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ORIGINAL PAPER

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Perceived need for mental health care among non-western labour migrants

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Abstract *Background* There is a supposed higher prevalence of common mental disorders among many migrant groups. At the same time, problems are reported regarding underutilisation of mental health services by migrants. Since perceived need for care is a powerful predictor of actual care utilisation, we aimed to study the hypothesis that, given the same level of mental morbidity, non-Western migrants would perceive less need for mental health care than ethnic Dutch residents. Additionally, we studied the extent to which needs are met in both groups, as well as several possible barriers to care. *Methods* A cross-sectional study with data from the 2004/2005 Amsterdam Health Monitor. Data were complete from

626 ethnic Dutch and non-Western (Turkish and Moroccan) labour migrants. Respondents participated in a structured interview in their own language, which included the perceived need for care questionnaire (PNCQ) and the composite international diagnostic interview (CIDI) version 2.1 for anxiety and depressive disorders. *Results* Perceived need was much higher among Turkish migrants. Among Moroccans the perceived need was comparable to ethnic Dutch. Turkish migrants also reported that needs were met less often than ethnic Dutch. Differences were explained by a higher prevalence of common mental disorders and higher symptom levels among Turkish. When differences in mental morbidity were taken into account, Moroccans perceived less need for information, drugs, referral to specialised mental health care, or for counselling. The most important barrier to care in all ethnic groups was the preference to solve the problem on one's own. *Conclusion* In case of similar mental morbidity, perceived need for care was lower than among ethnic Dutch. The results did not support the hypothesis that in case of similar mental distress, needs of migrants were less often met than needs of ethnic Dutch.

Key words ethnic groups – health services needs – depressive disorders – anxiety disorders – mental health care

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Introduction

Migration is a stressful process that can lead to mental illness [8, 38]. This may help explain why migrant status is sometimes associated with higher occurrence of common mental disorders (CMD; anxiety and depressive disorders) [9, 20, 28]. Additionally, there are concerns regarding underutilisation of mental services, non-compliance and dropout from treatment

among migrants compared to non-migrants [49, 50, 54]. A wide range of factors could be responsible for these phenomena [7]. Perceived need for care, which is a key variable in the help-seeking process [3], might be one of them. In addition to objective need (i.e. presence of a disorder), greater perceived need for care is associated with higher use of services, less dropout and better compliance with treatment [6, 19]. Conversely, the disbelief that problems require treatment (i.e. no perceived need for care) is an important reason for people not to seek help [4, 22].

From halfway the sixties of the previous century, labour migration from Turkey and Morocco brought large numbers of migrants to Europe. In fact, Turks nowadays constitute the largest immigrant group in western Europe [51]. Previous studies in Belgium and the Netherlands found that common mental disorders are more prevalent among Turkish and Moroccan migrants [13, 28, 49]. Nevertheless, both groups of migrants are believed to be reluctant in obtaining help for mental problems [5, 24]. As a result, we hypothesised that, given a certain level of objective need, perceived need for mental health care would be lower among Turkish and Moroccan migrants.

Supportive of this hypothesis is the finding that levels of education and health literacy are often much lower among non-western migrants [27]. For example, Bäärnhielm and Ekblad conducted interviews with Turkish women, during which difficulties to understand the meaning of unfamiliar words, concepts, investigations and treatments came up as a very important theme [5]. Such difficulties may result in difficulties in determining personal risk, and consequently a lack of perceived need for care [31, 42, 44]. Additionally, cultural factors are known to affect the interpretation of symptoms [23]. For example, in communities where Islam is prominent, like Turkey and Morocco, mental illness is often surrounded by taboo, coming from the idea that the illness is the consequence of failure as a Muslim to live by Islamic rules [46, 48]. In such case, the need for care will more likely be of spiritual nature, rather than the patient perceiving a need for mental care.

