

Use of health care services by Afghan, Iranian, and Somali refugees and asylum seekers living in The Netherlands

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Background: Although asylum seekers have been coming to The Netherlands since the 1980s, very few epidemiological studies have focused on this group of inhabitants, or on the refugees who have resettled in this country. The objective of this study is to estimate the use of health care services by refugees and asylum seekers and to identify determinants for this utilisation. **Methods:** A population-based study was conducted in The Netherlands from June 2003 to April 2004 among adult refugees and asylum seekers from Afghanistan, Iran, and Somalia. A total of 178 refugees and 232 asylum seekers, living in 3 municipalities and 14 reception centres, participated. **Results:** This study showed that there are no differences between refugees and asylum seekers in the self-reported use of health care services. Respondents from Somalia reported less contacts with a general practitioner, less use of mental health services, and less medication use than respondents from Afghanistan and Iran. Both female gender and older age were related to more contacts with a general practitioner and a medical specialist, and with higher medication use. Poor general health was related to more contacts with a medical specialist and mental health services, and with higher medication use. **Conclusion:** Asylum seekers and refugees seem to have equal access to the Dutch health care system in general. However, there are differences in the self-reported use of health care services by the different ethnic groups.

Keywords: determinants, health services, prevalence study, refugee

Although asylum seekers have been coming to The Netherlands since the 1980s, few epidemiological studies have focused on this group of inhabitants, or on the refugees who have resettled in this country.^{1–5} Many population-based studies among adult refugees and asylum seekers living in Western countries report on the prevalence of (mental) health problems,⁶ but only a few provide data on their use of the health care services.^{4,7–10} In European countries, a differentiation can be made between refugees who have obtained a residence permit and asylum seekers who are still in the process of achieving such status. In The Netherlands, in general, refugees are living in a municipality, while asylum seekers are living in reception centres (in which accommodation and limited educational and recreational facilities are provided). Health policies towards asylum seekers differ significantly between European Union countries.¹¹ In The Netherlands, for asylum seekers the first contact with the health care system is usually with a nurse of the community health services team for asylum seekers (MOA), based in all reception centres, who may refer the asylum seeker to a social physician of the MOA team or to a general practitioner in or outside the centre. Refugees have, like the general population of The Netherlands, direct access to a general practitioner, who

functions as gatekeeper to the rest of the health care system (i.e. the general practitioner refers patients to, for example, an outpatient medical specialist, mental health services). Concerns have been expressed that the access to the health care system might be hampered, particularly for asylum seekers due to the introduction of the nurse before the general practitioner.¹²

A population-based study was conducted in The Netherlands among adult refugees and asylum seekers from Afghanistan, Iran, and Somalia to investigate their use of health care services. Furthermore, factors associated with their use of health care services will be identified.

Methods

An extensive description of the methods, including the selection of the study population and ethnic groups, the chosen outcome measures, the translation and cross-cultural adaptation of the measurement instrument, the training of the interviewers, and the practical execution of the study, can be found elsewhere.⁶

Study population

The study focused on people from Afghanistan, Iran, and Somalia, because from these three countries both large groups of asylum seekers were residing in the reception centres and large groups of refugees were living in municipalities in The Netherlands. Asylum seekers were approached in 14 reception centres, randomly selected from the 46 centres located in the central region of The Netherlands. Random samples of refugees were obtained from the population registers of three municipalities (Arnhem, Leiden, and Zaanstad) in which at least 200 refugees from each country were living. In each group a random selection was made of one person per family/address for inclusion in the study. The plan was to include 100 refugees and 100 asylum seekers per country of origin, to make it possible to compare subgroups. Those who were selected for inclusion in

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the study were first sent a letter, after which they were contacted by one of the 33 specifically trained bilingual interviewers from the three countries of origin. Informed consent was obtained verbally from all respondents. No written informed consent was obtained, because having to sign a statement could remind the asylum seekers and refugees of earlier confrontations with authorities. This alternative informed consent procedure and the study protocol were approved by the Medical Ethics Committee of the VU University Medical Centre in Amsterdam. Asylum seekers were informed that participation in the study would neither help nor hinder their request for asylum. All respondents received a financial incentive (€10).

