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CHAPTER 4

Ethnic differences in DSM– classifications in youth mental health care practice

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Abstract

In community Youth Mental Health Care (YMHC) patients are mostly diagnosed according to the clinical judgment of professionals. Because validated instruments are hardly used, this process may be influenced by other factors than the diagnostic criteria, such as the ethnic background of the patient. The goal of our study was to assess differences between ethnic groups in the received clinical diagnoses. The sample consisted of children (n = 1940) and adolescents (n = 2484) admitted to a Dutch YMHC center. Ethnic background was specified based on the country of birth of the parents. Odds ratios on clinical diagnoses for ethnic minority patients were calculated with the native patients as reference. The results showed that native patients more often received specific psychiatric disorders and co-morbid diagnoses on axis I, while ethnic minority children more often received V-codes only, indicating that there was insufficient information to determine a psychiatric disorder. We therefore assume that it is harder to recognise psychiatric disorders when ethnic minority patients are diagnosed. This could imply that immigrant children and adolescents are not adequately treated for their disorders in YMHC. We recommend that YMHC professionals should reflect on the potential biasing effect of the patient's ethnic background in diagnostic procedures.

Keywords: ethnic minorities; youth mental health care; DSM-classifications; psychiatric diagnoses.

Introduction

In community youth mental health settings, diagnoses are usually made through unstructured interviews, in which clinicians gather diagnostic information from clients and/or family members (Anderson & Paulosky, 2004; Jensen-Doss & Weisz, 2008). Indeed, several surveys indicate that the unstructured clinical interview is the assessment method used most often by clinicians in the practice of Youth Mental Health Care (YMHC), and reliable and validated instruments are rarely used (Cashel, 2002; Zayas et al., 2005). Some studies suggest that because of this practice clinicians are susceptible to several information-gathering biases that will influence the diagnostic process, such as seeking information to confirm the diagnosis while ignoring conflicting information, and making decisions based on assumptions about gender, ethnicity or age (Garb, 2005; Torres et al., 2007; Zayas et al., 2005). In addition, if clinicians are under time pressure because they have to see many patients, as is often the case in clinical practice, ethnic stereotypes are more likely to influence their decisions (Burgess, Fu, & Van Ryn, 2004; Muroff, 2005).

It is widely assumed that migration and migration related processes affect the mental health of both children and adults (Barrett, Turner, & Sonderegger, 2000; Guarnaccia & Lopez, 1998). For instance, the migration process causes stress because it entails loss of family and surrounding, and migrants have to adapt to a new cultural environment. Children who did not migrate themselves may suffer indirectly, because they receive inadequate support from their parents who are preoccupied with their own migration stress (Hicks, Lalonde, & Pepler, 1993). Also, migrant populations often have a minority position in their host country and a weak social position which may adversely affect mental health (Garcia Coll et al., 1996). On the other hand, researchers have suggested that migrant youth may be at a decreased risk of mental health because there often is a coherent and supportive family culture within migrant families which protects them against the development of mental health problems (Harker, 2001). Indeed, a review on the prevalence of mental health disorders in migrant children showed that their was no unequivocally confirmation that migrant youth were at a higher risk of mental health problems than native Dutch youth (G. W. J. M. Stevens & Vollebergh, 2008). However, there is no clear evidence that migrant youth have a lower risk of mental health problems either. Therefore it is concluded that the prevalence of psychiatric disorders is at least as high among ethnic minority youth as among ethnic majority youth.

