CHAPTER 3

Ethnic minority status as a barrier to youth mental health care

Submitted for publication

Albert E. Boon

Anna M. de Haan

Sjoukje B.B. de Boer

Abstract

Objective Although their prevalence of mental disorders is at least as high as among ethnic majority youth, ethnic minorities are highly underrepresented in Youth Mental Health Care (YMHC). The purpose of the present study is to examine whether socioeconomic or ethnic factors are related to the underutilization of these services.

Method YMHC patients (age 0-19) living in a large city in the Netherlands were categorized per district they lived in. The number of patients and their ethnic background were compared to the ethnic composition and average spendable year income of their district. Odd Ratio's (chance of receiving YMHC treatment) for ethnic minority youths in comparison to their majority peers were calculated for the city as a whole and for black, mixed and white districts.

Results Large differences were found between districts in the percentage of YMHC patients. The percentage of youths in treatment was not related to the average spendable year income of the districts, but was however closely related to the ethnic composition of the districts. It was found that the higher the percentage of ethnic minority inhabitants was, the lower the percentage of youngsters in YMHC treatment.

Conclusions The underrepresentation of immigrant youths in YMHC is related to the ethnic composition of the district they live in. Presumably, ethnic minorities in districts with a low percentage of majority inhabitants have less knowledge about mental health problems and the treatment possibilities. Strategies to make YMHC more accessible for ethnic minorities should focus on the cultural barriers between the services and their potential patients.

Keywords: youth mental health care; underutilization; socioeconomic status; ethnic origin.

Introduction

Due to psychiatric problems an estimated seven percent of the children and adolescents in western societies is limited in its functioning to such a degree that psychiatric treatment is recommended (Friedman, Katz-Levey, Manderschied, & Sondheimer, 1996; Roberts, Attkisson, & Rosenblatt, 1998). However, only about one-third of the young population that needs treatment finds its way to youth mental health care (YMHC) (Boon et al., 2010; Fombonne, 2002; Meltzer et al., 2000; Sayal, 2006; Sytema et al., 2006). Compared to majority youth, ethnic minority youth make even less use of mental health services (Angold et al., 2002; Elster, Jarosik, VanGeest, & Fleming, 2003; Garland et al., 2005; Gudino, Lau, Yeh, McCabe, & Hough, 2009), while research indicates that the rates and patterns of mental disorders are quite similar across ethnic groups and that the prevalence of psychiatric problems in children and adolescents from minority groups is at least as high as that of their peers from the majority population (Fombonne, 2002; Janssen et al., 2004; Luk, Leung, & Ho, 2002; Murad, Joung, van Lenthe, Bengi-Arslan, & Crijnen, 2003; Nikapota & Rutter, 2008; Reijneveld et al., 2005; Vollebergh et al., 2005; Zwirs et al., 2007). Because there is no apparent difference in prevalence rates of psychiatric disorders between ethnic groups, the explanation for the higher underutilization of YMHC of minority youths must be sought in other factors like socioeconomic status or cultural differences.

Both ethnic background and socioeconomic status (SES) are seen as important variables in relation to ethnic differences in mental health care utilization (Angold et al., 2002; Garland et al., 2005; Sayal, 2006). These variables are often correlated however (i.e., ethnic minorities often have a lower SES than majorities) (CBS, 2009; Chen et al., 2006; Zahner & Daskalakis, 1997), and therefore it is difficult to discern which variable is the most important contributor. Thus far, several surveys in The Netherlands, Great Britain and the United States indicated that a higher level of education or income (both indications for a high SES) is associated with a higher use of mental health care (Paasche-Orlow, Parker, Gazmararian, Nielsen-Bohlman, & Rudd, 2005; Pumariega, Glover, Holzer, & Nguyen, 1998; Ten Have, Oldehinkel, Vollebergh, & Ormel, 2003). Other studies found a link between mental health care utilization and ethnic background, i.e., youths and adults with a ethnic minority background less often used mental health care services than youths and adults of a majority background (Bhui et al., 2003; Dieperink, Van Dijk, & De Vries, 2007; Dieperink, Van Dijk, & Wierdsma, 2002; K. Wells, Klap, Koike, & Sherbourne, 2001). Garland and colleagues (2005) analyzed the ethnic disparities in use of YMHC while

