

# Healthcare service use amongst Ethnic Minority and Immigrant groups in the UK

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## Introduction

Increased internationalisation of the market place and successive years of more borders becoming open, means western populations have become increasingly ethnically diverse. With this as its backdrop the World Health Organization (WHO) within its then 'Health for all by 2000' policy aimed to ensure ethnic minorities had equal access to healthcare. Within the UK, through the NHS, access to healthcare services is free, despite this healthcare service use by ethnic minority and immigrant groups has been shown to be less than that of the native population. The issues surrounding healthcare service access and use amongst these groups is made particularly problematic as the general and mental health of these groups has been shown to be poorer. The aim of this study is to examine ethnic differences in use of GP and Hospital healthcare services in the UK in a general sample and among a subsample of people with poor mental health.

## Theoretical Framework

Reasons for reduced use of healthcare services amongst ethnic minority groups have been linked to a number of barriers with the barriers divided into patient, provider and system level (Scheppers et al., 2006). This study focuses on the patient level barriers

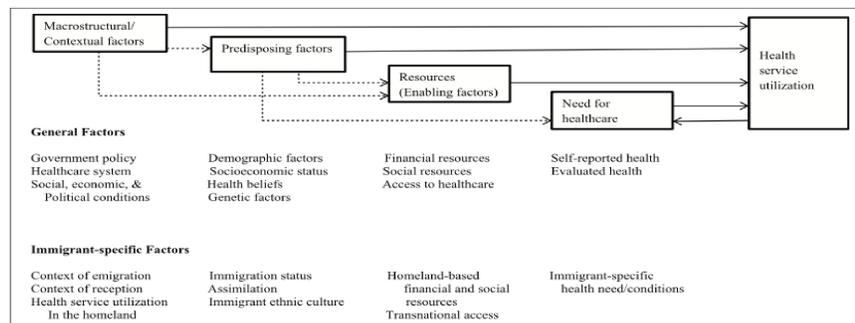


Figure 1: Framework for Health service utilisation including immigrant specific factors (Yang & Hwang, 2016)

## Research Questions

Are there ethnic differences in health service use amongst those with mental health problems?

How do health and length of stay determinants impact on healthcare service use?

Does health service access and use in the UK differ between people from ethnic minority and/or immigrant groups and the white British population, with particular focus on those with poor mental well-being?

## Methods and Materials

This study used the Understanding society –UK Household Longitudinal Study (UKHLS) dataset, conducting a cross-sectional analysis of Wave 7 (2015-2017).

The sample used in this study consists of 24,694 participants.

Variables included:

- Outcome:** Healthcare service use (primary and secondary care)
- Determinants:** ethnicity, Mental health/well-being(GHQ-12 score), length of stay in the UK, self-perceived health, number of chronic health conditions
- Co-variables:** marital status, education status, urban/rural location, home ownership, current economic status, age and gender.

## Data Analysis

- Analysed using IBM SPSS version 25. Multiple logistic regression models to examine ethnic differences in health care use were then carried out on the total population (n=24,694) initially, adjusting for co-variables and subsequently adding physical and self reported health, mental health, then length of stay in the UK to the model.
- The same analysis was then conducted on the population of 4,369 individuals with a GHQ score greater than 3 (poor mental health).
- These logistic regression models were run for both outcome measures of healthcare use.



## Results

Model 4 Variables	OR (95% CIs)	p-value	Hospital visits OR (95% CIs)	p-value
<b>Ethnic group<sup>a</sup></b>				
Indian	1.02 (0.83-1.26)	0.85	0.79 (0.59-1.06)	0.12
Pakistani	1.18 (0.96-1.47)	0.12	0.74 (0.54-0.99)	0.05
Bangladeshi	1.18 (0.87-1.61)	0.28	0.62 (0.38-1.01)	0.05
Caribbean	0.91 (0.73-1.19)	0.50	0.97 (0.69-1.35)	0.84
African	0.76 (0.56-1.03)	0.08	0.87 (0.58-1.31)	0.50
Mixed	1.00 (0.77-1.31)	0.99	1.17 (0.84-1.62)	0.37
Other	0.99 (0.82-1.20)	0.92	0.90 (0.70-1.16)	0.43
<b>Self-perceived health<sup>b</sup></b>				
poor	<b>2.97 (2.74-3.22)</b>	<0.001	<b>3.04 (2.74-3.38)</b>	<0.001
<b>Chronic Conditions present<sup>c</sup></b>				
One	<b>1.58 (1.44-1.74)</b>	<0.001	<b>1.35 (1.19-1.52)</b>	<0.001
More than one	<b>2.63 (2.37-2.92)</b>	<0.001	<b>2.13 (1.87-2.43)</b>	<0.001
<b>Mental health status<sup>d</sup></b>				
poor	<b>2.03 (1.86-2.22)</b>	<0.001	<b>1.50 (1.34-1.68)</b>	<0.001
<b>length of stay in UK<sup>e</sup></b>				
0-10 years	0.96 (0.72-1.21)	0.79	<b>0.62 (0.39-0.98)</b>	0.04
11-20 years	1.20 (0.96-1.50)	0.10	1.04 (0.76-1.41)	0.82
21-30 years	1.13 (0.86-1.47)	0.38	1.02 (0.71-1.47)	0.90
31-40 years	1.18 (0.88-1.56)	0.27	1.10 (0.76-1.06)	0.61
41-50 years	<b>1.55 (1.20-2.00)</b>	0.001	1.25 (0.89-1.75)	0.19
>50 years	1.17 (0.90-1.52)	0.23	1.01 (0.73-1.40)	0.94