The before mentioned factors may also be associated with higher perceived *unmet* need among migrant populations. For example, low levels of education or health literacy may interfere with the ability to understand medical information or to present symptoms to a medical practitioner in a way that is appropriate in western health care systems [42]. This problem is intensified by the inability of many Turkish and Moroccan migrants to communicate in Dutch. Also, avoiding the stigma of mental illness may prevent the presentation of mental symptoms to a regular physician at all [2, 23]. Turkish and Moroccan migrants, for that matter, are known to be reluctant in reporting mental health problems, and to focus on somatic symptoms instead [28]. The somatic expression of psychological problems (i.e. somatisation), in

combination with problems in doctor-patient communication and low socioeconomic status (SES) [9, 32], is likely to affect the probability that mental health problems are identified as such during a consultation [29]. Additional barriers in this context include lack of financial resources and low acculturation [42].

Few studies considered ethnic minority groups in relation to perceived need for mental health care [17]. Available studies provide no evidence that ethnicity is associated with perceived need [10, 14, 35]. There is also a dearth of studies defining and measuring the extent to which perceived needs for mental health treatment are perceived to be met, and existing studies tend to present conflicting evidence [16, 44, 54]. The aims of the present study were therefore (1) to examine possible ethnic differences in perceived need for mental health care, and the extent to which needs are met, (2) to provide potential explanations for these differences, and (3) to study potential differences in perceived barriers to care. We expected that, given a certain level of objective need, *perceived* need for mental health care interventions was lower among migrants compared to ethnic Dutch. In addition, we expected that perceived needs among migrants were met to a lesser extent, and studied whether this was related to higher levels of somatisation among migrants, besides other barriers.

Methods

■ Design

Every four years, the Amsterdam Municipal Health Service conducts a general public health survey (the Amsterdam health monitor (AHM)). The sampling frame for the AHM is the population register of the Amsterdam municipality. The AHM of 2004 was based on a representative sample of approximately 4,000 people, stratified for age (18–34, 35–44, 45–54, 55–64 and 65 years and older) and ethnicity (ethnic Dutch, Turkish, Moroccan, other) [1]. Overall, 1306 ethnic Dutch, Turkish and Moroccan respondents were included in the first wave (response 45%). The response was significantly lower among men (39.6%) than among women (50.4%; $P < 0.001$), and in the lowest (18–34 years) age-group ($P < 0.001$). The response was also lower among Moroccans (38.8%) than among ethnic Dutch (45.9%) or Turkish (49.6%; $P < 0.001$). Regarding SES, only a general comparison between respondents from the first wave of the AHM and the Amsterdam population could be made. On average, after weighting the AHM-sample for age, gender and ethnicity, respondents reported an annual income that was comparable to that of the Amsterdam population [36]. That is, 38% reported a net yearly income under €17,550, 48% had an income between €17,550 and €41,600, and 14% had an income of €41,600 or higher. In addition, 5% of the respondents reported to be unemployed, while a comparable part (7%) of the Amsterdam population was unemployed in 2004 [36].

The general AHM of 2004 was followed-up by a second wave, consisting of structured interviews that were specifically aimed at mental health [13]. These interviews were conducted in the language of choice of the respondent (i.e. Dutch, Turkish, Moroccan-Arabic or Berber) and could be completed within 1.5 h. Only those who gave permission to be approached again ($N = 1076$, or 81%) were invited to participate. Consent for the second approach was asked while keeping respondents ignorant about the topic of the follow-up study (i.e. mental health), in order to minimise the

probability that people would withhold their consent for reasons related to mental health. Less Turkish respondents agreed with a second approach, which was the result of a typing error in the questionnaire, resulting in Turkish respondents being unable to give their consent at all in the first week of the first wave. Since respondents were invited to participate randomly over time, this selection is considered to be random. The study procedures of this second wave were approved by the ethical commission of the Amsterdam Academic Medical Centre.

The interviews for the second wave were conducted between February and June of 2005, to avoid summer holidays, Christmas and Ramadan. Interviewers were trained during a full-time week and monitored intensively. Eventually, 725 Turkish, Moroccan and ethnic Dutch respondents participated in the second wave (equalling a response of 70% of all Turkish, Moroccan and Dutch subjects who gave their consent). There was no selection with respect to age ($P = 0.856$), but response was lower among Turkish and Moroccans (62.2 and 70.5% respectively) than among ethnic Dutch (76.9%; $P < 0.001$), and lower among men (68.1%) than among women (73.2%; $P = 0.027$). In addition, information from the first wave allowed us to test more elaborately for selective (non-) response regarding health and health care variables. Analyses showed no significant differences between respondents and non-respondents regarding perceived health status (SF-36 [53]; $P = 0.101$), psychological distress (K10 [21]; $P = 0.635$), general practice visits ($P = 0.101$) and outpatient health care utilisation ($P = 0.480$) in the past two months, any health care utilisation for mental health problems in the past year ($P = 0.903$), and current use of medication ($P = 0.903$). Within gender groups, the response was significantly lower among Turkish and Moroccan men ($P < 0.001$). Differences between male (non-)respondents on the other variables were not statistically significant, nor were there any differences among women.