controlling for socioeconomic position, and found that the ethnic disparities in the utilization of youth mental health services still remained. To our knowledge only the study of Garland and colleagues (2005), investigated both ethnic background and SES of the patients and its (interfering) associations with mental health service use. Although this is an important study, it focused on the situation of the United States where the insurance status of the patients always interferes with the SES and the possibility to receive (mental) health care. Indeed, Sayal (2006) suggests that the finding that Caucasian ethnicity is positively related with mental health care use, might be caused by their health insurance status, while other ethnic groups (e.g., African Americans or Hispanic Americans) less often have health insurance. In contrast, in most European countries the whole population has health insurance. This offers the opportunity to investigate the effect of SES without the insurance status as a confounding factor. More information about the association between ethnic background, SES and mental health service use in European countries, can give direction on how mental health services in countries where these services are covered by health insurance can deal the problem of underutilization by minority groups.

Because untreated youth psychiatric disorders can cause serious damage later in life (Domburgh, 2009; Gosden et al., 2003; Sytema et al., 2006), it is of utmost urgency to gain knowledge on the causes of underutilization of YMHC services. Based on the previous research citied above, two contradicting hypotheses can be formulated: (1) the socioeconomic hypothesis: people (from all ethnic groups) with a lower SES make less use of mental health facilities. As minorities are more likely to have a lower SES, poverty would explain their under-representation. This would implicate that the use of mental health care is primarily reserved to the socioeconomic top stratum population. And (2) the ethnic hypothesis: there is a direct link between ethnic origin and the use of mental health care. This would implicate that the use of mental health care is primarily reserved for the majority population and the thresholds to YMHC are associated with ethnic or cultural differences. The aim of the present study is to give more clarity about how these factors (socioeconomic background or ethnic origin) are related to the percentage of children and adolescents treated for psychiatric problems.

Method

The YMHC patients

In 2008 De Jutters, a youth mental health care institution, was a near monopolist in the field of youth mental health care in The Hague (one of the four main cities in The Netherlands). The city is divided into 44 districts. The patients (0-19) that lived in The Hague were selected from the files of De Jutters (2008), and were categorized per district they lived in, based on their postal code. This resulted in a data file with the exact number of children and adolescents in treatment per district and their ethnic background (see below for specification).

Because only general information about ethnic background was used, it was not mandatory to obtain written informed consent from patients or parents. This was in accordance with the statutory requirements in the Netherlands.

The general population per district

The following data per district were retrieved from municipality files: number of inhabitants born after 1988 (i.e. 0-19 years), the ethnic background of the inhabitants (total and those of 0-19 years), and the district's average spendable year income ("Den Haag in Cijfers," 2008). The present study uses data on the average spendable annual income per district as an indicator for the SES. The percentage of total native Dutch inhabitants per district was used as an indicator of the ethnic composition of that district. The districts were divided in three groups based on the percentage of native Dutch inhabitants: 'White districts' (>75% native Dutch inhabitants), 'Mixed districts ' (50-75% native Dutch inhabitants), and 'Black districts' (<50% native Dutch inhabitants).