Several studies show that psychiatric disorders are under-diagnosed with ethnic minority youth. A substantial part of this under-diagnosing can be attributed to the influence of ethnic stereotyping when professionals have to judge children from ethnic minority groups (Begeer et al., 2009; Kreps, 2006; Martin, 1993; Reijneveld et al., 2005; Van Ryn & Fu, 2003; Zwirs et al., 2006a). Indeed, a number of studies have shown that observers assign different meanings to the same behaviour depending on the race, class, or other demographic characteristics of the individual involved (Snowden, 2004; Van Ryn & Fu, 2003). For instance, in one study with a group of children that scored within the clinical range of an emotional and behavioural problem self-rating questionnaire, mental health care professionals recognized psychiatric problems among 9,4% of the ethnic minority children and among 21,4% of the native Dutch children (Reijneveld et al., 2005). Also, paediatricians more often referred to autism when judging clinical vignettes of European majority cases (Dutch) compared to vignettes including non-European minority cases (Moroccan of Turkish) (Begeer et al., 2009). The researchers concluded that the use of structured instruments, instead of giving diagnoses according to clinical judgment, may decrease the likelihood of ethnic bias in diagnostic decisions of autism. Likewise, in another study one group of psychotherapists was presented with a scenario involving a White adolescent, and a second group of psychotherapists was presented with a scenario involving a Black adolescent. Overall, the behaviours of the Black adolescent were rated as less clinically significant as the behaviours of the White adolescent (Martin, 1993). Also, it was shown that for more than two decades, African Americans had higher than expected rates of diagnosed schizophrenia and lower rates of diagnosed affective disorders, which might be attributed to clinicians being ethnically biased in routine practice and African Americans presenting their symptoms to clinicians in a different way than White Americans (Baker & Bell, 1999; Trierweiler et al., 2000). Several other studies have indicated that diagnoses generated through the use of (cross-culturally) validated diagnostic instruments, conducted in accordance with standard rules for information gathering, are more valid than are clinician-generated diagnoses (Aklin & Turner, 2006; Basco et al., 2000). In addition, diagnostic accuracy (an agreement between diagnoses generated by the clinician or by validated instruments) predicted better therapy engagement, and a decreased likelihood of therapy dropout (Jensen-Doss & Weisz, 2008).

As a consequence of potential misdiagnoses, ethnic minority youth might not receive the right treatment for their disorders, affecting the outcome of treatment. (Jensen-Doss & Weisz, 2008). Children with untreated disorders are likely to grow up as adults who may have to rely on

mental health services and this has negative consequences for the individuals, their surroundings and society (Belfer, 2008; Dulmus & Wodarski, 1996; Kazdin, Mazurick, & Siegel, 1994; Kazdin & Wassell, 1998; Reis & Brown, 1999). Compared to children who do receive treatment, children with untreated behavioural problems are more likely to leave school without a qualification, to engage in delinquent activities, to abuse drugs and alcohol, and to become unemployed (Lochman & Salekin, 2003; Moffitt et al., 2002). It is therefore important that the disorder is correctly recognized in order to increase a successful outcome of treatment.

To our knowledge, thus far no studies have focused on the impact of the ethnic background of youth mental health care patients on the diagnoses they receive. Our goal was therefore to assess differences between ethnic groups in received diagnoses (i.e., DSM classifications) by professionals in a YMHC practice where patients are diagnosed according to the clinical judgment of the professional and allocated to the categories of the Diagnostic and Statistical Manual of Mental Disorders IV-TR (APA, 2000). Specifically, our goal was to focus on whether the patients received V-codes only. V-codes in the DSM-IV-TR indicate other conditions than a psychiatric disorder that may be a focus of clinical attention (APA, 2000). V-codes should only be used as the main diagnoses when insufficient information is available to know whether or not a presenting problem is attributable to a psychiatric disorder (APA, 2000). We were interested if this situation would occur more for ethnic minority than for majority youth, because the studies described above indicate that psychiatric disorders are less often recognized within ethnic minorities. The study was performed in a YMHC institution with no standard diagnostic procedure of (cross-culturally) validated instruments. Our main research question was whether there were ethnic differences in the assigned DSM classifications (i.e., only V-codes versus one or more psychiatric disorder(s)) by clinicians in YMHC practice? We hereby analyzed differences between native Dutch and ethnic minority groups (all patients with ethnic backgrounds other than Dutch were seen as ethnic minorities), and we analyzed differences between the various ethnic groups (all specific ethnic backgrounds were taken into account).

Design

Population

The study was conducted in a youth mental health care center (i.e., "De Jutters") that covers almost all youth mental health care of The Hague (one of the three main cities of The

Netherlands) and its surroundings. Within this institution, patients aged 0-23 can be treated on ambulatory, clinical, or day-care basis. For this study, the ambulatory settings (including a specific intercultural setting), and the clinics and day-care clinics were taken into account. In 2009, a total of 5033 patients (5-19 years) were treated at "De Jutters". All of the patients that were in care at "De Jutters" in 2009 were taken into account in our study, some of the patients were already in treatment several years by then and others just started treatment in 2009. The patients were all treated by highly skilled professionals: psychologists, psychotherapists, and psychiatrists. The ethnic background of the patients was drawn from the registration system of De Jutters. Upon arrival, the secretary of the particular department asked the parents (for patients up to 16 years) and the patients (from the age of 12) whether they gave permission for the regular demographic information to be used anonymously in scientific research. Patients and their parents were informed that the goal of this research was to improve the quality of the services of the institution.

