kostoryano 2002; Yurdakul and Bodemann 2007). Given the exclusionary forces at work, Turkish people often settled in areas with high concentrations of immigrants with a similar background, for example, the Kreuzberg district in Berlin, and lived in quasi-Turkish communities replete with Turkish associations. This residential pattern kept somewhat intact many of the features of Turkish life and community as well as the use of the Turkish language. However, despite the fact that a large population of Turkish immigrants lives in Germany—and even though Turkish patients are a

widely investigated group—little research has been done on immigrants in Germany (Claassen et al. 2005).

In this brief article, we report our clinical findings on Turkish outpatients with depressive disorders. We used a baseline chronology for habitation, studying Turkish people who lived in Berlin and Ankara for a minimum of 10 years in each site. All individuals in this study were recruited and assessed in their native language and by the same Turkish-speaking interviewer to reduce the risk of variation. The assessment instruments employed included the Mini International Neuropsychiatric Interview (MINI), the Symptom Check List-90 Revised (SCL-90-R), and the Beck Depression Inventory (BDI). Scores of the two groups of patients were then compared. We found that patients in Ankara ( $n = 52$ ) and Berlin ( $n = 53$ ) showed significant differences in distinct symptom levels. It was interesting to note that patients in Berlin had more depressive symptoms while patients in Ankara had higher levels of obsessive-compulsive symptoms, anxiety, interpersonal sensitivity, hostility, phobic anxiety, and paranoid ideation as self-rated on the SCL-90-R.

The present study aimed to establish and compare symptoms in Turkish patients with major depression or dysthymic disorders who have been living in the capital cities of Turkey and Germany, i.e., in Ankara and Berlin, for at least 10 years. Turkish patients in Berlin immigrated as adults. The same native Turkish researcher interviewed all patients in both cities, to minimize biases due to language barriers and/or different interview and assessment styles. This was a cross-sectional exploratory study. Inclusion criteria for all patients were (a) being of Turkish origin, (b) being diagnosed with major depression or dysthymic disorder by a psychiatrist within the previous 2 weeks, and (c) residing in Ankara or Berlin as an adult for a minimum of 10 years (resulting in a minimum age of 28 years). Patients in Berlin had to have immigrated to Berlin at or after the age of 18 years, and patients in Ankara had to have no history of internal migration.

Patients in Ankara were recruited from the outpatient department of the psychiatric clinic at Ankara University. Patients in Berlin were recruited from two office-based practices of Turkish psychiatrists in central districts of Berlin. The patients were referred to the study by Turkish-speaking clinicians. The research interviewer, who was not involved in treatment in any of the settings, checked the inclusion criteria and administered a range of instruments. They included the MINI to establish the psychiatric diagnosis (Sheehan et al. 1997; Engeler 2004), the BDI for a self-rating of symptom levels of depression (Beck et al. 1974, 1988; Beck and Steer 1984; Hisli 1989) and the SCL-90-R for a self-rating of other psychological symptoms (Dag 1991; Derogatis 1977). All of the instruments have been validated previously in Turkish populations (Dag 1991; Engeler 2004; Hisli 1989).

Referrals were based on clinical diagnoses of major depression according to the International Classification of Diseases (ICD)-10. The research interviewer confirmed the diagnosis using the MINI. All interviews were conducted in Turkish. All patients gave written informed consent, and this study received approval from the Ethics Research Community at Humboldt University at Berlin.

## Statistical Analysis

The study aimed to recruit a minimum of 50 patients in each group. This would provide limited statistical power to detect small and medium-sized differences between the two groups. Yet it was seen as appropriate for this exploratory study, as we were interested in identifying substantial differences. We summarized all data using descriptive statistics. Groups were compared using Chi-square and *t*-tests. (We did not compute multivariate tests in this analysis because of the risk that results based on the small sample size might not be sufficiently robust.)

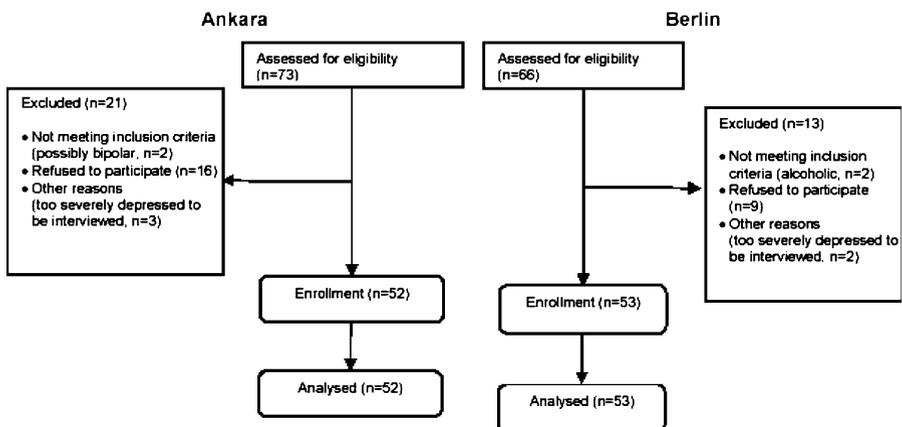
## The Sample

Seventy-three patients in Ankara and 66 patients in Berlin were regarded as eligible by the clinicians and referred to the study. Figure 1 shows the subsequent selection process, resulting in a final sample size of 52 patients in Ankara and 53 in Berlin.

