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Chapter 4

The influence of acculturation on mental health and specialized mental health care for non-western migrants

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ABSTRACT

Background: The level of acculturation of migrants varies and is associated with mental health. However, the association between acculturation, mental health and treatment effect is complex and may differ among migrant groups.

Aim: The aim of the current study is to explore the association between acculturation, mental health and treatment effect.

Methods: In a longitudinal cohort study of patients treated in specialized mental health facilities, different dimensions of acculturation (skills, social integration, traditions, norms/values and feelings of loss) were explored for Moroccan, Turkish and Surinamese migrants in the Netherlands. Furthermore, the associations between acculturation status and symptom levels, quality of life, care needs and effects of mental health treatment were examined. Data were analyzed with analysis of covariance, correlation analysis and multiple regression analysis.

Results: Acculturation status differed among migrant groups. Turkish migrants showed most cultural maintenance of the culture of origin (traditions, norms/values), Surinamese migrants showed most participation in Dutch society (skills, social integration), while Moroccan migrants were situated in between. Higher cultural adaptation was associated with less need for care, lower symptom levels and a higher quality of life. Participation significantly predicted lower symptom levels (p<.001) and higher quality of life (p<.001) six months after the start of treatment.

Conclusions: This study confirms that acculturation status affects symptom levels, quality of life, and perceived need for care of migrants. Moreover, participation in Dutch society appears to be a favorable factor for treatment effect. It is of importance for professionals in clinical practice to be attentive to this, especially for patients who are low on participation.

BACKGROUND

Acculturation can be defined as the way people adapt to living in a new cultural environment. People differ in the extent to which they adopt the new culture and preserve their culture of origin (Mooren et al., 2001). Acculturation can be conceptualised in different ways. Firstly, acculturation can be seen as a unidimensional construct, with more cultural adaptation indicating less cultural maintenance (Gordon, 1964; Ryder et al., 2000). Also, acculturation can be seen as a bidimensional construct, evaluating cultural adaptation and cultural maintenance as two relatively independent dimensions. By these two dimensions, according to the well-known theory of Berry, acculturation can be conceptualised in terms of four acculturation strategies; integration, separation, assimilation and marginalization (Berry & Sabatier, 2011). Levels of acculturation can vary over life domains. Therefore, it is of importance to investigate these domains, or aspects, of acculturation (Arends-Tóth et al., 2006). Domains of acculturation can be subdivided into participation in the new society (skills, social integration) and cultural maintenance of the culture of origin (traditions, norms/values). In addition, an important aspect of acculturation pertains to feelings of loss regarding the country of origin (Mooren et al., 2001). In the current study we analyze these aspects of acculturation, thereby viewing acculturation as a multidimensional construct.

Acculturation status has been associated with mental health, but research has shown considerable heterogeneity for this relationship (Yoon et al., 2011; Koneru et al., 2007). One meta-analysis, including both population and clinical studies (Yoon et al., 2011), showed a trend for higher cultural adaptation to be associated with less psychological distress and depression. According to a review of the literature, including mainly population studies (Koneru et al., 2007), participating in the new society while maintaining the culture of origin is associated with less mental health symptoms in comparison with other acculturation strategies. A population study from Nguyen (2011) showed that elder Asian immigrants with poor English proficiency were three times more likely to perceive a mental health need. Studies on the association between cultural adaptation and quality of life showed inconsistent findings, as one clinical study showed a positive link (Thoman & Suris, 2004), another clinical study showed a negative link (Yang & Wang, 2011) and a population study found no association at all (Lieber et al., 2001). Research on acculturation related to treatment outcome showed no significant associations (Pan et al., 2011; Santiago-Rivera et al., 2011; Gamst et al., 2002).

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Every western country has different major ethnic minority or migrant groups. Processes of acculturation differ across migrants and are influenced by factors such as the reason for migration, migration history and host-country migration regulations. In the Netherlands there are about 2 million non-western immigrants within a total population of 17 million inhabitants. Moroccan, Turkish and Surinamese migrants form the three largest groups (Centraal Bureau voor de Statistiek, 2013). Labor migration from Turkey and Morocco started during the 1960s, when western Europe's economy required labourers, especially for unskilled labor. Since the 1970s Surinamese migrants arrived in the Netherlands as well, because of unfavourable economic circumstances in Surinam. As Surinam is a former Dutch colony, most of these migrants master the Dutch language (Fassaert, 2011). According to research in the general population, Surinamese migrants show the highest degree of cultural adaptation, followed by Moroccan migrants and then by Turkish migrants (Kamperman et al., 2003). For these groups the association of acculturation and mental health has been studied (Kamperman, et al., 2003, 2007; Fassaert et al., 2011). Population studies of Kamperman et al. (2003, 2007) showed that having more feelings of loss (regarding to the country of origin) as well as less preservation of traditions was related to more psychiatric problems. In research among Turkish and Moroccan migrants in the general population Fassaert et al. (2011) found that having less practical skills for Dutch society was associated with more psychological distress.