Ethnic background

Most ethnic minorities in the Netherlands originate from Morocco, Turkey, Surname and the Dutch Antilles. The Moroccans and Turks are mainly descendants from labour migrants that entered the Netherlands in the 1960s and 1970s (Bocker, 2000; Nelissen & Buijs, 2000). Most Surinamese have come to the Netherlands from the early seventies during the process of decolonisation (Van Niekerk, 2000). The Dutch Antilles consists of six islands in the Caribbean, which were or still are part of the Netherlands. After the 1960s the group that came from these islands consisted primarily of labour migrants, before it were mainly children of white colonists who came to the Netherlands to study at universities (Van Hulst, 2000). Besides these four main

ethnic minority groups, many other groups are residing in the Netherlands nowadays. These inhabitants come from other African countries, the Middle East, Asia, Latin America, Eastern Europe, who migrated due to the processes of decolonisation, refugee movements following armed conflicts, political violence, humanitarian emergencies, human right violations, and other reasons.

In contrast to the United States, race is not registered in The Netherlands. Therefore in both samples (patients and general population) the ethnic background was specified as follows: if both parents of the patient/inhabitant were born in The Netherlands (regardless of his or her own country of birth), the person was seen as native Dutch. If one or both of the parents were born abroad, the person was seen as an ethnic minority/immigrant. Depending on the specific birth country, the person was seen as a western or non-western immigrant. If both parents were born in different foreign countries, the country of birth of the mother was taken as the determining country. Western immigrants were originally from European countries (except for Turkey), Northern America, Oceania, Indonesia and Japan. Non-western immigrants were from the remaining foreign countries. Both the patients and the general sample were divided in three ethnic groups, i.e., native Dutch, western immigrants, and non-western immigrants.

Statistical analyses

All analyses were performed using the Statistical Package for the Social Sciences, version 20.0 (SPSS, 2012). For each district the percentage of the population under age 20 that received YMHC treatment was calculated (i.e. the 'treatment percentage'). Pearson correlations between the percentages of youths in treatment and the average spendable year income per district (indicating SES) were calculated, as well as those between the percentages of youths in treatment and the total percentage of native Dutch inhabitants per district (indicating the ethnic composition). A stepwise regression analysis with the district variables (average year income, percentage of native Dutch inhabitants, western immigrant inhabitants, and non-western immigrant inhabitants) as independent variables, and the percentage of youngsters in treatment as the dependent variable was conducted. Scatter plots were generated to gain more insight in the association between YMHC consumption and the ethnic composition of the districts, and between YMHC consumption and the average income level of the districts. Also, Odd Ratios (chance at receiving treatment) for immigrant youths in comparison to their native Dutch peers were calculated for the city as a whole and for the White, Mixed and Black districts.

Results

In the year 2008 the city of The Hague counted 109818 inhabitants under age 20 ("Den Haag in Cijfers," 2008). The number of youths receiving psychiatric care in this age group was 2667, this indicates that 2.4% of the city's youth was treated at De Jutters. There were large differences in the treatment percentages between districts, varying from 1.5% to 4.2 percent. The number of youngsters (0-19 years) per district varied from 1 to 11254, with an average of 2496 youths per district. In order to make reliable comparisons between the districts on the percentages of youngsters in treatment per district, the sparsely populated districts were left out of the analyses.

Figure 1.District percentages of youths in YMHC treatment compared to the district percentage of native Dutch inhabitants