Following the guidelines of the Dutch government, ethnic background was specified as follows: if the country of birth of both parents was the Netherlands (regardless of the country of birth of the child), the child was seen as native Dutch. If one at least one parent was born abroad, the child was seen as an ethnic minority. A division in the largest minority groups (more than one percent of the total population of the area) was made. This resulted in the following seven ethnic minority groups: Surinamese, Turkish, Antillean, Moroccan, "Other African countries", "Other non-native western" and "Other non-native non-western". European countries (except Turkey), North-America, Oceania, Japan, Indonesia and the Asian part of the former USSR were considered as western countries. Turkey, Africa, Latin America and the rest of Asia were considered as non-western countries. The ethnic background for patients at De Jutters was known for 87,9% of the patients (n = 4424). Among these 4424 patients in our study, 1940 were children (5-10 years, 1404 male and 536 female) and 2484 were adolescents (11-19 years, 1200 male and 1284 female). All of these patients or their parents signed the formerly described consent form. The children whose ethnic background was not known and who did not participate in the study did not differ significantly on socio-demographic variables (data available on request).

Assessment and diagnoses

Before treatment began, psychiatric assessment was done by the treating psychologists, psychotherapists, or psychiatrists. Based on information by the patient, their parents and the referring institution, a descriptive diagnosis was made. Patients were classified according to the Diagnostic and Statistical Manual of Mental Disorders IV-TR (APA, 2000) and entered in the registration system of De Jutters. The DSM is organized into a five-part axis system, with the first axis incorporating clinical disorders and the second covering personality disorders and intellectual disabilities. The remaining axes cover related medical, psychosocial and environmental factors, as well as assessments of functioning for children. For the purposes of this study we concentrated on the psychiatric axes (axis I and II). A maximum of five different classifications on axis I were given. Because it is not recommended to diagnose personality disorders before adulthood, axis II classifications (personality disorders) were not given. Therefore, only the axis I disorders were involved in this study.

The axis I classifications were grouped in several categories. If only V-codes were given, the patient was grouped in the category 'Only V-codes'. 'Only V-codes' indicates that no classification of a psychiatric disorder was registered, but instead problems such as 'relational or communication problems between child and parent' or 'other social/environmental problems' were identified as the main reason to receive therapy. Patients that were diagnosed with one or more psychiatric disorders, were divided in the category 'One or more psychiatric disorders on Axis I'. Within this last category, a subcategory of patients with more than one psychiatric disorder (i.e., comorbid disorders) were identified, the category 'Comorbidity'.

Statistical Analyses

Odds ratios on psychiatric diagnoses made by clinicians for the ethnic minority group were calculated with native Dutch youth as the reference group. Also, odds ratios on psychiatric diagnoses made by clinicians for the seven ethnic minority groups were calculated with the Dutch group as the reference group. The analyses were performed for the different classifications grouped in the categories: 'Only V-codes', 'One or more psychiatric disorders on Axis I', and 'Comorbidity'. The analyses were done separately for children and adolescents, and for males and females.

Results

Children

For both boys and girls, the likelihood to be classified with only V-codes was significantly higher for ethnic minorities than for Dutch natives (ethnic minority boys: O.R. = 2.7, C.I. 95% = 1.84 -4.09; ethnic minority girls: O.R. = 2.1, C.I. 95% = 1.26 - 3.54). The likelihood to be classified with an Axis I disorder (OR = 0.6, C.I. 95% = 0.42 - 0.76) or comorbid disorders (OR = 0.6, C.I. 95% = 0.39 - 0.79) was significantly lower for ethnic minority boys than for native Dutch boys. For ethnic minority girls the likelihood to be classified with a psychiatric disorder on Axis I was almost equal to native Dutch girls (OR = 0.8, C.I. 95% = 0.50 - 1.13), but for comorbid disorders the likelihood was significantly lower (OR = 0.4, C.I. 95% = 0.16 - 0.80).