Measurements

■ Perceived need

Perceived need for mental health care in the past six months was measured with the perceived need for care questionnaire (PNCQ) [30, 31]. The PNCQ was developed to measure need for mental health care, as well as the extent to which needs are met, from the perspective of the patient. It discriminates between five types of interventions, namely *information* (about mental illness, treatment and available services), (b) *medication*, (c) *counselling* (psychotherapy, cognitive behaviour therapy or counselling), (d) *social interventions* (help to sort out housing or money problems) and (e) *skills training* (help to improve ability to work, time-management and/or to look after oneself). For this study, *referral* was added as an extra type of intervention. The PNCQ subsequently distinguishes between four levels of need; (1) *no need*, (2) *unmet need*, (3) *partially met need* and (4) *fully met need*. The outcome measures for this study were perceived need and discordance, the latter defined as 'unmet/ partially met need' in contrast to 'no need perceived/ fully met need'.

Additionally, if subjects indicated that a perceived need was partially met or unmet, the PNCQ provides information about seven predefined barriers to care. These barriers are *self-reliance* ('I preferred to manage myself'), *pessimism* ('I didn't think anything could help'), *ignorance* ('I didn't know where to get help'), *stigma* ('I was afraid to ask for help, or of what others

would think of me if I did'), *finance* ('I couldn't afford it'), *non-response* ('I asked but didn't get the help') and *alternate provision* ('I got help from another source').

During the AHM, the PNCQ was only administered to subjects who responded positively to a self-report probe that stated: 'Take the past six months into mind and try to remember how you felt: did you experience mental health problems at some time during that period?' The application of the probe question was based on the assumption that it would be difficult, if not impossible, to question respondents for a perceived need for mental health care if they did not even perceive a mental health problem.

■ Common mental disorders and symptom levels

Presence of common mental disorders was measured using the CIDI version 2.1 [55]. DSM-IV diagnoses were made for depressive (major depressive disorder, dysthymia) and anxiety disorders (social phobia, agoraphobia, panic disorder and generalised anxiety disorder) in the past six months. The CIDI has been translated into Dutch, Turkish and Arabic [18, 45]. Symptom levels were measured using four subscales from the Symptom Check List (SCL-90-R) [11, 15], namely anxiety (10 items), depression (16 items), agoraphobia (7 items), and somatisation (12 items). For each symptom, respondents indicated to what extent they were bothered by the symptom in question in the past week (e.g. for somatisation: 'During the past 7 days, how much were you distressed by numbness or tingling in parts of your body?'). Items were measured with 5-point Likert-type scales, with extremes labelled as 'not at all' and 'very much'. In addition to a total sum score (ranging between 0–180), separate subscales were calculated, of which sum scores ranged between 0–40 (anxiety), 0–64 (depression), 0–28 (agoraphobia), and 0–48 (somatisation).

■ Demographics and socioeconomic status

Ethnicity was defined on the basis of country of birth. Respondents were classified as Turkish or Moroccan if they or at least one of their parents were born in Turkey or Morocco [36]. Respondents were considered ethnic Dutch if they and both their parents were born in the Netherlands. Finally, age (18–34, 35–44, 45–54, 55–64 and 65 years and older), gender (female/male), level of education (no education or primary school/higher than primary school) and type of health insurance (public/private) were measured. The latter two served as indicators of SES. Health insurance was used because almost everybody in the Netherlands has medical insurance and until January 2006, people with an income below a certain level had a public insurance. Conversely, people with higher incomes were privately insured.