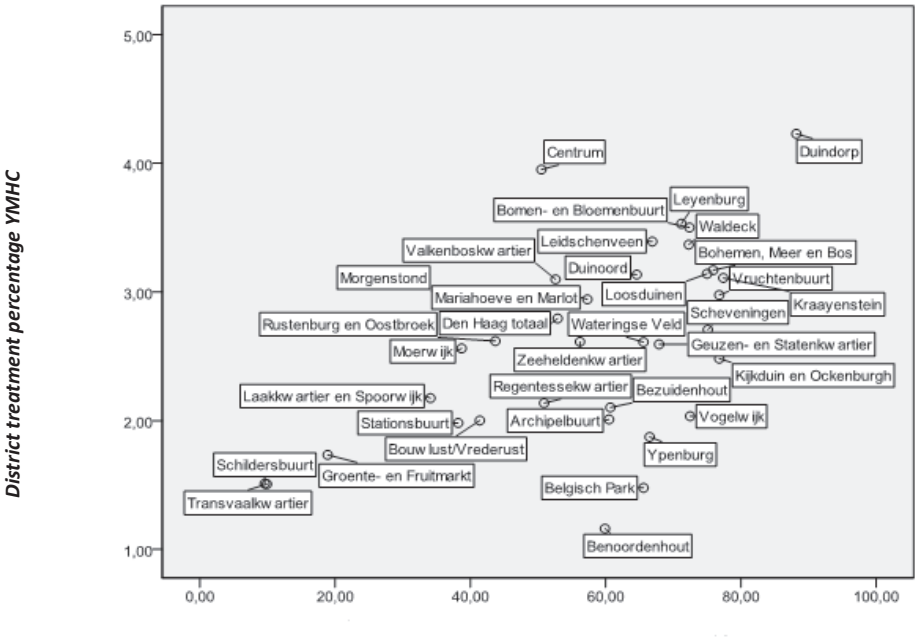
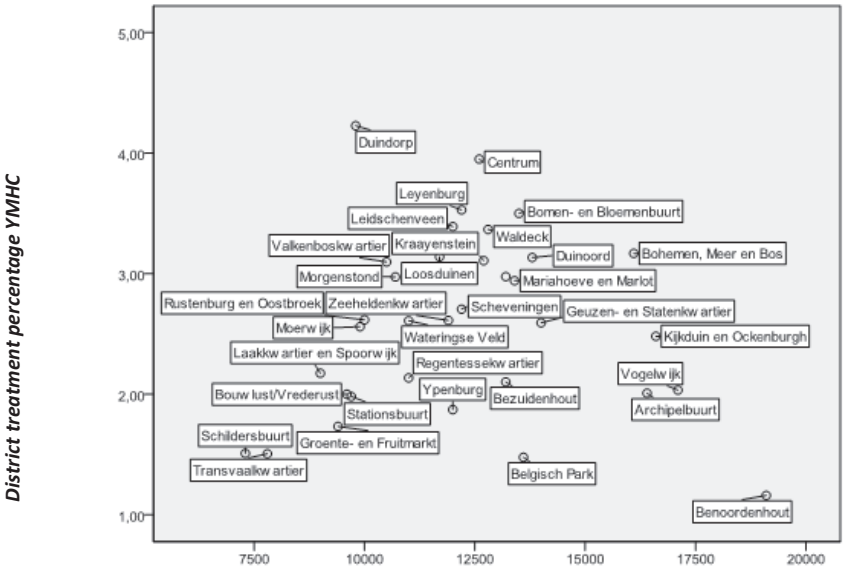


Figure 2. District percentages of youths in YMHC treatment compared to the district's spendable year income level



District average annual spendable income in euro's

Therefore, a reliability threshold was determined, wherein the districts were considered as samples of the total population of the city. With a reliability level of 95% and a error level of 5%, a number of at least 383 youngsters living in a district was needed to obtain reliable results. Districts (mainly park, office or industrial areas) with less than 383 inhabitants under age 20 were left out of the analyses. The population of these districts were mainly of native Dutch origin (69.5%) and from Western countries (17.2%). After this selection, 34 districts with a total of 108979 inhabitants under age 20 remained (99.2% of the young population of The Hague). The minimum number of youths per district was 404.

The correlation analysis showed a significant relationship between the districts' percentage of youth in treatment and the percentage of native Dutch inhabitants in the districts (r = .550, p = .001), while no relationship was found between the district's percentage of youth in treatment and the average spendable year income level of the districts (r = -.008, p = *ns*). The

ethnic composition of the district (Figure 1) appeared to be of greater influence on the treatment percentages than the average income level (Figure 2). The correlation between the ethnic composition (percentage of native Dutch inhabitants) and the average spendable year income level was high (r = .63, p = .000).

