Differences in Ethnic Background between Regular and Forensic Youth Mental Health Care Patients

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Abstract: The ethnic composition of the group of patients treated at both regular and forensic youth mental health care in a big city area in the Netherlands was compared to that of the regional youth population. In this way more accurate information about the mental health care utilization of different ethnic groups was obtained. Based on patient and population statistics, treatment percentages and relative risks were calculated for the major ethnic groups with Dutch natives as a reference. For most immigrant children (age 5-10) the relative risk on receiving regular mental health treatment was about half of that of their Dutch native peers. For the adolescents (age 11-19) the results of immigrants compared to Dutch natives were about the same, whereas the relative risk on treatment in forensic facilities was much higher for immigrant youths than for Dutch natives. Because it is known from epidemiological research that the prevalence of child and adolescent mental disorders is at least as high for ethnic minority groups as for majorities, we concluded that the accessibility of the regular and the forensic child and adolescent mental health facilities was strongly biased by ethnic factors.

Keywords: Child and adolescent mental health care, ethnic minorities.

INTRODUCTION

Child and adolescent mental health problems are prevalent in all regions of the world and a major contributor to school failure, suicide, anti-social behavior and disability adjusted life years (DALYs) lost in young people [1-5]. Various epidemiological studies have shown an estimated prevalence of child psychiatric problems between 10% and 20% with about 7% of children being so severely affected that treatment is indicated [6]. However, the treatment gap between the need for and the actual provision of mental health care services is enormous. A survey showed that for all serious mental, neurological and substance abuse disorders about 35-50% in developed countries and 75-85% in less developed countries have received no treatment in the previous 12 months [7]. In children the situation is much worse. In developing countries child mental health services are often virtually non-existent and even in developed countries only about 10-30% of those in need are treated in youth mental health care (YMHC) [6, 8, 9]. In the Netherlands YMHC is provided to about 2.5% of children and adolescents [10, 11]. One serious consideration is that there is no equality in service use between different ethnic and social groups. In particular first and second generation immigrant children (from here on referred to as immigrant children) show much reduced service use with only 1.5% of them receiving mental health care [10]. There is an urgent need for more accurate knowledge about the underrepresentation of immigrant children in YMHC, because untreated psychiatric disorders in childhood or adolescence can cause severe damage later on in life [12-14]. The goal of present study was to examine the representation of the various groups of immigrant youth in YMHC in an urban area in the Netherlands, with the focus on their ethnic background, age and gender.

In contrast to their underrepresentation in regular YMHC, immigrant youth are overrepresented in Dutch forensic (often compulsory) YMHC. Knorth and Eldering for instance [15] found that youth of non-western origin were at greater risk of being referred to secure or judicial psychiatric care than their native Dutch peers. Several surveys showed that, compared to ethnic majority youth, immigrant youths have more frequent police contacts and are overrepresented in judicial youth institutions [16, 17]. Research also showed that among juvenile delinquents in the Netherlands, a high percentage could be diagnosed with conduct disorders or other psychiatric disorders [18, 19]. Combining these findings, a plausible explanation for the overrepresentation of ethnic minority youngsters in judicial youth institutions and judicial psychiatric care is that they were erroneously not (or not timely) treated in YMHC [20].

Research shows that the rates and patterns of mental disorders are quite similar across ethnic groups and that the prevalence of psychiatric problems for

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immigrant children is at least as high as that of their peers from the ethnic majority [8, 21-31]. Therefore the underutilization of services by immigrant youth cannot be explained by variations in need, but has to be found by variations in barriers to care. Improving the access of underserved populations to mental health care is an important aim of the World Health Organization (WHO), who declared that "All persons have the right to the best available mental health care" and that these services should be accessible to all without discrimination on grounds of race, colour, national, ethnic or social origin [32].

The explanation for the underutilization of immigrant youths in regular YMHC must be sought in other factors than the variations in need. It has to be found in variations in barriers to care for immigrant children such as socioeconomic status or cultural differences. Indeed, both ethnic background and socioeconomic status are seen as important variables in relation to ethnic differences in regular mental health care utilization [33]. These variables however are often correlated (i.e., ethnic minorities often have a lower SES than natives) [34, 35], and it is therefore 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 [36-38]. Other studies found a link between mental health care utilization and ethnic background, i.e., youths and adults with a non-Western ethnic background less often used mental health care services than youths and adults of a Western background [39-42]. Garland and colleagues [33] analyzed the ethnic disparities in use of YMHC while controlling for socioeconomic position, and found that the ethnic disparities in the utilization of regular youth mental health services still remained. This study 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 regular (mental) health care, while in most European countries the whole population has health insurance and insurance status is not a confounding factor. In the Netherlands a similar study was conducted [43]. In this study the relation between the districts' percentage of children and adolescents that were treated in regular YMHC and the districts' percentages of native Dutch inhabitants and the average spendable year income level of the districts (indicating socioeconomic status) was analysed. A significant relationship between the districts' percentage of youth in treatment and the percentage of native Dutch inhabitants in the districts was found, while no relationship was found between the districts' percentage of youth in treatment and the average spendable year income level of the districts. Therefore we assume that underutilization of ethnic groups in the use of YMHC are strongly related to their ethnic minority status