As acculturation status seems to be a relevant factor in mental health of non-western migrants, more research is needed to explore the details of this relationship. The aim of the current study is to explore the association of acculturation with symptom levels, quality of life, perceived need for care and treatment effect. We hypothesize that:

- More participation (skills, social integration), more cultural maintenance (traditions, norms/values) and less feelings of loss are associated with lower symptom levels, less specific symptoms, higher quality of life and lower perceived need for care at the start of treatment.
- Symptom level and quality of life after six months of treatment are most strongly predicted by respectively symptom level and quality of life at the start of treatment, but also by acculturation status.
- Surinamese migrants show the highest level of cultural adaptation (most skills, highest social integration, least traditions, least norms/values, least feelings of loss), Turkish migrants the lowest, and Moroccan migrants are positioned in the middle.

METHODS

Design

The Monitor Study was a large naturalistic longitudinal cohort study, conducted at three outpatient clinics of PuntP of Arkin Mental Health Care in Amsterdam (Cuijpers et al., 2007; Eurelings-Bontekoe et al., 2012). The data were collected from 2005 to 2009 during the regular intake procedure. Patients were asked to complete a series of self-report questionnaires in Dutch, in the context of routine outcome monitoring (ROM), the monitoring of progress in treatment. Conform to current Dutch legal requirements, they were informed that the anonymised data might be used for scientific research and were given the option to disagree. If they did not agree, the data were not used. Because our study solely contains data of routine outcome monitoring, no other procedures were required. Measurements were planned prior to the intake (T_0) and 6 months after the start of treatment (T_1).

Participants

A total of 5,010 participants were included in the Monitor Study. From 4,309 patients the cultural origin was known. Because the ROM-procedure is an obligatory part of treatment, most of these patients completed at least some of the questionnaires. For the current study data were extracted from all Surinamese (N=212), Moroccan (N=328) and Turkish (N=197) patients. Of these patients 77 percent were first generation migrants and 23 percent were second generation migrants. Patients were excluded if they showed insufficient Dutch language skills. Ethnicity was determined by the country of birth of (one of) the participants parents. If both parents were born abroad, the origin of the mother was determinative.

Measurements

Lowlands Acculturation Scale (LAS; Mooren et al., 2001): The LAS is a well-validated self-report questionnaire that has been applied among diverse migrant populations in the Netherlands, in various settings (Drogendijk et al., 2012; Fassaert et al., 2011; Kamperman et al., 2003, 2007; Knipscheer & Kleber, 2006, 2007). This questionnaire consists of 25 items, forming five subscales: skills (e.g. 'I have difficulties understanding the Dutch language'),

traditions (e.g. 'I find it important to pass on our traditions to my (future) children'), social integration (e.g. 'I have plenty of contact with Dutch people'), norms/values ('I believe that Dutch law is too lenient on criminals') and loss ('I belong here less than in Turkey/Morocco/Surinam'). Together the subscales give a total score of acculturation or cultural adaptation. Also, the subscales make up the concepts of participation (skills, social integration) and cultural maintenance (traditions, norms/values). In this study we used a slightly adapted version of the LAS, consisting of 27 items. Scales analysis showed that Cronbach's alpha's were 0.85 (skills), 0.76 (traditions), 0.67 (social integration), 0.67 (norms/values) and 0.84 (loss). Although 0.70 is generally considered the minimal acceptable alpha value, in exploratory research it is allowed to be as low as 0.60 (Nunnally, 1978). Therefore, no items or subscales were excluded from further analyses. Higher sum scores indicated less skills for the new society, more social integration, more maintenance of heritage culture (e.g. traditions, norms/values) and more feelings of loss.

Dutch shortened version of the Patient Request Form (PBV; Veeninga & Hafkenscheid, 2002, 2004): A self-report questionnaire measuring medical/passive and psychological needs for care, such as problem clarification, advice and control. Scales analysis showed Cronbach's alpha's of 0.85 (psychological needs) and 0.76 (medical/passive needs). Validity appears to be sufficient (Methorst & Spinhoven, 1992; Veeninga & Hafkenscheid, 2002). There is no research available on the ethnic validity of the PBV.