Outcome measures

Following published guidelines, all questionnaires were cross-culturally adapted, translated into Dari, Pashto, Farsi, and Somali, back-translated, and pre-tested.^{13,14}

Use of health care services

To obtain an indication of the use of health care services, the following data were recorded: (i) contacts with a general practitioner in the previous 2 months; (ii) contacts with an outpatient medical specialist in the previous 2 months; (iii) hospital admissions (hospitalisation for one or more nights) in the previous 12 months; (iv) contacts with mental health services (e.g. psychologist, psychiatrist) in the previous 12 months; and (v) use of (un)prescribed medication in the previous 14 days and type of medication. For the asylum seekers the contacts with a nurse of the MOA in the previous 2 months were also recorded. These are all self-reported data, obtained with measures that have also been used in national health surveys.^{15,16} For the logistic regression analyses, all data were dichotomised into 'no' versus 'any' use of health care services.

Potential determinants

The following socio-demographic variables were recorded: country of origin, gender, age, highest level of education completed, and period of residence in The Netherlands. The current health status of the respondents—as indicator for their need for health care—was measured according to the general health question of the Short Form-36 (SF-36).¹⁷ For the logistic regression analyses, age was dichotomised into 18–37 years versus 38 years or older; education into none/religious/primary/secondary versus vocational/university; time in The Netherlands into <5 years and 5 years or more; and general health status into good (excellent, very good, good) and poor (fair, poor).

Statistical analysis

Two-tailed Pearson chi-square and Student's *t*-tests were used to examine differences in potential determinants between refugees and asylum seekers. Differences in the use of health care services between the two groups were examined by calculating odds ratios (ORs) with 95% confidence intervals (95% CIs) in univariate logistic regression analyses. To identify factors that were independently associated with indicators of the use of health care services, multivariate logistic regression analyses were performed by entering all variables simultaneously: legal status, country of origin, gender, age, education, time in The Netherlands, and general health status. Adjusted ORs were calculated to control for the presence of all other variables in the model. Finally, interactions between legal status and all other variables, and between country of origin and all other variables, were examined separately. $P < 0.05$ was considered to be statistically significant for all analyses.

Results

Characteristics of the study population

During a period of 10 months (June 2003–April 2004), a total of 479 refugees were approached in the various municipalities. Thirty-four refugees did not fulfil the inclusion criteria (24 were younger than 18) and 144 could not be contacted [60% were never at home, 34% were not living at the given address (any longer) and could not be traced]. Of the remaining 301 refugees, 123 were not interviewed, mainly because they were too busy or were not interested in participating. Thus, 178 of the 301 (59%) refugees who were eligible and had been contacted were interviewed (40% of the 445 eligible refugees who had been approached).

In the reception centres 391 asylum seekers were approached, 128 of whom could not be contacted [66% had left the centre (many with unknown destination), 34% were never at home] and one was younger than 18. Of the remaining 262 asylum seekers, only 30 were unwilling to be interviewed. Thus, 232 of the 262 (89%) asylum seekers who were eligible and had been contacted were interviewed (59% of the 390 eligible asylum seekers who had been approached).

Table 1 presents the number of respondents per country of origin, and the characteristics of the refugees and the asylum seekers are compared. There were more men than women in both groups. The refugees were somewhat older (except for the Somali refugees who were the same age as the asylum seekers) and had lived in The Netherlands for a longer period. The Iranian refugees had lived in The Netherlands for the longest period (mean 12.0 years, SD 4.2), and the Afghan asylum seekers for the shortest period (mean 2.8 years, SD 1.2). Only a third of the asylum seekers had completed higher education, compared to more than half of the refugees. More asylum seekers than refugees reported a poor general health status, and even 75.9% of the Iranian asylum seekers considered their health to be poor. In contrast, 64.8% of the Afghan refugees considered their health to be good.

Use of health care services

In table 2 the self-reported use of health care services by the refugees and asylum seekers is compared. There were no statistically significant differences between refugees and asylum seekers. Iranian refugees and asylum seekers reported the highest rate for 'use of mental health services' (24.6%) and 'medication use' (71.6%), whereas refugees and asylum seekers from Somalia reported the lowest rate for 'medication use' (42.5%). The mean number of contacts with a general practitioner in the past 2 months was 0.96 (SD 1.39) for the entire study population (there were no differences between the two groups). The most frequently self-reported medication use was: analgesics and antipyretics (67.9%), sleeping pills and tranquillisers (22.1%), medication for gastrointestinal complaints (17.9%), vitamin and mineral preparations (16.7%) and antidepressants (14.2%). With regard to the asylum seekers, 137 of the 216 (63.4%) reported that they had contacted a nurse of the MOA in the previous 2 months, and the mean number of contacts was 1.22 (1.45).