Mean ages were  $49.4 \pm 8.4$  years in the Berlin group and  $44.7 \pm 9.2$  years in the Ankara group. Demographic information on the groups is reported in Table 1. The diagnoses were First Major Depressive Episode (Ankara, 29; Berlin, 18), Recurrent Major Depressive Episode (Ankara, 14; Berlin, 23) and Dysthymic Disorder (Ankara, 9; Berlin, 12). None of the patients presented with current psychotic symptoms. Patients in both groups showed different degrees of anxiety symptoms, but they did not meet the full criteria for a comorbid anxiety disorder.

Patients in Ankara had significantly lower BDI scores (mean  $\pm$  SD =  $22.6 \pm 9.7$  vs.  $29.6 \pm 6.6$ ;  $t = 4.233$ ,  $p < 0.001$ ) but a higher Global Severity Index based on the SCL-90-R (mean  $\pm$  SD =  $52.0 \pm 18.4$  vs.  $43.4 \pm 11.5$ ;  $z = -2.285$ ,  $p = 0.002$ ). Scores on the SCL-90-R subscales are reported in Table 2.

Scores on the BDI and the subscale depression of the SCL-90-R were significantly higher in Berlin. The Global Severity Index on the SCL-R-90 as well as subscale scores on obsessive compulsive symptoms, interpersonal sensitivity,



**Fig. 1** Recruitment and selection of patients in Ankara and Berlin

**Table 1** Demographic and social characteristics of patients living in Berlin and Ankara: mean  $\pm$  standard deviation or *n* (%)

	Berlin ( <i>n</i> = 53)	Ankara ( <i>n</i> = 52)	Total ( <i>n</i> = 105)	<i>p</i> -value
Sex				
Male	19 (35)	14 (26)	33 (31)	0.325 <sup>a</sup>
Female	34 (64)	38 (73)	72 (68)	
Marital status				
Married	43 (81)	41 (78)	84 (80)	0.612 <sup>b</sup>
Divorced	7 (13)	4 (7)	11 (10)	
Widowed	2 (3)	3 (5)	5 (4)	
With a partner	–	1 (1)	1 (1)	
Single	1 (1)	3 (5)	4 (3)	
Duration of marriage (years)	23.9 $\pm$ 10.5	20.4 $\pm$ 10.8	22.2 $\pm$ 10.7	0.046 <sup>c</sup>
Years in the city	26.8 $\pm$ 7.8	30.3 $\pm$ 10.7	28.5 $\pm$ 10.5	0.246 <sup>c</sup>
Total work years	20.0 $\pm$ 10.0	12.3 $\pm$ 12.5	16.2 $\pm$ 11.1	0.001 <sup>c</sup>
Household income (subjective)				
Very high	3 (5)	–	3 (2)	<0.001 <sup>b</sup>
High	6 (11)	1 (1)	7 (6)	
Moderate	14 (26)	43 (82)	57 (54)	
Low	29 (54)	7 (13)	36 (34)	
No income	1 (1)	1 (1)	2 (1)	
Number in household	2.8 $\pm$ 1.4	3.4 $\pm$ 1.2	ND	0.006 <sup>c</sup>

Note: ND not determined

<sup>a</sup> Chi-square test

<sup>b</sup> Fisher's exact test (Monte Carlo)

<sup>c</sup> Mann–Whitney *U*

**Table 2** SCL-90-R subscale scores of patients in Ankara and Berlin: mean  $\pm$  standard deviation

Symptom group	Ankara	Berlin	<i>t</i>	<i>p</i> -value <sup>a</sup>
Somatization	29.9 $\pm$ 9.9	30.5 $\pm$ 9.2	0.304	0.762
Obsessive-compulsive	24.1 $\pm$ 8.0	16.6 $\pm$ 5.4	–4.552	<0.001
Interpersonal sensitivity	21.3 $\pm$ 7.5	16.5 $\pm$ 4.2	–4.073	<0.001
Depression	35.8 $\pm$ 11.5	39.6 $\pm$ 7.5	1.994	0.048
Anxiety	23.0 $\pm$ 9.2	17.9 $\pm$ 5.3	–3.493	0.001
Hostility	13.0 $\pm$ 5.2	8.6 $\pm$ 2.8	–5.321	<0.001
Phobic anxiety	14.1 $\pm$ 5.3	8.9 $\pm$ 2.7	–4.787	<0.001
Paranoid ideation	14.5 $\pm$ 5.8	8.4 $\pm$ 2.6	–6.907	<0.001
Psychoticism	18.1 $\pm$ 7.4	16.7 $\pm$ 4.1	–1.148	0.251

<sup>a</sup> Student's *t*-test

anxiety, hostility, phobic anxiety and paranoid ideation were all significantly higher in patients in Ankara. Only the SCL-90-R subscales somatization and psychoticism did not show any significant difference between the two groups.

