

# Psychosomatic rehabilitation in migrant women from Turkey in Germany: Cultural stressors and gender-specific challenges

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## Abstract

**Background:** Migrant women represent a particularly vulnerable group in psychosomatic rehabilitation, often reporting higher psychological distress and poorer treatment outcomes compared with male or non-migrant patients. Women of Turkish and Kurdish origin in Germany face persistent sociocultural and socioeconomic stressors that shape their mental health burden and rehabilitation experiences even after decades of residence.

**Objective:** This study examined sociodemographic, cultural, and clinical predictors of psychosomatic rehabilitation outcomes among long-term migrant patients of Turkish and Kurdish origin in Germany, focusing on depression, embitterment, and overall symptom severity.

**Methods:** A total of 80 inpatients (40 women, 40 men) of Turkish or Kurdish origin, all of whom had lived in Germany for at least 20 years, participated in this cross-sectional study. None had refugee backgrounds. Participants completed standardized instruments including the *Berne Embitterment Inventory (BEI)*, *Beck Depression Inventory I (BDI-I)*, *ICD-10 Symptom Rating (ISR)*, and *Personal Belief in a Just World Scale (PBJWS)*. Descriptive statistics, group comparisons, and correlation analyses were conducted.

**Results:** Women demonstrated significantly higher embitterment, depressive symptoms, and overall symptom severity than men, while reporting lower just-world beliefs ( $p < 0.01$ ). Cultural and socioeconomic stressors such as arranged or forced marriages (42.5% vs. 15%), low educational attainment (67.5% vs. 52.5%), and unemployment (72.5% vs. 47.5%) were strongly associated with elevated psychological burden. Embitterment correlated positively with depression ( $r = 0.62, p < 0.001$ ) and symptom severity ( $r = 0.58, p < 0.001$ ). Patients with a stated retirement wish reported significantly higher embitterment levels ( $p = 0.008$ ).

**Conclusions:** Long-term migrant women of Turkish and Kurdish origin exhibit greater psychological distress than men, reflecting the cumulative impact of gendered social roles, economic disadvantage, and perceived injustice rather than recent migration or trauma. Psychosomatic rehabilitation should therefore integrate gender- and culture-sensitive approaches, such as empowerment-based psychoeducation, motivational interventions, and intercultural competence training, to improve treatment equity and outcomes.

**Keywords:** Psychosomatic rehabilitation, Migrant women, Embitterment, Depression, Cultural stressors, Gender differences, Germany

## Introduction

Psychosomatic disorders are highly prevalent in modern healthcare systems, reflecting the intricate interplay between psychological distress, sociocultural stressors, and physical symptomatology. Migration represents one of the major psychosocial stressors of the 21<sup>st</sup> century, yet

its effects on mental health are highly heterogeneous and influenced by intersecting factors such as gender, socioeconomic position, and discrimination experiences [1]. In Germany, nearly 26% of the population has a migration background, yet systematic data on the psychosomatic health of migrants remain limited [1]. Among these, individuals of Turkish and Kurdish origin constitute the largest migrant group (approximately 2.8 million people), arriving primarily during the “guest worker” era of the 1960s and 1970s [2,3].

Migrant women, in particular, are at elevated risk for psychosocial strain. Their vulnerability arises not only from migration-related challenges, such as loss of homeland, language barriers, and social marginalization, but also from gender-specific stressors including traditional family expectations, limited participation in the labor market, and caregiving responsibilities [4]. Epidemiological studies have consistently shown that women with migration backgrounds experience higher rates of depressive and somatoform disorders compared to migrant men and non-migrant populations [5,6]. However, these differences should be understood as associations rather than causal relationships, given the multifactorial nature of psychosomatic distress.

The psychosomatic rehabilitation system in Germany plays a crucial role in addressing chronic psychological and physical distress among migrants. However, evidence indicates that migrants often show poorer rehabilitation outcomes, higher dropout rates, and greater tendencies toward retirement wishes compared to non-migrant patients [7,8]. Such trends highlight structural barriers in care—including language obstacles, limited intercultural competence, and differing illness perceptions, rather than cultural deficiencies among patients.