Brief Symptom Inventory (BSI; Derogatis & Melisaratos, 1983): A self-report questionnaire on severity of mental health symptoms, a shortened version of the Symptom Checklist 90 (SCL-90; Arrindell et al., 2006). Scales analysis showed Cronbach's alpha's of 0.88 (somatization T_0), 0.93 (somatization T_1), 0.85 (depression T_0), 0.92 (depression T_1), 0.85 (anxiety T_0), 0.92 (anxiety T_1), 0.84 (obsession-compulsion T_0), 0.91 (obsession-compulsion T_1), 0.85 (interpersonal sensitivity T_0), 0.92 (interpersonal sensitivity T_1), 0.85 (hostility T_0), 0.92 (hostility T_1), 0.83 (phobic anxiety T_0), 0.88 (phobic anxiety T_1), 0.83 (paranoid ideation T_0), 0.89 (paranoid ideation T_1), 0.76 (psychoticism T_0), 0.87 (psychoticism T_1), 0.64 (remaining 4 BSI items T_0), 0.83 (remaining 4 BSI items T_1). Cross-ethnic construct validity of the BSI subscales was shown to be sufficient by Hoe and Brekke (2009). For this study we analyzed BSI total scores and subscale scores for somatization, anxiety and depression.

EuroQOL Questionnaire-5 day (EQ-5D; Brooks & EuroQol Group, 1996): A self-report questionnaire on health-related quality of life. The EQ-5D comprises of five items measuring five dimensions of health: mobility, self-care, usual activities, pain/discomfort

and anxiety/depression. Furthermore, the current health state can be scored on a visual analogue scale of 0 to 100. For this article only the score on current health state was used. A higher score indicates a better overall health state. There is evidence for validity across ethnic groups (Lubetkin et al., 2004; Luo et al., 2003).

Statistical analyses

To compare the characteristics of the three ethnic groups we used a chi-square test to compare gender, a Kruskal-Wallis test to compare age (this non-parametric test was used, because the assumption of equality of variances was violated for these groups), and ANCOVA to compare the acculturation level. Because we found significant differences between cultural groups in age and gender, these variables were added to the analyses as covariates. In case the assumption of equal variance was violated, a Kruskal-Wallis test was used in addition to ANCOVA. In all these cases the results of ANCOVA were confirmed by the Kruskal Wallis test. For an exploratory analysis of the association of acculturation with need for care, symptom level, specific symptoms and quality of life at baseline (T_0), Pearson correlation coefficients were calculated. Because of the large number of variables in this correlation analysis, Bonferroni correction ($\alpha / 4$) was applied. For the prediction of symptom level and quality of life 6 months after the start of treatment (T_1) multiple regression analysis with backward selection was used. Symptom level or quality of life at T_0 and the number of therapy contacts in the first 6 months of treatment were added as covariates to control for their effect. Participation and cultural maintenance were included as predictor variables. Because of small sample sizes at T_1, regression analysis was performed for cultural groups together (see Flowchart 4.1). The analyses were performed with SPSS, version 16.0.

RESULTS

Patient characteristics

Characteristics of the three cultural groups are described in Table 4.1. Cultural groups differed significantly with regard to age and gender. For more than half of the migrants, the main treatment diagnosis was either depression or an anxiety disorder.
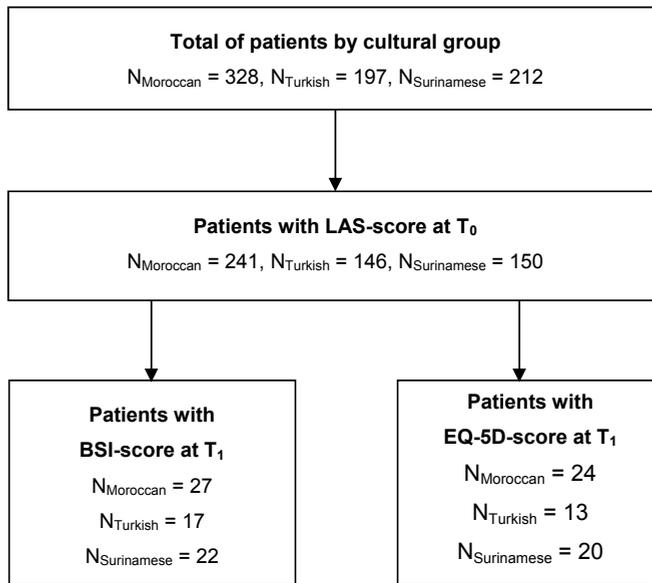
Figure 4.1   Flowchart.