Factors associated with the use of health care services

The associations between the characteristics of the study population and the indicators for the use of health care services, adjusted for all other variables listed, are shown in table 3. As education and time in The Netherlands were not associated with any of the outcomes, the results for these variables are not presented. Furthermore, the results for hospitalisation are not presented, because no statistically significant associations were

Table 1 Characteristics of the study population^a

Characteristic	Total (<i>N</i> = 410)	Refugees (<i>n</i> = 178)	Asylum seekers (<i>n</i> = 232)	Statistic	<i>P</i> -value
Country of origin					
Somalia	87 (21.2)	25 (14.0)	62 (26.7)	NA	NA
Afghanistan	206 (50.2)	90 (50.6)	116 (50.0)		
Iran	117 (28.5)	63 (35.4)	54 (23.3)		
Gender					
Male	241 (58.8)	99 (55.6)	142 (61.2)	$\chi^2 = 1.30$	0.254
Female	169 (41.2)	79 (44.4)	90 (38.8)		
Age, mean (SD), years	37.0 (12.4)	40.3 (13.3)	34.4 (11.1)	<i>t</i> = 4.83	0.000
Education					
Vocational/university	159 (38.8)	92 (51.7)	67 (28.9)	$\chi^2 = 22.07$	0.000
None/religious/primary/secondary	251 (61.2)	86 (48.3)	165 (71.1)		
Time in The Netherlands, mean (SD), years	5.6 (4.0)	8.8 (4.1)	3.4 (1.6)	<i>t</i> = 16.98	0.000
Poor general health status	211 (51.7)	74 (42.0)	137 (59.1)	$\chi^2 = 11.59$	0.001
	(<i>N</i> = 408)	(<i>n</i> = 176)			

NA indicates not applicable

a: Number (percentage) of respondents is presented. Total number of respondents equals total number per group, unless indicated otherwise

Table 2 Use of health care services^a

Health care service	Total (<i>N</i> = 410)	Refugees (<i>n</i> = 178)	Asylum seekers (<i>n</i> = 232)	Unadjusted OR (95% CI)
General practitioner (2 months)	189 (47.7)	88 (49.7)	101 (46.1)	0.87 (0.58–1.29)
	(<i>N</i> = 396)	(<i>n</i> = 177)	(<i>n</i> = 219)	
Outpatient medical specialist (2 months)	83 (21.3)	35 (19.9)	48 (22.5)	1.17 (0.72–1.91)
	(<i>N</i> = 389)	(<i>n</i> = 176)	(<i>n</i> = 213)	
Hospitalisation (12 months)	49 (12.1)	21 (12.1)	28 (12.2)	1.01 (0.55–1.85)
	(<i>N</i> = 404)	(<i>n</i> = 174)	(<i>n</i> = 230)	
Mental health services (12 months)	52 (12.9)	17 (9.7)	35 (15.4)	1.71 (0.92–3.16)
	(<i>N</i> = 403)	(<i>n</i> = 176)	(<i>n</i> = 227)	
Medication use (14 days)	241 (58.9)	107 (60.5)	134 (57.8)	0.90 (0.60–1.33)
	(<i>N</i> = 409)	(<i>n</i> = 177)		

OR indicates odds ratio; CI indicates confidence interval

a: Number (percentage) of respondents is presented. Total number of respondents equals total number per group, unless indicated otherwise

found, except for the association with poor general health [OR = 2.23 (95% CI 1.15–4.34)]. Again no differences were found in the use of health care services between refugees and asylum seekers. The OR for use of mental health services by asylum seekers, compared to refugees, decreased from 1.71 (95% CI 0.92–3.16; *P* = 0.087) (unadjusted) to 1.00 (95% CI 0.34–2.90; *P* = 0.992) (adjusted). Respondents from Afghanistan more often contacted a general practitioner, compared to respondents from Somalia. Respondents from Iran more often used mental health services, compared to respondents from Somalia and Afghanistan. Respondents from Afghanistan and Iran more often used medication, compared to respondents from Somalia. Both female gender and older age (38 years and older) were associated with a higher use of health care services,

with the exception of the mental health services. A poor general health status was associated with a higher use of health care services.