Table 1 Sample characteristics ($N = 626$)

	ethnic Dutch ($N = 310$)	Moroccan ($N = 146$)	Turkish ($N = 170$)	P value*
Age				
Mean (SD)	54.2 (14.6)	48.2 (14.6)	46.3 (14.1)	<0.001
Range	20–92	19–91	20–82	
Gender (male, %)	41.6	45.8	44.1	0.029
Education (higher, %)	79.7	45.9	48.2	<0.001
Insurance (public, %)	62.9	91.8	80.6	<0.001
6-month CIDI-diagnosis (%)	10.0	8.9	25.9	<0.001
SCL Somatisation				
Mean (SD)	4.2 (5.0)	9.8 (10.8)	12.8 (10.7)	<0.001
Range	0–29	0–48	0–41	
SCL Anxiety				
Mean (SD)	2.1 (3.3)	5.3 (7.9)	8.0 (9.4)	<0.001
Range	0–20	0–40	0–36	
SCL Depression				
Mean (SD)	4.9 (7.2)	9.8 (12.3)	13.6 (13.6)	<0.001
Range	0–44	0–61	0–61	
SCL Agoraphobia				
Mean (SD)	0.5 (1.7)	2.2 (5.5)	3.5 (5.4)	<0.001
Range	0–15	0–28	0–22	

*Means were tested with ANOVA, proportions with Chi square tests

Statistical analyses

SPSS version 15 (complex samples) was used to obtain percentages for perceived need for care and perceived discordance according to ethnic group, weighted for sex and age, based on the composition of the Amsterdam population in January 2005 [36]. Possible effects of selective response on these demographic variables have therefore been corrected for. Possible ethnic differences were tested with F-tests. Stepwise multivariate logistic regression analyses were performed to see whether possible ethnic differences in perceived need and discordance were related to presence of a CMD, symptom levels, and/or socio-economic status. To see if the association between somatisation and any perceived need (i.e. perceived need for any type of mental health care) or discordance was different for migrants than for ethnic Dutch, we performed an additional logistic regression analysis using the SCL subscales separately.

Results

Selected Turkish and Moroccan respondents were younger than ethnic Dutch respondents (Table 1). Among Moroccan respondents, women were under-represented compared to Turkish and ethnic Dutch. Both Turkish and Moroccan respondents received less education and were more likely to be publicly insured. The prevalence of a six-month diagnosis for a mood and/or anxiety disorder was much higher among Turkish respondents [13], and symptom levels were significantly higher in both migrant groups compared to ethnic Dutch.

Perceived need for mental health treatment was significantly higher among Turkish respondents compared to ethnic Dutch. In Table 2 it is shown that any perceived need was reported by fifteen percent of ethnic Dutch, thirteen percent of Moroccan subjects and thirty-one percent of the Turkish subjects. For the specific types of interventions, perceived need was consistently higher among Turks compared to ethnic Dutch. Only for counselling and skills training, differences were absent, though for counselling there was a trend towards a higher need among Turkish respondents ($P < 0.10$). Differences between Moroccans and ethnic Dutch were not significant.

For all types of mental health care interventions, perceived discordance was higher among Turkish compared to ethnic Dutch. Apart from 'need for skills training', there were no statistically significant differences between Moroccans and ethnic Dutch. Comparison of discordance to total levels of perceived need showed that the level of unmet need among those who perceive a need was high, especially for social interventions.

The regression analyses confirmed that, when controlling for differences in age and gender, perceived need for mental health treatment was generally much higher among Turkish respondents and comparable for Moroccan respondents is comparison to the ethnic Dutch (Table 3, model 1). Table 3 furthermore shows that the odds ratios for perceived need significantly decreased after adding prevalence

Table 2 Perceived need and discordance regarding mental health services (% weighted for age and sex)