Table 4.1   Demographic characteristics by cultural group

	Moroccan migrants	Turkish migrants	Surinamese migrants	χ^2 (df, N)
N patients	328	197	212	
Median age	35	37	40	14.55* (2, N=736)
Range age	39	41	44	
Gender (% female)	48.8	60.4	70.6	25.72** (2, N=736)
Main treatment diagnosis depression (%)	39.6	42.6	34.4	
Main treatment diagnosis anxiety (%)	18.3	16.3	12.2	
Main treatment diagnosis other (%)	42.1	41.1	53.4	

* $p<.01$, ** $p<.001$

Acculturation status

Analysis of covariance showed significant differences between cultural groups in scores on all subscales of acculturation (Table 4.2). Surinamese migrants showed the most skills and highest social integration, followed by Moroccan migrants. Turkish migrants showed the least skills and lowest social integration. Turkish migrants showed most traditions and

Table 4.2   Differences in acculturation between cultural groups

Migrants total	Moroccan (N=241)	Turkish (N=146)	Surinamese (N=150)		
	M (SD)	M (SD)	M (SD)	F (df)	η_p^2
Skills	2.43 (1.32)	2.79 (1.35)	1.85 (1.15)	27.92*** (2, 500)	.10
Traditions	4.01 (1.28)	4.27 (1.34)	3.24 (1.33)	28.60*** (2, 518)	.10
Social integration	3.99 (1.12)	3.68 (1.05)	4.08 (1.22)	5.35** (2, 523)	.02
Norms/values	3.14 (1.04)	3.46 (1.05)	3.36 (1.17)	4.16* (2, 488)	.02
Loss	3.07 (1.27)	3.54 (1.34)	2.79 (1.36)	15.33*** (2, 490)	.06

* $p<.05$, ** $p<.01$, *** $p<.001$

feelings of loss, followed by Moroccan migrants. Surinamese migrants showed the least traditions and feelings of loss. Turkish migrants showed most norms and values, followed by Surinamese migrants, least norms and values were shown by Moroccan migrants.

Correlations of acculturation with symptom levels, quality of life and perceived need for care

Exploratory correlation analysis showed significant correlations between aspects of acculturation and symptom level, specific symptoms, quality of life and perceived need for care (Table 4.3). For the total migrant group having more skills and higher social integration was associated with a lower total symptom level and lower levels of somatization, depression and anxiety. More preservation of traditions was associated with a higher total symptom level and higher levels of somatization and anxiety. More feelings of loss were associated with a higher total symptom level and higher levels of somatization, depression and anxiety. Some of these associations also appeared for Moroccan, Turkish and Surinamese migrants as separate groups.

Regarding the total migrant group, having more skills was associated with a higher quality of life. This association of skills with quality of life was only replicated for Moroccan migrants. For the total group, having more skills was associated with lower medical/ passive care needs. More preservation of traditions, more norms/values and more feelings of loss were associated with higher medical/passive care needs. Most of these associations also appeared for Moroccan and Turkish migrants in particular, while none appeared for Surinamese migrants.

Table 4.3   Correlations of acculturation with symptom levels, quality of life and perceived need for care

	BSI total	BSI somatic	BSI depression	BSI anxiety	EQ-5D quality of life	PBV medical/ passive	PBV psycho-logical
Migrants total (N=519)							
Skills	.28**	.21**	.24**	.22**	-.18**	.20**	.01
Traditions	.15**	.17**	.06	.12*	-.09	.12*	-.02
Norms/values	.10	.06	.06	.09	-.06	.17**	.08
Social integration	-.20**	-.11*	-.17**	-.12*	.10	-.07	.08
Loss	.24**	.22**	.17**	.15**	-.12	.19**	.04
Moroccan (N=238)							
Skills	.24**	.14	.17	.19*	-.21*	.23**	.03
Traditions	.07	.15	-.03	.12	.05	.07	.02
Norms/values	.10	.06	.07	.16	-.05	.19*	.12
Social integration	-.20*	-.09	-.11	-.09	.13	-.06	.10
Loss	.19*	.18*	.05	.19*	-.13	.17	.10
Turkish (N=143)							
Skills	.32**	.30**	.32**	.30**	-.09	.23*	.18
Traditions	.12	.12	.07	.03	-.10	.09	.09
Norms/values	.20	.11	.15	.16	-.14	.30**	.18
Social integration	-.27**	-.18	-.22*	-.22*	.13	-.16	-.02
Loss	.23*	.21	.28**	.13	.01	.27*	.14
Surinamese (N=147)							
Skills	.17	.12	.15	.11	-.02	.06	-.10
Traditions	.13	.08	-.02	.10	-.08	.16	-.12
Norms/values	.06	.07	.00	-.02	-.04	.10	-.01
Social integration	-.12	-.04	-.17	-.06	-.03	.02	.07
Loss	.26**	.21	.16	.11	-.08	.17	-.03