Embitterment has been identified as a relevant clinical construct in this context. Defined as a chronic affective state characterized by feelings of injustice, anger, and helplessness [9,10], embitterment may emerge as a maladaptive response to perceived discrimination, loss of status, or constrained autonomy. Migration, particularly under conditions of exclusion and limited social mobility, can foster embitterment, especially among women negotiating patriarchal family norms and restricted agency [10,11].

In clinical settings, embitterment frequently co-occurs with depressive symptoms and heightened symptom severity. Prior research has shown that migrant women report higher levels of depression, anxiety, and somatoform complaints than men [7,12,13]. These overlaps suggest that embitterment should be studied in relation to depression and global distress rather than as an isolated construct.

Furthermore, retirement aspirations should not automatically be interpreted as low motivation but may reflect chronic exhaustion, structural disadvantages, and limited reintegration prospects [14]. Recognizing this broader context allows a more nuanced understanding of rehabilitation motivation among migrant women.

Given this background, the present study aims to explore psychosomatic rehabilitation experiences among Turkish migrant women in Germany by examining sociodemographic, cultural, and psychological factors, including embitterment, depression, and general symptom severity, and by analyzing how gender and retirement aspirations interact with these variables. The goal is to identify culturally and gender-sensitive approaches that can enhance rehabilitation outcomes for this underserved population.

## Methods

### Study design and setting

This **cross-sectional study** was conducted in a specialized psychosomatic rehabilitation clinic in southern Germany with a dedicated transcultural ward for migrant patients. The study design combined sociodemographic assessment with validated psychometric instruments to evaluate embitterment, depressive symptoms, general psychopathology, and justice beliefs. All procedures followed the ethical standards of the institutional research committee and the Declaration of Helsinki. Ethical approval was obtained from the Ethics Committee of the University of Konstanz.

### Participants

A total of 80 inpatients of Turkish and Kurdish origin were included, comprising 40 women and 40 men. All participants were long-term residents of Germany, having lived in the country for at least 20 years ( $M=29.8$  years,  $SD=5.6$ ). Most had migrated as so-called “guest workers” or family members of guest workers during the 1960s–1980s. Individuals who had entered Germany as refugees due to political, ethnic, or religious persecution were explicitly excluded from participation in order to prevent potential confounding influences related to forced migration, trauma exposure, and asylum-related stressors.

Inclusion criteria required that participants had a migration background of Turkish or Kurdish origin, had lived in Germany for a minimum of 20 years, possessed sufficient language skills in Turkish or German (validated translations of all instruments were available), and provided written informed consent to participate. Exclusion criteria included severe cognitive impairment, acute psychotic disorder, or current or past refugee status.

### Procedure

Patients were informed about the study’s purpose and provided written informed consent. Questionnaires were administered in German or Turkish, with trained bilingual staff assisting illiterate participants when necessary. Standardized sociodemographic and clinical questionnaires were completed within the first week of admission. For some instruments (e.g., Beck Depression Inventory [BDI], ICD-10 Symptom Rating [ISR]), repeated measurements at discharge were conducted to assess potential change during rehabilitation.

### Instruments

**Sociodemographic questionnaire [15]:** Collected data on age, sex, education, employment, marital status, household composition, income, migration history, and religious practices.

**Berne embitterment inventory [16]:** Eighteen items measuring embitterment across four subscales: emotional embitterment, achievement-related embitterment, hopelessness/pessimism, and misanthropy. Items rated on a 5-point Likert scale (0–4). Higher scores indicate greater embitterment.

**Beck depression inventory I [17,18]:** Twenty one items assessing depressive symptoms (0–3 scale per item). Cut-offs: 0–9 = minimal; 10–18 = mild; 19–29 = moderate; 30–63 = severe depression.

**ICD-10 symptom rating [19,20]:** Twenty nine items covering depressive, anxiety, obsessive-compulsive, somatoform, and eating disorder syndromes, plus an additional stress scale. Items rated 0–4.