Table 1 specifies these results for the different ethnic minority groups with the Dutch group as the reference group. Surinamese, Turkish and other non-western boys, had a significant higher likelihood to be classified with only V-codes compared to native Dutch boys. Also, the likelihood to be classified with a psychiatric disorder on Axis I was significantly lower for these Surinamese, Turkish and other non-western boys compared to native Dutch boys. In addition, Surinamese boys were significantly less likely to be classified with comorbid disorders compared to native Dutch boys.

Only Surinamese girls had a significant higher likelihood to be classified with only V-codes compared to native Dutch girls. The odds ratios for the likelihood for ethnic minority girls compared to native Dutch girls to be classified with a psychiatric disorder on Axis I or with comorbid disorders were not significant.

Adolescents

For male adolescents, the likelihood to be classified with only V-codes was significantly higher for ethnic minorities than for Dutch natives (O.R. = 2.3, C.I. 95% = 1.50 - 3.42). The likelihood to be classified with a psychiatric disorder on Axis I (OR = 0.8, C.I. 95% = 0.59 - 1.03) or comorbid disorders (OR = 0.7, C.I. 95% = 0.44 - 1.08) was almost equal or somewhat lower (not significant).

For female adolescents, the likelihood to be classified with only V-codes was significantly higher for ethnic minorities than for Dutch natives (O.R. = 1.7, C.I. 95% = 1.28 - 2.34). The likelihood to be classified with a psychiatric disorder on Axis I (OR = 0.6, C.I. 95% = 0.45 - 0.73) and with comorbid disorders (OR = 0.3, C.I. 95% = 0.20 - 0.52) was significantly lower.

	Only	V-codes		r more		morbidity
			psychi	atric disorder(s)		
Ethnic background	OR	C.I. (95%)	OR	C.I. (95%)	OR	C.I. (95%)
Male children (N)						
Surinamese (106)	5.8*	3.36 - 9.82	0.3*	0.22 - 0.54	0.2*	0.10 - 0.65
Turkish (81)	3.2*	1.64 - 6.39	0.6*	0.32 - 0.98	0.6	0.27 - 1.22
Moroccan (67)	0.6	0.14 - 2.41	1.8	0.72 - 4.67	0.5	0.22 - 1.22
Antillean and Aruban (40)	2.1	0.71 - 6.05	0.6	0.27 - 1.32	0.3	0.07 - 1.16
Other African (41)	1.0	0.22 - 4.07	0.9	0.36 - 2.10	1.5	0.69 - 3.17
Other western (92)	1.8	0.81 - 3.88	0.8	0.42 - 1.37	1.2	0.69 - 2.08
Other non-western (55)	3.6*	1.68 - 7.89	0.3*	0.18 - 0.61	0.5	0.21 - 1.34
Female children (N)						
Surinamese (44)	2.5*	1.15 - 5.24	0.7	0.34 - 1.35	0.2	0.03 - 1.47
Turkish (29)	1.7	0.64 - 4.51	0.6	0.27 - 1.43	0.0	-
Moroccan (12)	1.3	0.27 - 6.23	0.9	0.22 - 3.20	0.8	0.10 - 6.14
Antillean and Aruban (11)	0.8	0.08 - 5.28	1.3	0.27 - 6.00	0.9	0.11 - 6.81
Other African (18)	0.4	0.05 - 2.99	1.4	0.40 - 5.00	1.7	0.47 - 6.14
Other western (41)	0.9	0.33 - 2.48	0.8	0.37 - 1.61	0.4	0.10 - 1.88
Other non-western (40)	1.6	0.69 - 3.86	0.6	0.30 - 1.23	0.0	-

Table 1: DSM Classifications of child patients (5-10): odd's ratios for ethnic minority children compared to native Dutch children (OR = 1; males N = 922; females N = 341)

* Significant according to the 95% C.I.