		N†	Any*	Information	Medication	Referral	Counselling	Social	Skills
Perceived need	ethnic Dutch	306	13.4	9.2	6.3	6.4	8.3	3.7	2.5
	Moroccan	146	11.4	9.3	4.4	3.9	9.2	4.3	2.1
	Turkish	169	30.4	26.0	19.8	18.1	19.3	22.8	5.3
	F -test ($df1, df2$)		6.67 (2, 1,073)	7.61 (2, 1,053)	10.68 (2, 1069)	6.96 (2, 940)	2.88 (2, 1,147)	20.86 (2, 970)	1.26 (2, 956)
	P -value		0.002	0.001	<0.001	0.002	0.058	<0.001	0.280
Discordance	ethnic Dutch	306	9.3	4.9	2.3	3.6	3.1	3.2	0.7
	Moroccan	146	7.1	5.2	1.8	3.1	4.9	3.7	2.1
	Turkish	169	24.6	17.2	11.8	10.5	10.8	18.6	5.3
	F -test ($df1, df2$)		7.01 (2, 1,093)	6.17 (2, 1,055)	8.52 (2, 941)	5.41 (2, 1,055)	5.05 (2, 1,055)	12.21 (2, 1087)	7.03 (2, 934)
	p -value		0.001	0.003	0.001	0.006	0.009	0.000	0.002

†Unweighted count

*Perceived need or discordance regarding any of six types of interventions

Table 3 Stepwise logistic regression examining the association between ethnic background, perceived need and discordance (*N* = 626)

		Perceived need			Discordance		
		Moroccan* OR (95% CI)	Turkish* OR (95% CI)	Sign. of step (p-value)	Moroccan* OR (95% CI)	Turkish* OR (95% CI)	Sign. of step (p-value)
Information	Model 1	0.99 (0.51–1.94)	2.63 (1.53–4.52)	<0.001	1.42 (0.63–3.21)	3.50 (1.79–6.86)	<0.001
	Model 2	1.03 (0.49–2.15)	1.77 (0.95–3.27)	<0.001	1.50 (0.64–3.51)	2.54 (1.24–5.19)	<0.001
	Model 3	0.34 (0.14–0.85)	0.66 (0.32–1.36)	<0.001	0.57 (0.21–1.55)	1.06 (0.47–2.43)	<0.001
Medication	Model 1	0.93 (0.42–2.03)	2.30 (1.24–4.25)	0.046	1.27 (0.41–3.92)	3.37 (1.40–8.08)	0.059
	Model 2	0.97 (0.42–2.24)	1.42 (0.71–2.83)	<0.001	1.36 (0.43–4.36)	2.13 (0.84–5.38)	<0.001
	Model 3	0.31 (0.11–0.88)	0.49 (0.21–1.15)	<0.001	0.55 (0.14–2.12)	0.91 (0.30–2.74)	0.003
Referral	Model 1	0.84 (0.38–1.84)	2.51 (1.37–4.57)	<0.001	1.11 (0.45–2.72)	3.03 (1.49–6.16)	0.004
	Model 2	0.84 (0.35–2.00)	1.57 (0.79–3.14)	<0.001	1.16 (0.45–2.98)	2.06 (0.96–4.44)	<0.001
	Model 3	0.25 (0.08–0.75)	0.54 (0.23–1.27)	<0.001	0.40 (0.13–1.26)	0.80 (0.32–1.99)	<0.001
Counselling	Model 1	0.92 (0.46–1.83)	1.81 (1.02–3.20)	0.006	1.93 (0.78–4.78)	3.59 (1.62–7.95)	0.002
	Model 2	0.93 (0.45–1.95)	1.13 (0.60–2.14)	<0.001	2.04 (0.79–5.24)	2.48 (1.07–5.74)	<0.001
	Model 3	0.41 (0.18–0.98)	0.49 (0.23–1.05)	<0.001	0.87 (0.30–2.54)	1.10 (0.42–2.88)	0.001
Social interventions	Model 1	1.52 (0.62–3.73)	5.60 (2.77–11.30)	<0.001	1.63 (0.62–4.26)	6.55 (3.10–13.88)	<0.001
	Model 2	1.66 (0.64–4.33)	4.00 (1.86–8.58)	<0.001	1.75 (0.64–4.79)	4.77 (2.15–10.59)	<0.001
	Model 3	0.46 (0.14–1.48)	1.44 (0.60–3.46)	<0.001	0.44 (0.13–1.53)	1.68 (0.68–4.17)	<0.001
Skills training	Model 1	1.69 (0.55–5.20)	3.04 (1.16–8.01)	0.121	4.31 (1.05–17.78)	7.66 (2.09–28.03)	0.010
	Model 2	1.86 (0.57–6.10)	1.75 (0.62–4.93)	<0.001	4.96 (1.15–21.42)	4.71 (1.23–17.97)	<0.001
	Model 3	0.63 (0.15–2.61)	0.60 (0.17–2.18)	<0.001	1.44 (0.27–7.65)	1.50 (0.32–7.01)	<0.001