**Personal belief in a just world scale [21]:** Seven items on a 6-point Likert scale (1–6). Higher scores indicate stronger belief that life events are fair to oneself.

### Data analysis

All analyses were conducted using Statistical Package for the Social Sciences, version 27 (SPSS v.27). Descriptive statistics (means, standard deviations, frequencies) were computed for all variables. Group differences by gender and by presence/absence of a retirement wish were tested using independent-sample *t*-tests and chi-square tests. Correlations between embitterment and clinical variables were calculated using Pearson's *r*. Significance level was set at  $p < 0.05$  (two-tailed). In addition, the potential confounding effect of residence duration in Germany was examined descriptively to confirm homogeneity of acculturation experience across participants.

## Results

### Sociodemographic characteristics

**Table 1** provides an overview of the sociodemographic characteristics of the study sample. The average age of participants was comparable between groups, with women ( $M = 44.7$  years,  $SD = 7.5$ ) slightly younger than men ( $M = 46.1$  years,  $SD = 8.1$ ), though this difference did not reach statistical significance ( $t = 0.78$ ,  $p = 0.44$ ). Educational attainment was generally low across the sample, with 67.5% of women and 52.5% of men reporting no formal or only limited schooling ( $\chi^2 = 1.92$ ,  $p = 0.17$ ).

All participants were of Turkish or Kurdish origin and had lived in Germany for at least 20 years ( $M = 29.8$  years,  $SD = 5.6$ ). None of the participants had entered Germany as refugees; all migrated as guest workers or family members of guest workers during the 1960s–1980s.

Marked gender differences were observed in employment and financial status. Nearly three-quarters of women (72.5 %) were unemployed compared to less than half of men (47.5%), a statistically significant difference ( $\chi^2 = 5.33$ ,  $p = 0.02$ ). Household income levels mirrored this disparity: 65.0% of women reported monthly household incomes below €1500, compared with 37.5% of men ( $\chi^2 = 6.11$ ,  $p = 0.01$ ).

Cultural and familial factors also showed significant gender disparities. Whereas 42.5% of women reported being in arranged or forced marriages, only 15.0% of men reported the same ( $\chi^2 = 7.56$ ,  $p = 0.006$ ). Mean household size did not differ significantly between groups, with women reporting an average of 4.2 household members compared to 3.8 for men ( $t = 1.07$ ,  $p = 0.29$ ).

These findings highlight that women in the sample—despite long-term residence in Germany—remain exposed to significant socioeconomic disadvantage and traditional gender role expectations, which form a crucial backdrop for interpreting clinical outcomes.

### Clinical scales

Psychometric assessments revealed pronounced gender differences in embitterment, depressive symptoms, global symptom severity, and justice beliefs (see **Table 2**). Women scored significantly higher than men on the Berne Embitterment Inventory ( $M = 2.48$ ,  $SD = 0.62$  vs.  $M = 2.05$ ,  $SD = 0.57$ ;  $t = 3.05$ ,  $p = 0.003$ ). Similarly, women reported more severe depressive symptoms on the Beck Depression Inventory ( $M = 21.9$ ,  $SD = 7.8$ ) than men ( $M = 16.8$ ,  $SD = 6.5$ ), a highly significant difference ( $t = 2.99$ ,  $p = 0.004$ ).

General psychopathological severity, as assessed by the ICD-10 Symptom Rating, was also higher in women ( $M = 1.82$ ,  $SD = 0.53$ ) than in men ( $M = 1.45$ ,  $SD = 0.49$ ;  $t = 2.93$ ,  $p = 0.005$ ). Conversely, beliefs