The ethnic background variables of the district population (percentage of native Dutch, western immigrants, and non-western immigrants), and income level were entered as independent variables in a regression analysis (stepwise) with the district's treatment percentages as the dependent variable. The best solution (adjusted R^2 = 0.469) was found when the specific ethnic background variables (percentage of western and non-western immigrants) were excluded. The final solution contained only two predictors: percentage of native Dutch in the district (t = 5.583, p = .000) and the districts' average income level (t = -3.491, p = .001). The percentage of native Dutch inhabitants in a district, and not the differentiation between western and non-western descent within the immigrant group, appeared to be the most important predictor for the percentage of the district's youth that received treatment in YMHC.

Figure 2 shows that the highest treatment percentages were found in the middle income districts. Other studies also found a 'curvilinear' relationship with greatest YMHC use in middle socio-economic status groups (Sayal, 2006). For our study no data from non-institutional therapists, who according to their professional profile (also) offered treatment to children and adolescents, were available. The majority (25 of 29) of these therapists was located in the five districts with the highest average spendable annual income. In these five districts the percentage of youth in treatment is low (1.5%), maybe because the inhabitants of these districts are more likely to use non-institutional psychotherapists. Therefore we repeated our analysis after the five richest districts (year income > €16000) were excluded. After this elimination, 29 districts remained with 103756 inhabitants under age 20 (94.5% of the total young population of the city). The correlation between the district's treatment percentages and the district's percentage of native Dutch inhabitants became slightly higher (r = .593, p = .000) than it was when the highest income districts were included. The correlation between the districts' treatment percentages and the income level per district remained non-significant (r = .006, p = *ns*). In the (stepwise) regression analysis for this selection of districts, only the percentage of native Dutch inhabitants per district remained as a predictor for the districts' treatment percentages (adjusted R^2 = 0.413, t = 4.553, p = .000).

A closer look at the ten districts with the lowest average spendable annual income (< €10.000) made clear that there are large differences in the treatment percentages in these poorest districts. The district with the highest treatment percentage (4.2%), and a population that consisted almost exclusively of native Dutch inhabitants (88.2%), as well as the two districts with the lowest treatment percentages (1.5%), and a population that consisted almost completely of immigrants (90.1% and 90.4%), belong to the ten poorest districts. The district with a mixed population (38.7% native Dutch inhabitants) was positioned between these extremes with a treatment percentage of 2.6.

The analyses so far concentrated on the percentages of youths in treatment, regardless the ethnic background of these patients. The results presented above cannot rule out the possibility that all patients from the districts with a majority of native Dutch inhabitants, are minority youths. To check for this phenomenon (i.e., 'ecological fallacy'), the city was divided in three categories based on the number of native Dutch inhabitants. 'White districts', 'Mixed districts ' and 'Black districts'. For these three categories the treatment percentages and the Odds Ratios for treatment of the immigrant youths compared to their native Dutch peers were calculated (Table 1). The treatment percentage of native Dutch patients in the 'Black districts' was about the same as that in the 'White districts' (respectively 3.6% and 3.5%). However, the treatment percentage of immigrant youths in 'Black districts' was much lower than the immigrants' treatment percentage in 'White districts' (respectively 1.4% and 2.6%). In addition, in the 'Black districts', the chance for immigrant youths at YMHC treatment was much lower (Table 2) compared to their native Dutch peers living in the same districts (OR = 0.38), and is lowest for the non-western immigrants (OR = 0.36). In the other categories ('Mixed districts' and 'White districts'), the chances for non-western immigrant youths at treatment in YMHC is about half of that of their native Dutch peers (OR = 0.51 and OR = 0.58). A remarkable finding is that the percentage of immigrant patients from western origin in the 'White districts' is much higher than that of the native Dutch (respectively 4.7% and 3.5%).