*Ethnic Dutch serve as reference category

OR odds ratio, CI confidence interval

Model 1: Discordance = ethnicity + age/gender

Model 2: Discordance = ethnicity + age/gender + prevalence

Model 3: Discordance = ethnicity + age/gender + prevalence + symptom levels

of a depressive and/or anxiety disorder to the model (model 2). Thus, differences in perceived need between Turkish and ethnic Dutch were strongly related to differences in prevalence of CMD. The third model revealed that, when taking into account differences in symptom levels as well, the level of perceived need among migrants was lower in both migrant groups, sometimes reaching levels of statistical significance among Moroccans (i.e. regarding need for information, drugs, referral to a specialised health provider, and counselling). In other words, taking into account ethnic differences in prevalence of CMD and symptom levels, Moroccans perceived less need for information, drugs, referral, and counselling. Finally, entrance of the SES variables to the model (step 4) was not a significant contribution to any of the models, nor did it substantially change the OR's of the

other variables in the model. Thus, model 4 was not considered in the further analysis of the results, and the results are therefore not reported.

With respect to discordance, differences between Turkish respondents and ethnic Dutch were significant for all types of interventions. For Moroccan migrants, only discordance regarding skills training occurred significantly more often. Similar to perceived need, ethnic differences in discordance could partially be explained by differences in prevalence of CMD (model 2) and differences in symptom levels (model 3). However, in contrast to perceived need, adjusting for symptoms levels did not result in significantly lower levels of discordance in any of the ethnic groups. Again, the final step of entering SES variables was not statistically significant (model 4), and was therefore not reported.

Table 4 Association between SCL symptom levels, perceived need and discordance, according to ethnic background*

		ethnic Dutch OR (95% CI)	Moroccan OR (95% CI)	Turkish OR (95% CI)	Migrant OR (95% CI)
Any need	SCL Depression	1.10 (1.03–1.18)	1.07 (0.97–1.18)	1.07 (0.99–1.16)	1.07 (1.01–1.13)
	SCL Anxiety	1.20 (1.05–1.38)	1.12 (0.91–1.37)	1.00 (0.87–1.14)	1.04 (0.93–1.15)
	SCL Agoraphobia	1.21 (0.95–1.53)	0.91 (0.75–1.09)	1.03 (0.87–1.21)	0.97 (0.86–1.08)
	SCL Somatisation	0.98 (0.89–1.07)	0.98 (0.86–1.12)	1.00 (0.93–1.08)	1.00 (0.94–1.06)
Any discordance	SCL Depression	1.03 (0.96–1.10)	1.10 (0.99–1.22)	1.04 (0.97–1.12)	1.06 (0.99–1.12)
	SCL Anxiety	1.32 (1.14–1.52)	1.12 (0.90–1.39)	1.04 (0.91–1.18)	1.06 (0.95–1.17)
	SCL Agoraphobia	0.88 (0.69–1.11)	0.86 (0.68–1.07)	0.99 (0.85–1.15)	0.94 (0.85–1.05)
	SCL Somatisation	1.01 (0.92–1.11)	1.00 (0.86–1.16)	1.01 (0.94–1.08)	1.01 (0.95–1.07)

*All associations corrected for differences in sex, age, and SES

OR odds ratio, CI confidence interval

Table 5 Ranking barriers to care for those who perceived any partially met or unmet need for mental health care ($N = 90$)

	ethnic Dutch ($N = 32$)	%	Migrant ($N = 58$)	%
1.	self-reliance	31.3	Self-reliance	55.2
2.	alternate provision	28.1	Pessimism	36.2
3.	non-response	25.0	Ignorance	36.2
4.	ignorance	21.9	Non-response	20.7
5.	stigma	3.1	Alternate provision	20.7
6.	finance	3.1	Finance	10.3
7.	pessimism	0.0	Stigma	6.9

Looking more closely at the association between symptom levels, *any* perceived need, and *any* perceived discordance, Table 4 shows that the relation between symptom levels and perceived need/discordance was generally stronger among ethnic Dutch than among Turkish or Moroccan respondents. There was no specific relation between somatisation levels and perceived need or discordance, nor were there indications that somatisation played a different role among ethnic Dutch compared to Turkish/Moroccan respondents.