**Table 1.** Sociodemographic characteristics of the sample (N=80).

Variable	Women (n=40)	Men (n=40)	$\chi^2 / t$	p-value
Mean age (years)	44.7 (SD=7.5)	46.1 (SD=8.1)	0.78	0.44
Low education (%)	67.5%	52.5%	1.92	0.17
Unemployed (%)	72.5%	47.5%	5.33	0.02 *
Monthly income < €1500 (%)	65.0%	37.5%	6.11	0.01 *
Arranged/forced marriage (%)	42.5%	15.0%	7.56	0.006 **
Mean household size	4.2 (SD=1.6)	3.8 (SD=1.4)	1.07	0.29
Years living in Germany (≥ 20)	M=29.8 (SD=5.6)	M=30.1 (SD=5.2)	0.25	0.80
Ethnic origin (Turkish / Kurdish)	60% / 40%	62.5% / 37.5%	–	–

\* $p < 0.05$ , \*\* $p < 0.01$

**Table 2.** Mean scores on clinical instruments by gender.

Instrument	Women (n=40)	Men (n=40)	t	p-value
Berne Embitterment Inventory (BVI) (Embitterment, total)	2.48 (SD=0.62)	2.05 (SD=0.57)	3.05	0.003**
Beck Depression Inventory I (BDI-I) (Depression)	21.9 (SD=7.8)	16.8 (SD=6.5)	2.99	0.004**
ICD-10 Symptom Rating (ISR) (Global severity)	1.82 (SD=0.53)	1.45 (SD=0.49)	2.93	0.005**
Personal Belief in a Just World Scale (GWPER) (Just World Belief)	2.3 (SD=0.7)	2.8 (SD=0.6)	-3.02	0.003**

\*\* $p < 0.01$

in a just world were significantly lower among women ( $M=2.3$ ,  $SD=0.7$ ) compared to men ( $M=2.8$ ,  $SD=0.6$ ;  $t=-3.02$ ,  $p=0.003$ ).

These findings confirm that despite decades of residence and social integration, migrant women continue to experience disproportionately high psychological distress and stronger perceptions of injustice compared to their male counterparts.

### Correlation analyses

To explore relationships between embitterment and other clinical variables, Pearson correlation coefficients were computed (Table 3). Embitterment was strongly and positively correlated with depressive symptoms ( $r=0.62$ ,  $p<0.001$ ) and with overall psychopathological severity ( $r=0.58$ ,  $p<0.001$ ). In contrast, embitterment correlated negatively with just world beliefs ( $r=-0.41$ ,  $p=0.002$ ).

These correlations confirm that embitterment is not an isolated phenomenon but is deeply interwoven with broader psychopathology. The negative correlation with just world beliefs suggests that embitterment may be intensified when individuals feel deprived of fairness or justice in their personal lives.

### Retirement wish analysis

A subgroup of patients ( $n=27$ ) explicitly expressed a desire for retirement during their rehabilitation stay. Post-treatment analyses revealed significantly higher embitterment scores in this subgroup compared to patients without such a wish ( $t(78)=2.74$ ,  $p=0.008$ ). Notably, women within this group displayed the highest embitterment and depression levels, suggesting that cumulative socioeconomic strain and gendered expectations may contribute to these findings despite long-term residence in Germany.

This finding is clinically relevant because it indicates that rehabilitation motivation and outcome expectations are closely tied to socio-economic and cultural realities. Patients who view rehabilitation primarily to secure disability pensions may be less engaged in therapeutic processes, which can limit the effectiveness of interventions and reinforce maladaptive coping strategies.

## Discussion

The present study examined psychosomatic rehabilitation outcomes among long-term migrant women and men of Turkish and Kurdish origin living in Germany, focusing on embitterment, depression, and symptom severity. The findings confirm that migrant women exhibit significantly higher psychological burden than their male counterparts. Specifically, they demonstrated elevated embitterment, depressive symptoms, and global symptom severity, while endorsing weaker beliefs in a just world. These results are consistent with clinical observations that migrant women represent a particularly vulnerable subgroup in psychosomatic care.