Table 1: Percentages of youths in treatment in The Hague (age 0-19)

	Total %	Dutch natives %	Ethnic minorities		
			Western %	Non-Western %	Total %
White districts[1]	2.6	3.5	4.7	1.8	2.6
Mixed districts[2]	2.3	2.6	1.8	1.5	1.6
Black districts[3]	1.8	3.6	2.5	1.3	1.4

[1] (>75% Dutch natives), [2](50-75% Dutch natives), [3](<50% Dutch natives).

Table 2: Chance at YMHC treatment of ethnic minority youth (age 0-19) in the Hague compared to native Dutch youths

	Odds Ratios (OR)		
	Western	Non-Western	Total
White districts	1.34	0.51	0.74
Mixed districts	0.69	0.58	0.62
Black districts	0.69	0.36	0.38

1 (>75% Dutch natives), 2(50-75% Dutch natives), 3(<50% Dutch natives).

Discussion

Although research indicates that the prevalence rates of psychiatric disorders are about as high or even higher for ethnic minority youth compared to ethnic majority youth, ethnic minority youths are underrepresented in youth mental health care (YMHC). Because untreated youth psychiatric disorders can cause serious damage later in life, our research intended to extend the knowledge on possible causes of this underutilization by specifically focusing on the (interfering) effects of the socioeconomic status (SES) and the ethnic background of potential patients.

Two hypotheses were tested: 1) the socioeconomic hypothesis: people (from all ethnic groups) with a lower SES underutilize mental health facilities. As ethnic minorities are more likely to have a lower SES, this would explain their under-representation, and 2) the ethnic hypothesis: there is an association between ethnic origin and the use of mental health care. The district's average year income was used as an indicator for SES, and the district's percentage of native Dutch inhabitants was used as an indicator of the ethnic composition of that district. A high correlation between treatment percentages and the districts' average income level can be seen as support for the first hypothesis, and a high correlation between treatment percentages and the districts' percentage of native Dutch inhabitants can be seen as support for the second.

The results of present study indicated that the percentage of children and adolescents in treatment was strongly associated with the ethnic composition of the district, and that the district's income level had almost no effect. This implicates that ethnic (or cultural) aspects are more relevant obstacles on the pathway to mental health treatment than socioeconomic aspects. The districts where the proportion of YMHC patients was low, were mostly districts with a high percentage of immigrant inhabitants. Of course, because no information about the SES of the patients was available, the possibility remains that on a individual level socioeconomic factors do play a role. For instance, within districts with a low average year income, minority youth with a higher SES might enter care more frequently than minority youth with a lower SES.

The comparison between 'White', 'Mixed' and 'Black' districts showed that the treatment percentage of native Dutch youths living in 'Black districts' was about equal to the treatment percentage of those living in 'White districts'. The treatment percentage of non-western immigrant youths living in the 'Black districts' however, was much lower than the treatment percentage of non-western youths living in 'Mixed' and 'White' districts. Compared to the native Dutch inhabitants of the 'Black districts', the chance for non-western immigrant youths in same districts to be treated in YMHC was one-third (OR: 0.36).

Several explanations can be given for the finding that minority children are treated less often in YMHC than majority children. For instance, language problems between the parents and the professionals might heighten the threshold to care. But at the time our data were collected, interpreters were financed by the Dutch government and it is therefore unlikely that language problems play a major role. Another explanation can be the proximity of YMHC centres for people in the 'Black' districts. It is possible that the native Dutch population in these districts have a higher individual SES than the immigrant population and that they can thus afford to pay for transportation, while the immigrant population cannot afford this. It might also be that ethnic minorities seek non-institutionalized help with traditional or alternative healers (Bhui & Bhugra, 2002). One of the reasons for seeking help here (instead of within YMHC) can be that ethnic minorities have negative beliefs about psychiatric disorders and YMHC and are afraid of stigma (De Jong & Colijn, 2010).