Three statistically significant interactions were found: (i) the interaction terms for legal status and country of origin were statistically significant in the model with mental health services as outcome. As a result, the association between legal status and the use of mental health services is different for each of the three countries of origin: OR = 0.35 (95% CI 0.06–2.21) for respondents from Somalia; OR = 5.43 (95% CI 0.60–48.90) for respondents from Afghanistan; and OR = 0.52 (95% CI 0.12–2.19) for respondents from Iran. Asylum seekers from Somalia and Iran therefore seem to make less use of mental health services than refugees from these two countries, while for people from

Table 3 Factors associated with the use of health care services

Characteristic	Adjusted OR (95% CI)			
	General practitioner	Outpatient medical specialist	Mental health services	Medication use
Legal status				
Refugees	1.00	1.00	1.00	1.00
Asylum seekers	0.81 (0.42–1.56)	1.12 (0.50–2.51)	1.00 (0.34–2.90)	0.70 (0.35–1.40)
Country of origin				
Somalia	1.00	1.00	1.00	1.00
Afghanistan	1.81 (1.01–3.25)	0.70 (0.36–1.39)	0.67 (0.27–1.66)	2.21 (1.22–4.00)
Iran	1.77 (0.96–3.28)	0.51 (0.24–1.07)	3.03 (1.29–7.10)	3.45 (1.79–6.64)
Gender				
Male	1.00	1.00	1.00	1.00
Female	2.03 (1.33–3.10)	2.14 (1.27–3.59)	1.10 (0.59–2.06)	2.07 (1.31–3.26)
Age, years				
18–37	1.00	1.00	1.00	1.00
≥38	1.58 (1.01–2.46)	2.05 (1.20–3.52)	0.80 (0.41–1.55)	2.17 (1.35–3.50)
General health status				
Good	1.00	1.00	1.00	1.00
Poor	1.49 (0.96–2.29)	2.42 (1.39–4.20)	2.49 (1.24–5.00)	3.28 (2.07–5.21)

OR indicates odds ratio; CI indicates confidence interval

Each variable has been adjusted for all other variables listed in the table and for education and time in The Netherlands (data not shown)

Afghanistan this seems to be the other way around (although none of the differences were statistically significant). (ii) The interaction term for legal status and general health status was statistically significant in the model with medication use as outcome. This means that the association between legal status and medication use depends on the general health status of the respondents: OR = 1.12 (95% CI 0.51–2.47) for people with a good general health status; and OR = 0.35 (95% CI 0.14–0.87) for people with a poor general health status. Asylum seekers with a poor general health status use therefore less medication than refugees with a similar health status. (iii) The interaction terms for country of origin and age were statistically significant in the model with medication use as outcome. This means that the association between country of origin and use of medication depends on the age of the respondents: for people aged 38 and older, compared to respondents from Somalia, the ORs are 0.67 (95% CI 0.19–2.35) for respondents from Afghanistan and 0.49 (95% CI 0.35–1.76) for respondents from Iran. However, for the younger age group these ORs are 3.21 (95% CI 1.54–6.68) for respondents from Afghanistan and 9.83 (4.09–23.67) for respondents from Iran. Therefore, only people from Afghanistan and Iran, between 18 and 37 years of age, use more medication than people in the same age group from Somalia.

Discussion

The main purpose of this study was to compare the use of health care services between refugees and asylum seekers in The Netherlands. It was expected that, in the unadjusted analyses, asylum seekers would have a higher use of (mental) health care services, because, in general, asylum seekers report more (mental) health problems than refugees.¹⁸ However, the unadjusted analyses did not show any statistically significant differences between refugees and asylum seekers, although

asylum seekers seemed to make more use of mental health services (but the difference was just statistically insignificant). A reason for not finding a difference in contact with a general practitioner could be lying in the fact that asylum seekers do not have direct access to a general practitioner, but have to be referred by a nurse of the MOA team. When comparing the prevalence rate for contact with a nurse of the MOA team for asylum seekers with the prevalence rate for contact with a general practitioner for refugees, asylum seekers seem to have a higher use of this type of health care, although the difference is not statistically significant [OR = 1.75 (95% CI 1.17–2.02)]. This is also true when comparing the number of contacts with the MOA nurse respectively the general practitioner. The fact that no differences were found in contact with an outpatient medical specialist, hospitalisation, and medication use might be explained by the fact that the main differences in health problems between asylum seekers and refugees were found to be mental health problems (and this may also be reflected in the general health status). It was expected that in the adjusted analyses, the differences between asylum seekers and refugees would become smaller compared to the unadjusted analyses, under the assumption that access to the health care system is equal for both groups. This is what we found with regard to the use of mental health services. So, despite the fact that it was expected that the access to the health care system for asylum seekers might be hampered compared to refugees, this does not seem to be the case.