The objective of present study was to gain more insight in to what extent the ethnic background is related to utilisation of the services of a big city YMHC institution that supplies both regular and forensic care. This information will help to gain more insight in the differences in accessibility of the care between ethnic groups and what measures should be taken to advance the equal accessibility of YMHC for all ethnic groups.

METHOD

Population

YMHC Patients

Present study was conducted at 'De Jutters' a YMHC institution in The Hague, one of the main cities of the Netherlands. The area that is served by 'De Jutters' consists of the city of The Hague and the surrounding municipalities. In the year of this survey, 'De Jutters' was a near monopolist in the area, therefore present study is a very near approximation of the real utilization of YMHC in that area. The patient population consisted of all children and adolescents (age 5-19) that were treated at the outpatient, prevention or (semi-)residential facilities of 'De Jutters' in 2009. A division was made between youngsters treated at the forensic facilities (delinquents with a psychiatric disorder) and the patients of the regular (non-forensic) divisions. The forensic care served patients from the age of 11 and older.

Youth Inhabitants in the General Population

The statistics for the general population with the same years of birth as the patient group were drawn from the municipality files of the areas that were served by De Jutters. Both the patient population and the general population were classified in the age groups of children [5-10] and adolescents [11-19].

Ethnic Background

To establish the ethnic origin of the patients and the general population, the country of birth of the subjects and that of both parents was used. If the country of birth of both parents was the Netherlands (regardless of the country of birth of the person himself), a person

was seen as native Dutch [44]. If one or both parents were born abroad, a person was seen as an immigrant. A division was made between immigrant children from western and non-western countries. Following the guidelines of the Dutch government, 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 remaining part of Asia were considered as non-western countries. Immigrant groups that represented more than one percent of the total population were distinguished in the analyses. These groups were youngsters with a native Dutch, Surinamese, Turkish, Antillean, Moroccan and "Other African" (= Africa minus Morocco) background. Immigrant groups that consisted of less than one percent of the total population were combined under the categories 'other western' or 'other non-western'.

Statistical Analyses

All analyses were performed using the Statistical Package for the Social Sciences, version 17.0 [45]. Based on the statistics of the general population of the area and those of the patient population, the percentages of children and adolescents in treatment were calculated for the ethnic groups. The percentage of native Dutch youths that received treatment was used as a reference variable to calculate the relative risks (chances) on both regular treatment and forensic treatment for the other ethnic groups.

RESULTS

About half of the youngsters of the general population (age 5-19) consisted of immigrants (48.7%), in the patient population this percentage was somewhat lower (42.6%). Within regular care 40.7% of the patients were immigrants, while within the forensic group 62.7% was of immigrant origin.

Children (5-10 Years): Regular YMHC

Table **1** shows that 3.2% of the native Dutch girls received treatment in regular YMHC, and 8.4% of the native Dutch boys received treatment in regular YMHC. In comparison with the native Dutch children, the treatment percentages of the immigrant children were considerably lower, and the treatment probability or relative risk (RR) for most immigrant children was about half as large. Girls, especially the Moroccan girls, had a much lower treatment probability than the native Dutch girls (RR = 0.24). Two other groups with lower treatment probability compared to native Dutch girls, were the Turkish girls (RR = 0.73) and the 'other western' girls (RR = 0.60). For boys, the treatment probability of all immigrant groups, except for the Antillean boys, was lower compared to the native Dutch boys. The treatment probability was about half as large for the immigrant groups, with the lowest probability for the 'other non-western' boys (RR = 0.43), and the highest for the Surinamese boys (RR = 0.65).