A possible explanation for the results can be found in the concept of 'proto-professionalization' which describes the degree to which individuals have the capacity to obtain, process, and understand basic health information, recognize the mental health problem, and

have knowledge about the services needed to make appropriate health decisions (De Swaan, 1979). A lack of proto-professionalization among potential patients and their parents can hinder the access to accurate mental health care. During the past fifty years the ethnic majority population in western countries has been proto-professionalized regarding mental health problems, which can be seen as one of the factors responsible for the huge increase of their mental health care utilization (Nicolai, 1996; Stapel & Keukens, 2009). Proto-professionalization also implies that cultural or religious beliefs about mental illness are replaced by notions from western mental health care. Some groups (i.e. ethnic minorities, people with a low socioeconomic status) might be less proto-professionalized than the rest of the population. Because the percentage of native Dutch children and adolescents that are treated in YMHC is about the same in 'Black', 'Mixed' and 'White' districts, it can be assumed that the process of proto-professionalization influences the native Dutch population regardless of their surroundings. For ethnic minorities however, it might be that the level of proto-professionalization is related to the ethnic composition of the district they live in, i.e., this process is more common among immigrants living in 'White' districts than among the ones living in 'Black' districts. More knowledge and insight in the level of proto-professionalization of ethnic minority inhabitants of 'Black' districts is needed to warrant such conclusions. Health care professionals should gain insight in the way these inhabitants interpret problematic behaviour and the reasons for them to decide that professional help is (not) needed. For one aspect of proto-professionalization, i.e., the problem identification, it was shown that this was an important factor contributing to the mental health help-seeking process. Indeed, with ethnic minority parents and adolescents problem identification was significantly lower than with native Dutch parents and adolescents (Verhulp, Stevens, Van de Schoot, & Vollebergh, 2013).

In order to be able to supply equal mental health care to all ethnic groups, the YMHC institutions have to employ strategies to reach immigrant children and their parents, especially in the 'Black' districts. For instance, locate services in these districts' general health centres. YMHC institutions should also gain more insight in the possible ethnic biases in the trajectory that leads to referral for treatment in YMHC. Those biases can occur when psychiatric problems are discarded because of the cultural distance between a referral professional and the patient (Garb, 2005; Torres, Zayas, Cabassa, & Perez, 2007; Zayas et al., 2005). Indeed, professionals (in the referral process) are likely to judge differently on behavioural and psychological cues dependant on the ethnic background of the patient, 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 with psychiatric disorders are less likely to be referred to YMHC and that they are treated elsewhere or not treated at all. In addition, immigrant parents might 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 without it. Indeed, Sayal (2006) and Kelleher et al. (1999) stated that the recognition of problems in children and the subsequent referral to YMHC depends amongst others on disclosure of problems by parents/children. But even when parents disclose problems the health professional will not always recognize these problems and will thus not refer the child to YMHC (Sayal, 2006). Also YMHC services should reflect on what they can do to welcome minority youth and find ways to meet their needs. For instance by employing ethnic minority professionals or by setting up special facilities for intercultural mental health (Boon, De Haan, De Boer, & Isitman, 2012).

A limitation of this research is that it was based on the data of one institution in one city in The Netherlands. Therefore we recommend that the study should be replicated in other metropolitan surroundings. Only then can we learn to what extent specific Dutch factors (or even specific features of the population of The Hague) influenced the results. Another limitation is that we used the average income of the district as an indicator for SES and we did not have information on the individual SES levels of the patients. We could thus not provide rates of children with a lower or higher SES in care, and we can therefore not conclude that socioeconomic factors do not play a role at all in the utilization of YMHC facilities. We advocate that in future research the individual SES variables are used in similar research. But even without additional research, youth mental health care professionals can reflect on measures that make their institutions more accessible for the inhabitants of the districts with a lower percentage of patients. When these actions are combined with an adequate registration of ethnic and socio-economic background of patients, the effect of the new strategies can be analyzed.