A further purpose of the study was to explore other factors associated with the use of health care services, e.g. ethnic background. In general, respondents from Somalia reported fewer contacts with a general practitioner, less use of mental health services, and less medication use than respondents from Afghanistan and Iran. This might partly be explained by the fact that respondents from Somalia reported less mental health problems (PTSD and depression/anxiety) than

respondents from Afghanistan and especially Iran.¹⁸ Furthermore, it is said that people from Somalia living in The Netherlands do not have much faith in the Dutch health care system and, for example, often consult health care practitioners in Germany.

To further examine the accessibility of the health care system, the results of this study can be compared with those of a large-scale health survey conducted in the general population of The Netherlands, including immigrants.^{16,19} In general, asylum seekers and refugees experience more health problems compared to immigrants, and especially compared to the general population.¹⁸ Therefore, it would be expected that asylum seekers and refugees make more use of the health care system compared to the other groups. A total of 42% of the general population and 51% of the immigrants reported that they had contacted a general practitioner in the previous 2 months, compared to 47.7% of the refugees and asylum seekers. However, the mean number of contacts seems to be lower for the study population [0.96 (SD 1.39)], compared to the general population [1.7 (SD 1.24)] and the immigrants [2.2 (SD 1.86)]. So, despite the higher prevalence of health problems, refugees, and asylum seekers seem to make less use of the general practitioner. Therefore, refugees and asylum seekers might both be experiencing problems in access to this type of health care, maybe due to cultural or language barriers. The prevalence of hospitalisation seems to be higher among asylum seekers and refugees (12.1%), compared to the general population (7.2%) and the immigrants (7.5%). The use of mental health services made by the study population (12.9%) is comparable with that made by immigrants (11%), but higher than the use made by the general population (6%). However, as the prevalence of mental health problems is very high among refugees and asylum seekers,¹⁸ the prevalence of use of mental health services is still relatively low. This was also found in a study among Somali refugees in the UK.¹⁰

Future research could focus on, for example, the nature of problems the MOA nurse does or does not refer to a general practitioner; differences in health services use between various ethnic groups; possible limited access to primary care for both asylum seekers and refugees compared to the general population; and the relatively low use of mental health services by both asylum seekers and refugees.

Finally, some methodological considerations need to be mentioned. The sampling procedures were intended to produce a representative sample of all refugees and asylum seekers from the three countries under study. However, the number of refugees who could not be contacted was rather high, due to incorrect address lists and because they were never at home, despite the fact that the interviewers tried to contact them on several occasions during the day and in the evening, during the week and in the weekend. Unfortunately, this is a common problem in studies among asylum seekers and refugees in The Netherlands.^{2,4,5} A low response rate may influence the representativeness of the sample. However, the respondents did not differ from those who could not be contacted in age or gender. Respondents and non-respondents (those contacted, but not interviewed) did not differ in age, but the male refugees were more likely to be unwilling to participate.

The validity and reliability of the measurement instruments have not (yet) been tested in the population included in the present study. However, the measurement instruments have been used in many health surveys, also including immigrants.^{15,19} Furthermore, all measurement instruments have gone through an extensive translation and cross-cultural adaptation process and have been pre-tested. Self-reported data on the use of health care services are presented, and earlier research has shown that self-reports produce a reasonably valid estimate of differences between groups in the use of health care services.²⁰

In conclusion, asylum seekers and refugees seem to have equal access to the Dutch health care system in general. However, there are differences between the various ethnic groups in their self-reported use of the health care services.

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Key points

- This study estimates the use of health care services by refugees and asylum seekers and identifies determinants for this utilisation.
- There are no differences between refugees and asylum seekers in the self-reported use of health care services.
- However, there are differences in the self-reported use of health care services between different ethnic groups.
- The health services should be aware that asylum seekers and refugees might have limited access to care compared to the general population.

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