	Only V-		One or more		Cor	Comorbidity	
	codes		psychiatric disorder(s)				
Ethnic background	OR	C.I. (95%)	OR	C.I. (95%)	OR	C.I. (95%)	
Male adolescents (N)							
Surinamese (114)	3.0*	1.66 - 5.46	0.6*	0.40 - 0.97	0.8	0.38 - 1.75	
Turkish (89)	2.3*	1.12 - 4.59	1.1	0.61 - 1.88	0.4	0.12 - 1.22	
Moroccan (57)	1.2	0.42 - 3.51	1.0	0.49 - 1.85	0.8	0.28 - 2.32	
Antillean and Aruban (37)	2.0	0.66 - 5.76	0.9	0.41 - 2.06	0.6	0.14 - 2.62	
Other African (41)	0.8	0.19 - 3.53	0.6	0.31 - 1.23	0.6	0.13 - 2.34	
Other western (86)	1.9	0.88 - 4.01	0.8	0.46 - 1.33	0.7	0.26 - 1.70	
Other non-western (94)	3.3*	1.76 - 6.15	0.7	0.45 - 1.22	0.9	0.38 - 1.96	
Female adolescents (N)							
Surinamese (162)	2.0*	1.32 - 3.13	0.6*	0.39 - 0.80	0.4*	0.18 - 0.82	
Гurkish (84)	1.4	0.74 - 2.55	0.6*	0.34 - 0.87	0.4	0.13 - 1.04	
Moroccan (64)	1.6	0.81 - 3.09	0.5*	0.31 - 0.89	0.2*	0.06 - 0.97	
Antillean and Aruban (42)	2.8*	1.36 - 5.57	0.5*	0.24 - 0.84	0.4	0.09 - 1.57	
Other African (48)	0.7	0.34 - 1.55	0.6	0.30 - 1.03	0.0	-	
Other western (127)	1.2	0.71 - 2.07	1.0	0.62 - 1.47	0.5	0.24 - 1.06	
Other non-western (80)	2.3*	1.32 - 3.99	0.4*	0.26 - 0.66	0.1*	0.01 - 0.69	

Table 2: DSM Classifications of adolescent patients (11-19): odd's ratio for ethnic minority adolescents compared to native Dutch adolescents (OR = 1; males N = 682; females N = 677)

* Significant according to the 95% C.I.

Table 2 specifies these results for the different ethnic minority groups with the native Dutch group as the reference group. It shows that the likelihood for ethnic minority male adolescents to be classified with only V-codes compared to native Dutch males was significantly higher among Surinamese, Turkish and other non-western males. Although the results were not significant for the ethnic minority group as a whole, the likelihood to be classified with a psychiatric disorder on Axis I was significantly lower for Surinamese males. The likelihood to be classified with comorbid disorders was not significantly higher or lower for any of the ethnic minority groups.

The likelihood for ethnic minority female adolescents to be classified with only V-codes compared to native Dutch females was significantly higher for Surinamese, Antillean and Aruban, and other non-western females. For most ethnic minority females the likelihood to be classified with a psychiatric disorder on Axis I was significantly lower. Similarly, the likelihood to be classified with comorbid disorders was significantly lower for Surinamese, Moroccan and other non-western females compared to the native Dutch females.

Conclusions and discussion

The present study intended to gain insight in the effects of patient ethnicity on the received disorders in YMHC practice with no standard protocol for validated (cross-cultural) instruments, and where DSM classifications are given according to the clinical judgment of the professional. Our main conclusion is that ethnic minority children and adolescents received a psychiatric disorder on axis I less often than their native Dutch peers. In addition, ethnic minority children more often received only V-codes, indicating that insufficient information is available to know whether the presenting problem is attributable to a psychiatric disorder, than native Dutch children. Also, native Dutch children and adolescents more often received a comorbid diagnosis than their ethnic minority peers. Differences between the various ethnic minority groups in chances of being attributed to a certain DSM category of diagnoses compared to the native Dutch group, were found as well.

Our study showed that the ethnic background of the patient is an important factor in the outcome of the diagnostic process. Although prevalence rates of psychiatric disorders vary across ethnic groups and according to type of disorder, research has shown that in general, the prevalence of psychiatric disorders is at least as high among ethnic minority youth as among ethnic majority youth (Fombonne, 2002; Nikapota & Rutter, 2008; Reijneveld et al., 2005; G. W.