Finally, potential barriers to care are presented in Table 5. Most respondents who reported some degree of discordance claimed to be self-reliant, i.e. preferred solving the problem on their own. 'Stigma' scored very low among both ethnic Dutch and migrants. In terms of ethnic dissimilarities, the two largest differences between ethnic groups concerned 'alternate provision' (ranking higher among ethnic Dutch than among migrants), and 'pessimism' (ranking higher among migrants than among ethnic Dutch). Finally, it should be noted that percentages were generally much higher for migrants, indicating that migrants more often reported more than one, in contrast to ethnic Dutch respondents.

Discussion

Variations in the prevalence of mental disorders are often not sufficient to explain variations in care utilisation. Thus, we studied perceived need for mental health care to gain a better understanding of the relationship between ethnicity, mental illness and mental health care utilisation. Perceived need for any kind of mental health treatment in the past six months was reported by fifteen percent of ethnic Dutch respondents and thirteen percent of Moroccan subjects. The percentages for ethnic Dutch and Moroccans were comparable to what has been reported in other studies. For example, Meadows et al. [30] reported approximately 14% of Australians to have a perceived need for care using the PNCQ. Furthermore, Katz et al. [19] found a perceived need for care in the past 12 months among nineteen percent of respondents in the US and twelve percent in Ontario. Wells et al. [54], finally, found a perceived need for care in the past 12 months among ten

percent of Whites and Hispanics and twelve percent of African-Americans.

However, perceived need was much higher among Turkish migrants, who also reported discordance much more often than ethnic Dutch. The analyses revealed that differences were predominantly explained by a higher prevalence of common mental disorders and differences in symptom levels. When we took into account these differences, the effects of ethnic background disappeared or changed into the opposite direction: after correction Moroccans had a lower perceived need for information, drugs, a referral to specialised mental health care, and for counselling. As such, the results seem partially supportive of the first hypothesis, i.e. that in case of similar mental morbidity or distress the perceived need for care is lower among non-Western (Moroccan) migrants. The results did however not support the hypothesis that in case of similar mental distress, needs of migrants were less often met than needs of ethnic Dutch. Notably, ethnic differences in perceived need and discordance could generally not be accounted for by the lower socioeconomic position of migrants, as inclusion of educational level and type of health insurance did not significantly improve any of our statistical models. An explanation could be that the socioeconomic position of migrants in our sample had a very unequal distribution. That is, by far most of the migrants had, according to our proxy measures, a low SES, making it difficult to investigate its role in relation to perceived need and discordance.

The results from Moroccan respondents fit in the more general impression that ethnic background is often related to differences in perceived need for regular mental health care [39]. Considering the minor role of socioeconomic factors in the present study, this could be related to the respondents' cultural background. For example, first-generation Moroccan migrants in the Netherlands can be considered conservative and traditional [47]. This is, among other factors, expressed in the importance that is attached to the extended family, often the foundation of Moroccan social life [26]. As is the case for many first-generation Moroccans, it is not uncommon for individuals with traditional backgrounds to have health beliefs that deviate from our Western biomedical models, characterised by a more external locus of control, and fatalistic beliefs [43]. Indeed, in traditional Moroccan culture, illness is primarily perceived as caused by factors outside the human body [26]. Consequently, Moroccan traditional healers play an important role in mental health care by removing evil sorcery and expelling evil spirits, even though psychiatry in Morocco is strongly rooted in Western medicine due to French colonisation [48]. Prior to this study we expected that similar explanations would result in comparable findings among Turkish, but this was not the case. We have no clear-

cut explanation for this, although we must acknowledge that both groups have somewhat different backgrounds [40]. For example, not only have popular concepts of mental illness in Morocco been influenced by Islam, the indigenous Berber population also played an important role [48]. Moreover, there are indications that Turkish and Moroccan migrants differ regarding their levels of acculturation in Dutch society [12, 37, 47]. Further research in this area is recommended.