Adolescents (11-19 Years): Regular and Forensic YMHC

For the older group of patients both forensic psychiatric treatment and regular psychiatric treatment was available. Table **1** shows that 3.2% of the native Dutch adolescent females, and 3.1% of the native Dutch male adolescents received treatment in regular YMHC. In contrast to the children, the treatment percentages were a little lower or just as high for the adolescent immigrant groups compared to the adolescent native Dutch group. When females were compared, only the Moroccan girls had a somewhat lower treatment probability (RR = 0.73). The treatment probability for the Surinamese female adolescents was a little higher (RR = 1.19). For males, the treatment probability was lower for the Moroccan and 'other western' male adolescents compared to the native Dutch male adolescents (RR = 0.61 and RR = 0.67). For the Turkish males, the treatment probability was only a little lower than for the native Dutch males (RR = 0.80).

In forensic YMHC, the treatment percentages were higher for most immigrant groups compared to the native Dutch adolescents. The absolute numbers of females in forensic YMHC were rather low, and therefore most relative risks for immigrant compared to native Dutch females were non-significant. Still, the treatment probabilities were significantly higher for the Antillean females (RR = 4.46) and for the Surinamese females (RR = 2.41). For males, the treatment probabilities for forensic YMHC were especially high for Moroccan (RR = 3.92) and Antillean (RR = 3.33) adolescents compared to native Dutch adolescents. For Surinamese (RR = 1.75), 'other African' (RR = 1.78), and 'other non-western' (RR = 1.67) male adolescents the forensic treatment probabilities were also almost twice as high as for native Dutch male adolescents.

The graphical representation in Figure **1** of the relative risks from Table **1** articulates the large differences between the chances at regular and

Table 1: Ethnic Background of Regular and Forensic YMHC Patients Compared to the General Population of Haaglanden

	Females					Males				
Ethnic background	**Patients (n)**	**Population (n)**	**Treatment %**	**RR**	**C.I. (95%)**	**Patients (n)**	**Population (n)**	**Treatment %**	**RR**	**C.I. (95%)**
Children (5-10) in regular YMHC										
Native Dutch	341	10783	3.16	1	-	922	10998	8.38	1	-
Surinamese	44	1867	2.36	0.75	0.55 - 1.02	106	1950	5.44	0.65**	0.53 - 0.79
Turkish	29	1726	1.68	0.53**	0.36 - 0.77	81	1795	4.51	0.54**	0.43 - 0.67
Moroccan	12	1571	0.76	0.24**	0.14 - 0.43	67	1677	4.00	0.48**	0.37 - 0.61
Antillean	11	480	2.29	0.72	0.40 - 1.31	40	544	7.35	0.88	0.65 - 1.19
Other African	18	871	2.07	0.65	0.41 - 1.04	41	972	4.22	0.50**	0.37 - 0.68
Other western	41	2181	1.88	0.60**	0.43 - 0.82	92	2277	4.04	0.48**	0.39 - 0.59
Other non-western	40	1521	2.63	0.83	0.60 - 1.15	55	1529	3.60	0.43**	0.33 - 0.56
Total	536	21000	3.16			1404	21742	8.38		
Adolescents (11-19) in regular YMHC										
Native Dutch	677	21161	3.20	1	-	682	22085	3.09	1	-
Surinamese	162	4247	3.81	1.19*	1.01 - 1.41	114	4322	2.64	0.85	0.70 - 1.04
Turkish	84	3195	2.63	0.82	0.66 - 1.03	89	3619	2.46	0.80*	0.64 - 0.99
Moroccan	64	2729	2.35	0.73*	0.57 - 0.94	57	2743	2.08	0.67**	0.52 - 0.89
Antillean	42	1224	3.43	1.07	0.79 - 1.46	37	1272	2.91	0.94	0.68 - 1.31
Other African	48	1435	3.34	1.05	0.78 - 1.39	41	1393	2.94	0.95	0.70 - 1.30
Other western	127	4323	2.94	0.92	0.76 - 1.11	86	4561	1.89	0.61**	0.49 - 0.76
Other non-western	80	2717	2.94	0.92	0.73 - 1.16	94	2949	3.19	1.03	0.83 - 1.28
Total	1284	41031	3.13			1200	42944	2.79		
Adolescents (11-19) in forensic YMHC										
Native Dutch	31	21161	0.15	1	-	125	22085	0.57	1	-
Surinamese	15	4247	0.35	2.41**	1.30 - 4.46	43	4322	0.99	1.75**	1.24 - 2.47
Turkish	2	3195	0.06	0.43	0.10 - 1.78	25	3619	0.69	1.22	0.80 - 1.87
Moroccan	4	2729	0.15	1	0.35 - 2.83	61	2743	2.22	3.92**	2.90 - 5.32
Antillean	8	1224	0.65	4.46**	2.06 - 9.69	24	1272	1.89	3.33**	2.16 - 5.14
Other African	3	1435	0.21	1.43	0.44 - 4.66	14	1393	1.01	1.78*	1.02 - 3.08
Other western	9	4323	0.21	1.42	0.68 - 2.98	21	4561	0.46	0.81	0.51 - 1.29
Other non-western	6	2717	0.22	1.51	0.63 - 3.61	27	2949	0.92	1.62*	1.07 - 2.45
Total	78	41031	0.19			340	42944	0.79		

RR = Relative Risk; C.I. = Confidence Interval.
* = significant on a 95% level.
** = significant on a 99% level.