J. M. Stevens & Vollebergh, 2008; Van Oort et al., 2007; Zwirs et al., 2007). Therefore it is unlikely that our results designate that ethnic minorities have less psychiatric problems than their native Dutch peers and are therefore diagnosed less often with psychiatric disorders. A more logical explanation for our findings is that ethnic majority professionals have more problems recognizing psychiatric disorders when confronted with ethnic minority youth and therefore more often choose to use V-codes. This could imply that these children and adolescents are not adequately treated for their disorders in YMHC.

However, our results may be interpreted in alternative ways. One explanation might be that in the process of referral to YMHC, ethnic minorities without a psychiatric disorder have a higher probability to be referred to YMHC than ethnic minorities with a psychiatric disorder. Indeed, professionals (in the referral process) are likely to judge differently on behavioural and psychological cues dependant on the ethnic background of the client, the ethnic background of the professional, cultural values and education of the professional, as well as the culture of the institution itself (Torres et al., 2007; Zayas et al., 2005). This would indicate that immigrant children and adolescents that do have psychiatric disorders are less likely to be referred to YMHC and that they are treated elsewhere or not treated at all. More likely however, is that ethnic minority children that are referred to YMHC do have psychiatric problems, but there are differences between ethnic groups in the identified disorders by YMHC professionals. These YMHC professionals are prone to similar mechanisms as the professionals in the referral process. For instance, there are indications that different ethnic groups express problems in different ways and ethnic minorities can have a weak knowledge of the host countries language and some words can have different meanings within the various languages which hinder the diagnostic process (Nikapota & Rutter, 2008). In addition, ethnic minority parents are less willing or capable to share information on the development during the child years than native Dutch parents (Pels & Nijsten, 2003). Sharing this information of the early years is important, because it is hard to make correct diagnoses (for instance with ADHD or autism) without it. Also, ethnic minority parents and potential patients might have different perspectives on mental health care and mental health problems than native Dutch parents and potential patients. Most native Dutch patients enter mental health care because they know they have a certain problem that can be treated by YMHC. Subsequently one has to be familiar with YMHC and have trust in its possibilities in order to seek help at an YMHC institution (Zwaanswijk et al., 2003, 2005a). Ethnic minority groups appear to be less familiar with mental health problems and with the possibilities of professional care that ethnic majority groups (Colijn, 2001). This would indicate that YMHC institutions are less accessible for ethnic minority children and adolescents than for their ethnic majority peers. Indeed, the chance for ethnic minority youth to receive mental health care was half the chance of native Dutch youth to receive it (De Haan, Boon, Vermeiren, & De Jong, 2012). These different perspectives, i.e., less knowledge and lower accessibility, might lead to minority youth with psychiatric problems not being treated in YMHC and might explain our results. This explanation however does not clarify why the minority children that do come into care are mainly treated for relational problems and not for psychiatric disorders. We therefore assume that, maybe in addition to all the alternative accounts, the best explanation for our findings is that there is an ethnic bias in the diagnostic process.

We advocate that to generate a cross-cultural validated diagnostic procedure, it is really important for YMHC institutions to work with (culturally validated) diagnostic instruments as the golden standard. Currently, diagnostic instruments, if used al all, are often not specific and sensitive enough to diagnose correctly with ethnic minority groups. For assessing diagnosis with (ethnic minority) children and adolescents, it would be best if this was done on the basis of deciding if diagnostic criteria are met, modeled on the gold standard for each disorder. This can for instance be done with the K-SADS, which is a semi-structured diagnostic interview designed to assess current and past episodes of psychopathology in children and adolescents according to DSM-IV-TR criteria (J. Kaufman, Birmaher, Brent, Rao, & Ryan, 1996; Puig-Antich & Chamber, 1978). The K-SADS is administered by interviewing the parent(s), the child, and finally achieving summary ratings which include all sources of information (parent, child, school, chart, and other). Concerning the DSM-IV-TR, some critics advocate that a more culturally sensitive approach to psychiatry is needed and that current diagnostic guidelines have a fundamentally Euro-American outlook (Kress, Eriksen, Rayle, & Ford, 2005; Widiger & Sankis, 2000). Indeed, the DSM-IV-TR is criticized not only for its culturally insensitivity, but it is also developmentally insensitive as well (Kress et al., 2005). In other words, many children, regardless of ethnicity, end up with V-codes or parent child relation conflict problems even in western settings or dominant culture settings. Still, our research indicates that this problem is much larger for ethnic minority patients than for native Dutch patients. The DSM-IV-TR offers an adaptive interview technique (the Cultural Formulation of Diagnosis) (APA, 2000; Kirmayer, Thombs, Jurcik, Jarvis, & Guzder, 2008) to compensate for the cultural insensitivity. Cultural interviews provide additional information on the client's life context and perceptual meanings and can ultimately facilitate comprehensive care (Marsella & Kaplan, 2002). Assessing a client's worldview through such interviews, or how the client views the world from social, ethical, moral, and philosophical perspectives, is necessary to comprehensive, culturally sensitive assessment (Lonner & Ibrahim, 2002).