* $p < .0125$, ** $p < .0025$

Predictors of symptom level and quality of life on T_1

For the prediction of symptom level and quality of life 6 months after the start of treatment (T_1) multiple regression analysis with backward selection was used. Participation and cultural maintenance were included as predictor variables. Symptom level or quality of life at T_0 and the number of therapy contacts in the first 6 months of treatment were added as covariates to control for their effect.

Participation appeared to be a significant predictor of symptom level and quality of life at T_1 (Table 4.4 and 4.5). Table 4.4 shows that model 3 remained with two significant predictors for symptom level at T_1. Model 3 is a significant model and accounts for 70

Table 4.4   Prediction of symptom level (β-values)

	Model 3
Total score BSI T_0	.68*
Participation	-.32*
Cultural maintenance	
Number of therapy contacts (in 6 months)	
Adjusted R^2	.70
F (df)	78.82 (2, 64)
p	<.001

N=67, * p<.001

Table 4.5   Prediction of quality of life (β-values)

	Model 3
Health state Euroqol T_0	.33*
Participation	.53**
Cultural maintenance	
Number of therapy contacts (in 6 months)	
Adjusted R^2	.37
F (df)	17.97 (2, 55)
p	<.001

N=58, * p<.01, ** p<.001

percent of variance. Symptom level at T_0 appeared to be the best predictor, in addition participation has predictive value. More participation predicts a lower symptom level at T_1.

Table 4.5 shows that model 3 remained with two significant predictors for quality of life at T_1. Model 3 is a significant model and accounts for 37 percent of the variance. Participation appeared to be the best predictor, in addition quality of life at T_0 has predictive value. More participation predicts a higher quality of life at T_1.

DISCUSSION

This article focused on describing the acculturation status of Surinamese, Turkish and Moroccan patients in secondary care and especially on exploring the association of acculturation with symptom levels, quality of life, perceived need for care and treatment effect.

Differences in acculturation status

Regarding differences in acculturation between migrant groups, in accordance with expectations Turkish patients showed the highest cultural maintenance (traditions, norms and values) and the most feelings of loss. In line with expectations, patients of Surinamese descent showed most participation in Dutch society, i.e. highest skills and social integration. Moroccan patients were situated in between as regards their level of cultural maintenance and participation. These findings are similar to previous research in the general population (Kamperman et al., 2003) and may be explained by the fact that Surinamese migrants come from a culture with a history of Dutch colonization (Niekerk, 2000). Subsequently, the current social climate towards Islam may play a role. Perceived discrimination can lead to a reduced orientation on the larger society (Berry, 2006; Berry et al., 2006; Berry & Sabatier, 2011). The difference between Turkish and Moroccan migrants can be explained by the finding that Turkish migrants are, more than Moroccan migrants, oriented to their own group. Also, Turkish migrants appear to be less fluent in the Dutch language (Phalet & Haker, 2004; Te Riele et al., 2012).

Symptom levels, quality of life and perceived need for care

According to exploratory analyses, acculturation status was associated with symptom levels, quality of life and perceived need for care. In line with expectations, more skills, higher social integration and less feelings of loss were associated with lower symptom levels. Having more skills was associated with a higher quality of life. This is consistent with previous studies in the general population (Kamperman et al., 2003, 2007; Fassaert et al., 2011). Knipscheer (2000) described that processes of migration and change of culture have an impact on mental health and wellbeing. Skills and social integration are necessary to successfully adapt and feel part of this society (Fassaert et al., 2011). Also, certain migrants might have a personality structure more vulnerable to developing mental health problems than others. These migrants in particular might experience problems in adapting to a new society, which may invoke or increase psychological symptoms (Knipscheer & Kleber, 1998). The outcomes are in line with a recent population study among Arab Americans (Jadalla & Lee, 2012), which indicated higher attraction to American culture to be associated with better mental health. In this study no relationship was found between attraction to Arabic culture and mental health.