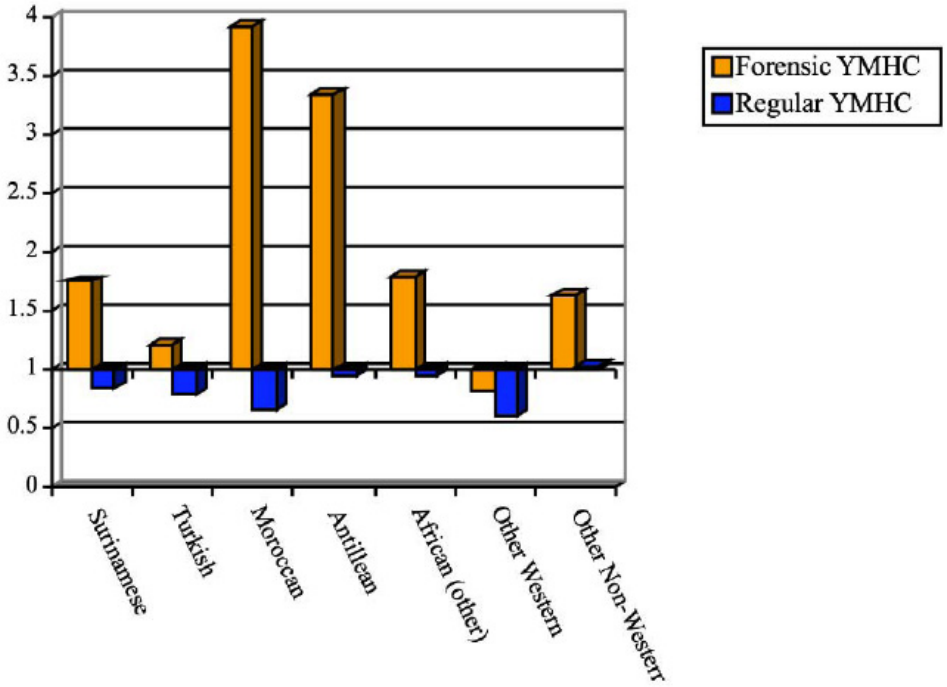

Figure 1: Relative Risk at treatment at regular and forensic YMHC for male adolescents from the major countries of origin (native Dutch as reference).

forensic treatment for some of the immigrant male adolescents.

DISCUSSION

Interpretation and Discussion of the Results

The study clearly shows that most immigrant children underutilize regular Dutch YMHC compared to native Dutch children. During adolescence immigrants tend to use YMHC at similar rates as native Dutch adolescents, but they are at the same time overrepresented in compulsory forensic services. The question arises firstly whether there is a connection between these three findings and secondly what the possible explanations for these findings might be.

One obvious link between the underrepresentation of younger ethnic minorities children in regular care and their overrepresentation during adolescence in forensic care is that their psychiatric disorders remain unrecognized and untreated early on in life and only become apparent once they have to appear in court because of criminal activities. This is strongly supported by the literature, which shows that untreated conduct disorders in childhood can lead to a delinquency later on in life [46-48] and that timely treatment of these disorders can prevent a criminal pathway [49]. The only exception to this argument found in our data are the Antillean boys, who do actually enter regular services at a young age and are not underrepresented in regular YMHC during adolescence, but are still highly overrepresented in forensic services. However, in this study we only looked at service utilization in general and not at disorder recognition or level of treatment completion versus dropout of those who had entered services and here might well lie a barrier to care as discussed below.

When looking at possible explanations for the restricted access to effective mental health treatment for ethnic minority children and adolescents in the Netherlands 'the filter model for access to mental health care' [50-52] is a useful tool. According to this model a number of filters has to be passed before treatment in a mental health institution will be carried out. The first one is related to how psychiatric problems are perceived by the (ethnic) groups themselves and whether patient and family present the problems to a professional at all. The second filter is, whether these problems are recognized by institutions and individuals (in the Dutch system often the general practitioner), who are in a position to refer patients to mental health care. Whether the patients are indeed referred to YMHC is determined in the third filter. The fourth filter occurs within mental health services and determines whether patients enter residential care. Once a person is referred to a mental health service, professionals need to interpret the presented behavior as belonging

to their field of experience, problems need to be diagnosed and recognized correctly and patients need to be engaged in effective treatment. During the process of being referred to YMHC, 'selective filtering' [51] can occur because the filters are easier to pass for some (ethnic) groups than for others. The filter model assumes that not only individual but also group characteristics determine who is blocked by the filters. Therefore a better understanding of these (for example, demographic and socio-economic) characteristics could help to explain the differences in accessibility of treatment for different ethnic groups.