This study has some limitations. Most importantly, the PNCQ was only administered to subjects who reported mental health problems to a probe question, based on the assumption that respondents who did not perceive a mental health problem could not perceive a need for mental health care either. It can nevertheless be argued that some respondents did not report mental health problems while in fact they did perceive them. However, additional analyses showed that only 4.8% of the respondents who reported no mental problems on the probe in fact had a CMD. This is extremely low compared to the 45.8% of CMD-cases among those who did report mental health problems in response to the probe. Moreover, when looking at separate ethnic groups, then ethnic differences in the prevalence of CMD among probe-negatives (3.3% for ethnic Dutch, 4.8% among Moroccans, and 7.9% for Turkish) were statistically non-significant (7.9%; $\chi^2 = 3.66$, $df = 2$, $P = 0.161$), suggesting that the probe did not disproportionately disadvantage migrants compared to ethnic Dutch. Secondly, it is not well known to what extent levels of discordance reflect true unmet need for care, as perceived discordance may have been the consequence of the mental condition of subjects. That is, anxiety and depression are both motivational disorders that often result in negative thinking about the received care. Thirdly, the migrant population in this study consisted mainly of first-generation migrants, i.e. migrants who were born in Turkey or Morocco. Consequently, the results can mainly be generalised to first generation migrants. Finally, the population-based character of this study precluded a focus on mental disorders with a low prevalence. Inclusion of psychotic disorders, for example, would have resulted in insufficient cases. Therefore, the results are based on the most common disorders, i.e. depressive and anxiety disorders.

Common disorders like depression and anxiety to a large extent affect quality of life on social and financial domains, while mental health services primarily focus on the mental problems [33]. This might explain why we found high (unmet) need for 'social interventions', defined as interventions "to help sort out housing or money problems" [30]. Although this result was not ethnicity-specific, previous studies in the Netherlands found a need for more collaboration between social work and mental health care for ethnic minority patients which has been acknowledged and

supported by health care professionals in the Netherlands [34]. Additionally, openings for interventions that aim to improve access to care for minorities might follow from our overview of barriers to care for patients who perceived discordance. For example, a lack of knowledge about where to find appropriate help (i.e. 'Ignorance') was for example one barrier mentioned quite often by both migrants and ethnic Dutch. The finding that the need for 'skills training' was very low in all three groups might be seen in this context, as the supposed lack of knowledge on where to find help may coexist with a supposed lack of knowledge about what is helpful in managing mental health problems in the first place. The latter might also (partially) explain the high level of pessimism about the value of mental health care among migrants. Considering that migrants in our sample generally had much lower levels of education as well, our results could be taken as a support for increasing efforts to educate (ethnic minority) patients in mental health care, in languages other than Dutch if necessary, about the potential benefits of seeking professional help in case of mental health problems [25, 52]. However, new questions arise as well. For example, what does it mean when respondents report 'non-response' as a barrier to care? Have they explicitly asked for help? And where did they ask for help? What was the (perceived) reason for denying respondents the help they requested? Future research should focus on questions like these. In addition, the results suggest a high level of self reliance, regardless of patients' ethnic background. This is supported by findings from other studies. For example, Sareen and colleagues [41] reported that "*I wanted to solve the problem on my own*" was among the most frequently mentioned barriers in surveys conducted in the United States, Ontario, and the Netherlands. As Sareen et al. [41] also notice, this finding tends to be counterintuitive, because respondents apparently did perceive a need for care but decided not to act on it. Without going into further detail about the mechanism underlying this finding, it is important to note that a barrier like self-reliance is probably less susceptible to interventions.

Conclusion

Perceived need for mental health care was considerably higher among Turkish migrants than among ethnic Dutch. Furthermore, the extent to which perceived needs were unmet was substantially higher among Turkish. These differences were largely in agreement with the higher burden of CMD among Turkish. Taking into account ethnic differences in burden of CMD, there was evidence to suggest that Moroccan migrants perceived less need for mental health care than ethnic Dutch. In all ethnic groups, self-reliance was most frequently mentioned as a

barrier to care. Pessimism about the effectiveness of mental health services and lack of knowledge of (Dutch) mental health care were important barriers to care that appear more specific to migrants, providing suitable entries for prevention strategies.

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