Regarding cultural maintenance the findings do not correspond to our expectations. More cultural maintenance (traditions) appeared to be correlated with more symptoms and showed no connection with quality of life. This contrasts with population studies of Fassaert et al. (2011) and Kamperman et al. (2003, 2007), which showed that more maintenance of traditions was associated with less psychological distress and fewer psychiatric problems. For our patient sample, participation appeared to be negatively associated with cultural maintenance and feelings of loss. We hypothesize that healthy migrants are capable of maintaining their culture of origin and successfully adapting to the new society as well, while vulnerable migrants or patients are not. This might explain the difference in findings between the current study and population studies.

For perceived need for care, it appeared that having more skills is associated with lower medical/passive care needs. Migrants with more skills may be better able to take an active approach towards problems instead of consulting a doctor, which would entail a more medical/passive care need. More maintenance of traditions, more preservation of norms/values and more feelings of loss were associated with higher medical/passive care needs. This could be explained by the fact that in non-western cultures a more authoritarian or paternalistic form of care is usual (Van Mens-Verhulst & Bekker, 2005; Kortmann, 2006). Feelings of loss are associated with more psychological and somatic complaints, which might explain the association with higher needs for care. There appears to be no relation between social integration and medical/passive care needs, neither between acculturation and psychological care needs. Because of small variation in scores on psychological care needs, it may have been impossible to show a link with acculturation.

Some of the beforementioned associations did not reach significance for the specific cultural groups separately, although some effect sizes were similar. This is most probably due to the smaller sample sizes of the subgroups. Significant results mainly showed for Moroccan and Turkish patients. Moroccan and Turkish migrants differ more from western culture than Surinamese migrants do, so smaller samples are needed to show significant effects.

Treatment effect

For the prediction of symptom level and quality of life six months after the start of treatment, participation appeared to be of importance. More participation predicted a lower symptom level and higher quality of life. Participation seems to be a favorable

factor specifically for treatment effect, possibly by facilitating communication and therapy commitment. Patients who are more adapted to the new society might be more involved in treatment goals and may receive more qualitative treatment from their therapist.

Strengths and limitations

The strength of the present study lies in the focus on acculturation status. For several aspects in the field of mental health care the association with acculturation was studied. A limitation of the study is that while most of the participants were first generation migrants, measurements were conducted only in Dutch. Participants were excluded if they showed insufficient Dutch language skills. Another limitation is that most analyses were cross-sectional. With regard to the longitudinal analyses, a limitation is that only a small number of participant data was available, so only the migrant group as a whole was analyzed. However, studies with these migrant groups, that have been shown a difficult group to recruit in scientific research (Stevens et al., 2005), are of true importance. Especially longitudinal analyses with these groups are scarce. In despite of small sample sizes, several significant associations were shown by our study. Some insignificant but relevant effect sizes were shown in the correlation analysis of acculturation with symptom levels, quality of life and perceived need for care, which could be interesting for further research. The Dutch policy of measuring progress in treatment (ROM) gives an opportunity to evaluate the course of symptoms and therapy results. This study sheds some light on the possibility of using these data for scientific research purposes. Specifically, using the Lowlands Acculturation Scale creates an opportunity to evaluate the acculturation of migrants and use this for the therapy process.

Conclusions

The present study suggests that acculturation status influences symptom levels, quality of life and care needs of migrants. Moreover, participation appears to be a predictor for treatment effect. It is of importance for professionals in clinical practice to be attentive to this, especially for patients who are low on participation. For therapy purposes, a cultural interview such as the Cultural Formulation Interview (American Psychiatric Association, 2013) could be used to evaluate acculturation status of the patient and discuss any differences or problems the patient or therapist experiences. For future research, it would be interesting to analyze the interdependence of aspects of acculturation, mental health

and care in line with the already existing model of Kamperman et al. (2007). Nevertheless, directions of causality still remain unclear. A problematic acculturation process might provoke mental health problems. On the other hand, for migrants with mental health problems it might be very difficult to successfully adapt to a new society. Furthermore, there might be other factors influencing both the acculturation process and mental health of migrants, such as the reason for migration. Extensive longitudinal research might give more insight into the complex processes of acculturation.

Acknowledgements

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