With respect to the first filter it is important that the potential patient and his family have a certain level of knowledge about psychiatric problems and the way they can be treated. Understanding which problems are suited for professional help is labeled proto-professionalization [53] and a lack of proto-professionalization can be seen as the first barrier on the way to get access to accurate mental health care. During the past fifty years the majority population in western countries has been proto-professionalized, which has resulted in an increase of mental health care utilization. Youth mental health care should take measures to reach groups that are until now constrained from care and thereby advance the equality in service use between different ethnic and social groups. Therefore more knowledge and insight is needed in the level of proto-professionalization of immigrant youngsters and their families. In this way health care professionals could gain more knowledge of the way that immigrants interpret problematic behavior and what keeps them from making use of professional help. In The Netherlands the second filter (problem recognition) and the third filter (referral) between first contact with a health care professional and mental health services is provided by general practitioners as well as youth (social) services. At the moment we have insufficient data to know whether distressed ethnic minority youths do present their problems to these first line institutions, but national data indicate that at least on the level of youth social services immigrants are not underrepresented [16]. It might well be the case that problem behaviors in immigrants are more readily attributed to social problems by the professionals rather than to core mental health disorders, and that this is the reason why fewer referrals to mental health services occur.

A recent study on differences in care of various ethnic groups who had entered YMHC seems to support the possibility that immigrants' problem behaviors are more often attributed to social problems. We found that there was a marked difference in diagnoses (DSM classifications) of immigrant and native Dutch youth once they had actually passed through the third filter and reached specialist mental health care [54]. It was found that, compared to their native Dutch peers, ethnic minority children and adolescents were less often diagnosed with a core psychiatric disorder. Instead they often received only V-codes, indicating that their problem was mainly seen as being related to social factors such as parent-child relationship issues or life events, rather than to a core psychiatric disorder. By focussing on social factors, probably more prevalent in immigrant groups, professionals might overlook the presence of actual psychiatric morbidity. To be correctly diagnosed is the first requirement to receive the right treatment and to increase a successful outcome of treatment. Unfortunately, psychiatric disorders are often under-diagnosed, especially in ethnic minority youth [28, 55-60]. A number of studies have shown that observers assign different meanings to the same behavior depending on the race, class, or other demographic characteristics of the individual involved [57, 61, 62]. Ethnic stereotyping is especially present when diagnoses are made based on the opinion of the professionals, for whom unstructured clinical interview is the assessment method used most often in the practice of YMHC, and reliable and validated instruments are rarely used [63, 64].

Also, more insight should be gained in the possible ethnic bias that occurs in the trajectory that leads to treatment in YMHC. This bias is probably influenced by the attitude of the potential patients and their parents towards problematic behavior and professional help. Possibly the filters in the different stages of this trajectory are disadvantaging for some ethnic groups. For instance, there is the possibility that immigrant boys with conduct disorders do not receive the right and timely treatment because their parents, teachers, GP's and other professionals do not recognize the symptoms. The conduct disorder in turn may result into criminal behavior and lead to penitentiary measures or forensic psychiatric treatment. To realize a mental health care system that offers an equal access to all ethnic groups, more research should be conducted on how these filters on the route to the right treatment for mental health problems are functioning. Another interesting line of future research should focus on the consequences of under-diagnosing of psychiatric disorders and the underutilisation of mental health care

during childhood. Based on our findings a relation between underutilisation of regular YMHC by immigrant children and their overrepresentation in forensic YMHC during adolescence can be hypothesised. Future research can hopefully bring more clarity about the causality between these two phenomena.

LIMITATIONS OF THIS STUDY

A limitation of present study is that it is based on the data of only one institution in one large city in The Netherlands. Therefore we recommend that the study should be replicated in other metropolitan surroundings. Only then can we learn to what extend specific Dutch factors (or even special features of the population of The Hague and its surroundings) influenced the results. But even without additional research, YMHC professionals can reflect on measures to make their services more accessible for people of immigrant origin. When these actions are combined with an adequate registration of the ethnic background of the patients, the effects of the measures can be analyzed.

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