Table 1 Multiple logistic regression model for use of healthcare services by ethnic group for total study population

Model 3 Variables	OR (95% CIs)	p-value	Hospital visits OR (95% CIs)	p-value
<b>Ethnic group<sup>a</sup></b>				
Indian	1.36 (0.94-1.95)	0.10	0.96 (0.59-1.56)	0.87
Pakistani	1.31 (0.92-1.89)	0.14	1.39 (0.89-2.15)	0.14
Bangladeshi	1.50 (0.87-2.60)	0.14	1.02 (0.49-2.10)	0.97
Caribbean	0.89 (0.57-1.38)	0.61	0.98 (0.56-1.72)	0.95
African	<b>0.49 (0.27-0.91)</b>	0.02	0.73 (0.32-1.66)	0.46
Mixed	1.20 (0.78-1.83)	0.41	1.24 (0.73-2.11)	0.43
Other	1.05 (0.74-1.48)	0.78	1.08 (0.70-1.67)	0.73
<b>Self-perceived health<sup>b</sup></b>				
poor	<b>3.51 (2.95-4.17)</b>	<0.001	<b>3.55 (2.75-4.57)</b>	<0.001
<b>Chronic Conditions present<sup>c</sup></b>				
One	<b>1.72 (1.44-2.06)</b>	<0.001	<b>1.57 (1.24-1.20)</b>	<0.001
More than one	<b>2.43 (1.20-2.95)</b>	<0.001	<b>2.13 (1.66-2.72)</b>	<0.001
<b>length of stay in UK<sup>d</sup></b>				
0-10 years	0.61 (0.34-1.07)	0.09	0.69 (0.31-1.52)	0.35
11-20 years	1.24 (0.83-1.86)	0.30	0.96 (0.56-1.66)	0.89
21-30 years	1.27 (0.81-2.00)	0.30	1.10 (0.63-1.94)	0.74
31-40 years	1.24 (0.75-2.06)	0.40	0.86 (0.47-1.59)	0.63
41-50 years	1.52 (0.94-2.46)	0.09	0.88 (0.48-1.60)	0.67
>50 years	1.46 (0.92-2.32)	0.11	1.22 (0.73-2.05)	0.45

Table 2 Multiple logistic regression model for use of healthcare services by ethnic group for poor mental health population

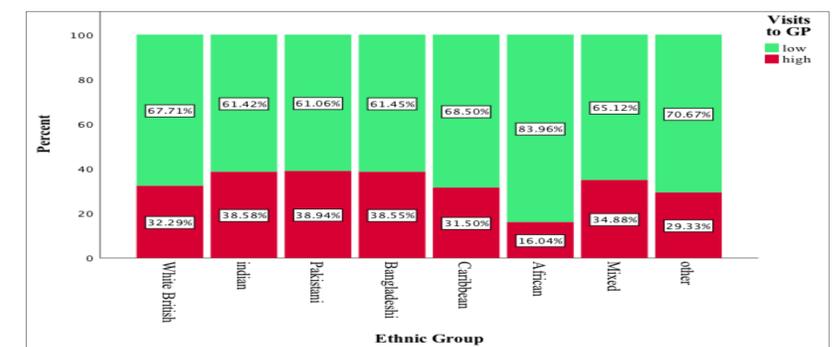


Figure 2 Ethnic group by visits to GP for those with poor mental health status

## Discussion

- After adjustment the only ethnic group with significantly reduced odds of high use are those from the African community, and only in relation to GP services. This same ethnic group have also been reported as being more likely to be detained under the 1983 Mental Health Act, often deemed to be due to lack of social support and higher mental health incidence. The over-representation of detention of this group has been related to late presentation to healthcare services with their illness due to accessibility issues. A potential explanation for the reduced use amongst those not in the UK for a substantial period of time may be due to the 'healthy migrant effect', where migrant populations experience better mental and physical health than the indigenous population in their early years of arrival. Referring back to Figure 1 what can be indicated from this research is that the need factors of self-perceived health, mental health status and diagnosed chronic conditions are of greatest significance in predicting use.

## Conclusion

In conclusion this study indicates that overall once adjustment for a plethora of socio-demographic factors as well as health and migration factors that ones ethnicity does not play a significant role in use of healthcare services, either in the sample population in its entirety or in the sub population of individuals with poor mental health. The only group seen to still experience inequality in use of healthcare services after all adjustments were the African ethnic group with poor mental health. This study thus can provide direction and a basis for future targeted research. Also it helps NHS policy makers in the UK understand which groups it may in the future invest greater resources into. Namely from these findings, investment is needed to improve access to primary healthcare in African communities at the local level targeting those with poor mental health. Currently work is on-going into gender stratified analysis of the same data.