## Discussion

Our study yielded clear and statistically significant findings. Turkish patients with major depression living in Berlin have higher levels of depressive symptoms but lower scores on obsessive-compulsive symptoms, interpersonal sensitivity, anxiety, hostility, phobic anxiety and paranoid ideation. Thus, we did not find one of the two groups to have consistently higher levels of symptoms across all symptom scales, but distinct profiles, with each group having significantly higher scores for different types of symptoms. This is most interesting given the cultural system of identity in Germany. Our findings suggest that looking at symptom profiles comparatively may have important results for understanding immigrant experience that may go against conventional wisdom.

The study has several methodological strengths. All patients met the same inclusion criteria and had a diagnosis of major depression or dysthymia. All patients had been living in Ankara or Berlin, respectively, for a minimum of 10 years, so that none was subjected to recent experiences of migration within or across countries or to possibly related adjustment problems. All had at least 10 years' experience in a consistent cultural environment. In general, the Turkish immigrants in Berlin had originally not intended to stay in Berlin forever. Rather, they had plans, realistic or not, to return to Turkey at some point. Most of the Turkish patients in Berlin in this study did not have a very good command of German, and language was a serious barrier in all communications with German institutions, including health services. Because of this, all patients were interviewed by the same trained researcher in the native Turkish language so that there was neither interviewer bias due to different cultural backgrounds nor a language barrier. The initial diagnosis for including patients in the study had also been made by a native Turkish-speaking physician, to avoid possible misdiagnosis because of language problems.

The study also has some limitations, which should be considered in the interpretation of the findings. We assessed clinical samples, which do not allow conclusions on representative samples in the community. Since the health-care systems in Germany and Turkey differ, we could not use an identical recruitment processes and had to approach patients at services with slightly different functions. In this exploratory study we did not adjust the level of statistical significance to multiple testing. Yet the level of statistical significance for all the identified differences—other than the one on the SCL-90-R subscale depression—were so high that a Bonferroni adjustment would still have left differences as statistically significant. Most of the differences between the two groups are equivalent to a large effect size. Finally, because of the limited sample size we did not control for the influence of potential confounders.

The study was cross-sectional so that conclusions on causal relationships cannot be drawn. Different factors may have contributed to the different symptom profiles. They include the selection processes of people who decided to migrate to Germany, experiences in the host culture over more than 10 years, selective pathways into specialized psychiatric care and various interactions with health-care professionals at services in Germany. Whatever the exact explanation, the findings demonstrate that the cultural context in which patients have been living

is associated with specific symptom profiles and—surprisingly, given the host country in this instance—with reduced symptoms of anxiety, hostility, phobic anxiety and paranoid ideation. These results are not consistent with those of a longitudinal study by Haefner (1980), which found that “guest-workers” from Turkey arriving in Germany initially suffered from depression and increasingly developed psychosomatic symptoms over the next 2 years. Those results suggested a decreasing focus on depressive symptoms after migration to Germany, while we found higher levels of depression in Turkish patients in Berlin compared to Ankara. Also, Haefner identified a tendency toward somatization, while in our study somatization was one of only two subscales with no statistically significant differences between the two groups. However, the studies are difficult to compare. They were done at different times and in different settings, and Haefner studied younger people and psychosocial processes within the first 2 years after migration, while we investigated patients more than 10 years after they had immigrated.

One might speculate as to whether the health-care system in Germany is more responsive to the presentation of depressive symptoms, so that either patients with more depressive symptoms are more likely to receive treatment and stay in services or patients tend to focus on the presentation of depressive symptoms over time. In a similar vein, general aspects of the culture or specific responsiveness of health professionals might facilitate or reinforce the presentation of a wider range of symptoms including anxiety, but not specifically depression, in Ankara.

It is noteworthy that symptoms of hostility and paranoid ideation were higher in Ankara than in the patients in Berlin, although the latter were living in a foreign country where they commonly did not comprehend the language and did not enjoy the full entitlements of German nationals. However, these differences were identified only in clinical samples. There are no data suggesting that similar differences are to be found in representative community samples. Future research may explore whether the symptom profiles of immigrant groups become more similar to those of indigenous patients in the host country or remain qualitatively different from those of both Turkish patients in Turkey and German patients in Germany. In addition to assessing immigrant patients in the country of origin and the host country, such research will require studying indigenous patients in the host country. A major challenge for such studies is the methodological consistency of assessments across groups, that is, how to guarantee consistency when different languages have to be used.

What the findings of this study clearly show is that specific symptom profiles found in immigrant populations cannot necessarily be attributed to common symptom patterns in the culture of origin. Additionally, expected symptoms may not appear in an immigrant group, suggesting psychocultural adaptation or protective psychocultural processes. The current cultural context needs to be considered to understand patients presenting symptomatology in context, that is, in the host country. This is a challenge to clinicians and also to researchers, as in the future both will have to deal increasingly with immigrant populations with mental health disorders (Priebe et al. 2004).

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