An important contextual aspect of this study is that all

participants had lived in Germany for more than 20 years, reflecting long-term social and cultural integration. None of the participants were refugees; instead, they migrated as part of the so-called “guest worker” generation during the 1960s–1980s. By excluding individuals with refugee backgrounds, who often face trauma-related psychopathology, the study intentionally focused on a socioeconomically disadvantaged yet stable migrant population to reduce confounding by war, persecution, or asylum-related stressors. This methodological decision allows clearer attribution of psychosomatic distress to chronic social and cultural stressors rather than acute trauma exposure.

The results align with prior research documenting higher prevalence rates of depression and somatoform disorders among women worldwide [22]. In migration contexts, gendered vulnerabilities are further amplified. Even after decades in Germany, Turkish and Kurdish women continue to experience cumulative socioeconomic disadvantage, limited labor market participation, and persistent traditional role expectations [23]. The present study highlights additional sociocultural burdens such as arranged or forced marriages, which were significantly more prevalent among women than men. These findings echo studies by Kizilhan [7] and Bermejo *et al.* [5], showing that gendered cultural expectations and patriarchal norms increase psychosocial stress and compromise mental health.

Embitterment emerged as a central construct, showing robust correlations with depressive symptoms and overall psychopathology. Linden [24] described embitterment as an affective response to perceived injustice, often leading to chronic maladaptive coping. Migration-related adversities, such as discrimination, loss of social status, and identity conflicts, create fertile conditions for embitterment, particularly in women facing both cultural and gender constraints. In this study, embitterment appeared not as an acute reaction but as a long-term emotional pattern that persists despite decades of residence and partial social integration. The negative association between embitterment and just world beliefs underscores the role of shattered fundamental assumptions [16,25].

An important clinical finding concerns the subgroup of patients expressing a retirement wish, who exhibited significantly higher levels of embitterment. This supports earlier studies suggesting that rehabilitation patients who view therapy primarily as a pathway to pension entitlement often present lower therapeutic motivation and higher dissatisfaction when treatment goals are unmet [7,8]. However, given the long migration history and socioeconomic hardship of this cohort, a retirement wish may also reflect chronic exhaustion, accumulated work strain, and structural barriers to reemployment rather than a lack of motivation. Female patients with retirement aspirations were particularly burdened, combining socioeconomic disadvantage with reduced engagement in therapy.

**Table 3.** Correlations between embitterment (BVI) and other clinical measures ( $N = 80$ ).

Variable	r	p-value
Beck Depression Inventory I (BDI-I) (Depression)	0.62	<0.001***
ICD-10 Symptom Rating (ISR) (Global severity)	0.58	<0.001***
Personal Belief in a Just World Scale (GWPER) (Just World Belief)	-0.41	0.002**

\*\*\* $p<0.001$ , \*\* $p<0.01$



The findings therefore suggest that psychosomatic distress in long-term migrant women of Turkish and Kurdish origin should be understood less as a transient adaptation problem and more as the consequence of decades of cumulative social inequality, discrimination, and gendered expectations. These results underline the necessity of distinguishing between recent refugees and long-settled migrant populations when designing psychosomatic and mental health interventions, as their psychosocial determinants differ substantially.

The results are consistent with international evidence. Studies in the United States have shown that immigrant women from collectivist cultures report higher depression and somatization rates than men, particularly when exposed to family stress and limited autonomy [26]. Research in Turkey similarly found elevated psychiatric morbidity among women in patriarchal family structures, with arranged marriages and restricted employment opportunities serving as risk factors [27]. In Scandinavia, first-generation migrant women displayed greater utilization of psychosomatic rehabilitation services but poorer long-term outcomes, attributed to language barriers and cultural incongruence in care [28]. Together, these findings highlight that chronic structural disadvantage—rather than migration recency or refugee experience, is a key determinant of psychological distress among long-settled migrant women.

### Clinical Implications

The study has important implications for psychosomatic rehabilitation practice. Programs targeting long-term migrant populations must acknowledge the cumulative impact of social marginalization and intergenerational disadvantage. First, psychosomatic rehabilitation should include culturally adapted psychoeducation and therapy modules addressing embitterment, depression, and chronic strain in migrant women. Second, rehabilitation staff must receive intercultural competence training to understand cultural illness representations, gendered expectations, and family dynamics. Third, systematic screening for retirement wish at admission may help identify patients at risk of reduced motivation and facilitate early motivational or empowerment-based interventions. Finally, therapeutic models incorporating empowerment, autonomy building, and acknowledgment of long-term acculturative stress can improve rehabilitation outcomes for women who have lived in Germany for decades but remain socially marginalized.