A limitation of the present study is that the various groups were too small to differentiate between more detailed diagnostic categories. However, such analyses were beyond the scope of this study, since we particularly wanted to analyse whether ethnic minority patients indeed received a V-code more often, and a psychiatric disorder less often than their native Dutch counterparts. In future research we would like to differentiate between for instance, depressive disorders and behavioural disorders and analyze whether an under-diagnosis or over-diagnosis of certain diagnostic categories within certain ethnic groups is present. For this purpose, we would also need information on the actual prevalence of these disorders within these ethnic groups. Such analyses were thus beyond the scope of our present research. In addition, diagnostic categories, which can be adapted or corrected during the diagnostic or treatment phase, were made upon arrival and entered into the registration system (diagnoses were thus not specifically made for this study). This limitation is simultaneously a strength of our research. Our goal was to evaluate the clinical practice of YMHC and we therefore used this naturalistic design. A different study (for instance assessing diagnoses with more structured methods with a selected group of patients), would show the actual differences in diagnoses between ethnic groups upon arrival. We would advocate such a study, but it would not evaluate the actual clinical practice (where clinicians often make diagnoses according to their clinical judgment). Third, we were not able to take the socioeconomic status (SES) of the patients into account. Indeed, ethnicity and SES are often correlated (i.e., ethnic minorities often have a lower SES than ethnic majorities) (CBS, 2009; Chen et al., 2006), and because both are seen as important interrelated variables causing ethnic differences in mental health care utilization (Garland et al., 2005), it is important to include the SES in the analysis when focusing on the ethnic background. Unfortunately, we did not have information on the SES of our patients, while it could have been a possible confounder. For instance, it is possible that V-codes are used more often for both ethnic minority and ethnic majority patients that have a low SES. Because ethnic minorities often have a lower SES, this might have influenced out results. But even if this is true, the diagnostic procedure should likewise be adapted for ethnic minority youth with a low SES. Still, we recommend that future research takes both ethnic background and SES into account. A fourth limitation is that it is unknown which children and adolescents did not enter YMHC. This information could have been valuable to complete our results on potential ethnic biases within the diagnostic procedure, because then we could have excluded that the diagnostic differences between ethnic groups reflect real diagnostic differences. Fifth, we did not have detailed information on which psychologist, psychotherapist, or psychiatrist treated which patient. We therefore could not analyse the potential cofounding effects of the therapists, i.e., we do not know whether the differences that we found were due to the diagnostic capabilities of just one or two therapists or whether therapists that were more highly trained, showed less differences in diagnosing the various ethnic groups. Still, the large number of patients, and the significant results, indicate that the found differences between given diagnoses reflect the actual differences in clinical practice. Finally, characteristics of the Dutch health care system may limit generalizability - external validity of the results found in this study. Utilization of health care services in the Netherlands is largely independent from financial constraints, therefore all Dutch children are covered by public or private health insurance (Zwaanswijk et al., 2005a). The results may not be directly applicable to nations in which major financial constraints hamper the availability of care.

In spite of several limitations, we believe that this study is an important first step in increasing the knowledge on the potential biasing effects of ethnic background on diagnostic procedures within YMHC. Conclusively, it can be stated that psychiatric disorders might not always be recognized by professionals in YMHC when they have to work with ethnic minority youth. Ethnic minority children and adolescents might therefore more often being diagnosed with V-codes than native Dutch children and adolescents. This could imply that these children and adolescents are not adequately treated for their disorders in YMHC. YMHC professionals should therefore reflect on potential biasing effects of patient ethnic background in their diagnostic procedures and assessments