### Limitations

Several limitations should be considered when interpreting these findings. The sample size was relatively small (N=80) and drawn from a single rehabilitation clinic, which limits generalizability. Although some repeated measures were collected, the overall design was primarily cross-sectional. As such, causal relationships between duration of stay, sociocultural variables, and clinical outcomes cannot be established. The reliance on self-report instruments also introduces potential bias due to cultural differences in symptom expression. Additionally, while the exclusion of refugees strengthens internal validity by removing trauma-related confounders, it restricts external validity for other migrant subgroups. Future studies should therefore include larger samples, longitudinal designs, and comparison groups of recent refugees to explore differences in psychosomatic adaptation pathways.

### Conclusion

Migrant women of Turkish and Kurdish origin who have lived in Germany for more than two decades continue to display high levels of embitterment, depression, and psychosomatic symptoms. These burdens are strongly shaped by gendered sociocultural stressors such as arranged marriages, unemployment, and traditional family roles, compounded by structural inequalities that persist despite long-term residence. By focusing on a non-refugee population, this study emphasizes the role of chronic social disadvantage rather than post-traumatic factors in explaining psychosomatic distress.

To improve rehabilitation equity and efficacy, programs must integrate gender-sensitive and culturally adapted interventions, including psychoeducation, intercultural competence training, and early motivational strategies. Future research should expand to larger, diverse migrant groups, employ longitudinal designs, and test rehabilitation models that explicitly address long-term integration stressors. Such approaches are essential to promote sustainable health improvements for migrant women in Germany.

### References

1. Borde T, Blümel S. Gesundheitsförderung und Migrationshintergrund. Leitbegriffe der Gesundheitsförderung. 2015. Verfügbar unter: <https://leitbegriffe.bioeg.de/alphabetisches-verzeichnis/gesundheitsfoerderung-und-migrationshintergrund/>.
2. BAMF – Federal Office for Migration and Refugees. *Migration report 2023*. Available from: <https://www.bamf.de/SharedDocs/Anlagen/EN/Forschung/Migrationsberichte/migrationsbericht-2023.html?nn=447198>.
3. Turrini G, Purgato M, Cadorin C, Bartucz M, Cristofalo D, Gastaldon C, et al. Comparative efficacy and acceptability of psychosocial interventions for PTSD, depression, and anxiety in asylum seekers, refugees, and other migrant populations: a systematic review and network meta-analysis of randomised controlled studies. *Lancet Reg Health Eur.* 2024 Nov 29;48:101152.
4. Kische H, Haring R. Geschlecht und Gesundheit—Grundlagen einer geschlechtssensiblen Medizin und Gesundheitsvorsorge. In: Haring R, Editor. *Gesundheitswissenschaften*. Berlin, Heidelberg: Springer; 2022. pp. 573–85.
5. Bermejo I, Mayninger E, Kriston L, Härter M. Mental disorders in people with migration background compared with German general population. *Psychiatrische Praxis.* 2010 Mar 25;37(5):225–32.
6. Erim Y. Psychische Gesundheit von Migranten in Deutschland. *PSYCH up2date.* 2022;16(S 01):S25–S30.
7. Kizilhan JI. Kultursensitivität in der Psychotherapie. In: Linden M, Hautzinger M, Editors. *Verhaltenstherapie manual—Erwachsene*. Berlin, Heidelberg: Springer; 2021. pp. 43–8.
8. Yilmaz-Aslan Y, Aksakal T, Langbrandtner J, Deck R, Razum O, Brzoska P. Welche Versorgungserwartungen haben Rehabilitand\*innen mit Migrationshintergrund im Verlauf der medizinischen Rehabilitation? – Eine qualitative Befragung. *Physikalische Medizin, Rehabilitationsmedizin, Kurortmedizin.* 2023 Aug 1;33(04):201–8.
9. Linden M, Lieberei B. Injustice and Embitterment: Crucial Stressors in Psychosomatic Patients. *Psychopathology.* 2024;57(1):39–44.
10. Znoj H. Embitterment and post-traumatic embitterment disorder. In: Linden M, Maercker A, Editors. *Embitterment: Societal, psychological, and clinical perspectives*. Berlin, Heidelberg: Springer; 2011. pp. 33–46.

11. Dalbert C. The justice motive as a personal resource: Dealing with challenges and critical life events. Kluwer Academic/Plenum Publishers; 2001.
12. Mösko MO, Pradel S, Schulz H. Die Versorgung von Menschen mit Migrationshintergrund in der psychosomatischen Rehabilitation [The care of people with a migration background in psychosomatic rehabilitation]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2011 Apr;54(4):465–74.
13. Kizilhan JI. Kulturelle Aspekte von Emotionen. *PiD-Psychotherapie im Dialog.* 2018 Mar;19(01):61–5.
14. Bassler M. Laufendes Rentenverfahren und Psychotherapie. *PiD-Psychotherapie im Dialog.* 2016 Jun;17(02):74–7.
15. Kizilhan JI. Changes in disease perception, coping strategies and diagnoses in the case of first and fourth generations of Turkish migrants in Germany. *Europe's Journal of Psychology.* 2012 Aug 29;8(3):352–62.
16. Znoj M. *Berner Verbitterungs-Inventar.* Bern: Verlag Hans Huber; 2008.
17. Beck AT, Ward CH, Mendelson M, Mock J, Erbaugh J. An inventory for measuring depression. *Arch Gen Psychiatry.* 1961 Jun;4:561–71.
18. Hisli N. Beck Depresyon Envanterinin gecerliligi uzerine bit calisma (A study on the validity of Beck Depression Inventory.). *Psikoloji Dergisi..* 1988;6:118–22.
19. Tritt K, von Heymann F, Zaudig M, Zacharias I, Söllner W, Loew T. Entwicklung des Fragebogens "ICD-10-Symptom-Rating" (ISR) [Development of the "ICD-10-Symptom-Rating"(ISR) questionnaire]. *Z Psychosom Med Psychother.* 2008;54(4):409–18.
20. Kizilhan JI, Roniger A, von Heymann F, Tritt K. Validation of a Turkish Version of the ICD-10 Symptom Rating (ISR). *Europe's Journal of Psychology.* 2013 May 31;9(2):366–77.
21. Dalbert C. The world is more just for me than generally: About the personal belief in a just world scale's validity. *Social Justice Research.* 1999 Jun;12(2):79–98.
22. World Health Organization. *World report on the health of refugees and migrants: summary.* Geneva: World Health Organization; 2022.
23. Spallek J, Zeeb H, Razum O. Lebenslauforientierte Epidemiologie in der Migrationsforschung [Life course epidemiology in migrant health research]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz.* 2023 Oct;66(10):1092–8.
24. Linden M. Posttraumatic embitterment disorder. *Psychother Psychosom.* 2003 Jul-Aug;72(4):195–202.
25. Hafer CL, Dalbert C. Cross-cultural generalisability of the belief in a just world. *Journal of Research in Personality.* 2023;102:104317.
26. Alegría M, Mulvaney-Day N, Torres M, Polo A, Cao Z, Canino G. Prevalence of psychiatric disorders across Latino subgroups in the United States. *Am J Public Health.* 2007 Jan;97(1):68–75.
27. Kose T. Gender, income and mental health: The Turkish case. *PLoS One.* 2020 Apr 29;15(4):e0232344.
28. Bäärnhielm S, Ekblad S. Turkish migrant women encountering health care in Stockholm: a qualitative study of somatization and illness meaning. *Cult Med Psychiatry.* 2000 Dec;24(4):431–52.