

# Equity and access: understanding emergency health service use by newly arrived refugees

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**H**ealth inequities and provision of health care to resettled refugees are complex and critical issues worldwide. Many refugees arrive with significant levels of poor health,<sup>1-5</sup> exacerbated by trauma and resettlement difficulties,<sup>6,7</sup> which may lead to acute conditions requiring emergency medical attention. Prior patterns of emergency services use can influence the way refugees use them in their country of resettlement.<sup>8-11</sup>

There is limited information on the way newly resettled refugees engage with emergency department (ED) care in Australia. The role of the ED in categorising patients for potential inpatient admission emphasises the need for such research.<sup>12,13</sup> Understanding the way newly arrived refugees engage with EDs can help with education and policy making in relation to emergency care and the treatment of these refugees. We define emergency services as rescue facilities, such as the ambulance service and the ED. Our study aims to identify specific community needs and beliefs about use of the emergency health care service in the south-western Sydney area.

## METHODS

We administered a descriptive, community-based, semistructured telephone questionnaire over a 4-month period (December 2008 – April 2009). Patient information and contact details were obtained from the Liverpool Hospital ED database of patients who accessed the ED in the 6 months before our survey, indicating attendances at the Liverpool ED, located in metropolitan south-western Sydney. We profiled potential participants by country of birth and asked them if they had a refugee background. Human research ethics committee approval was

## ABSTRACT

**Objectives:** To determine issues that affect newly resettled refugees in accessing an emergency department (ED).

**Design, setting and participants:** We conducted a descriptive community survey using a semistructured questionnaire. Newly resettled refugees from the Middle East and Africa were interviewed, statistical analysis was performed, and standard content analysis methods were applied to free-text responses.

**Main outcome measures:** Emergency health-seeking behaviour, sociocultural barriers and beliefs about Australia's emergency health services.

**Results:** Half the African refugees (53/106) (50%), compared with only 15/49 (31%) of the Middle Eastern refugees, preferred an ED service over other forms of care for an urgent medical condition ( $P = 0.024$ ). Qualitative data revealed that most newly resettled refugees understand how to use the emergency health services. However, while most indicated that they were able to make a call for emergency medical help, a substantial number of our respondents revealed that they were afraid to make such a call for fear of security implications, on the basis of experiences from their home countries.

**Conclusion:** Reasons for differences in preferences of health care access, and determining how best to educate the community on the use of ED services, warrant further investigation. From a policy perspective, the increasing health care needs of refugees need re-examination when planning health care provision to refugees.

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obtained from the Sydney South West Area Health Service (SSWAHS).

## Questionnaire

The questionnaire was developed by community consultation through a cross-cultural adaptation process. Advice was taken from ethnic community health care workers and community leaders, on the clarity and cultural sensitivity of the questions, during our first meeting with them. Trained multilingual community health workers who were qualified interpreters administered the questionnaires.

## Data analysis

Descriptive analysis was performed, and 95% confidence intervals and  $P$  values were obtained. Differences in proportions of Afri-

can and Middle Eastern participants were tested by calculation of Pearson's  $\chi^2$  test. To examine the potential confounding effects of socioeconomic factors, multivariate logistic regression analysis was performed to show the difference between the African and Middle Eastern groups in terms of access to emergency services. Results were calculated using SPSS version 17 (SPSS Inc, Chicago, Ill, USA).

## RESULTS

### Characteristics of sample

Overall, 155 out of 172 potential participants completed the survey (90% response rate). Sixty-eight per cent were from sub-Saharan Africa and 32% were from the Middle East. Box 1 shows the demographic characteristics of the survey participants, Box 2 describes their socioeconomic details, and Box 3 shows the remaining results of the questionnaires. Respondents had lived in Australia for a mean of 4 years (SD, 2.9 years).

### Access to EDs and other health services

The survey showed that 144/155 respondents (93%) perceived a need for a general

### 1 Demographic background of survey participants (n = 155)

Demographic factor	African origin (n = 106)	Middle Eastern origin (n = 49)	P
Sex (male)	57.5%	34.7%	0.008
Interpreter required	60.4%	53.1%	0.391
Lived in another country as well as Australia and country of birth	87.7%	83.7%	0.492

## 2 Selected socioeconomic indicators (n = 155)

Socioeconomic indicators	Number
Has home telephone for emergency call	150 (97%)
Owens a car	98 (63%)
Has had some education	150 (97%)
Can easily read English	67 (43%)
Reads native language	146 (94%)
Unemployed	118 (76%)
Receives a social security payment	130 (84%)
Does not own a house	152 (98%)
Has a Medicare card	153 (99%)
Has a health care card	125 (81%)

practitioner from their ethnic group who spoke the same language. Half the African refugees (53/106) 50% preferred the ED for an urgent medical condition rather than other services, compared with only 15/49 (31%) of the Middle Eastern refugees ( $P = 0.024$ ). The preferred way of accessing urgent medical help was substantially divided between the ED and the family GP. Qualitative data showed that most respondents explained their preference for a GP because they thought he or she would explain their health conditions more easily in their own language and in a culturally relevant manner.

A large majority of the participants (142/155 [92%]) knew how to call for emergency medical help. However, a considerable proportion of newly resettled refugees were afraid to call an ambulance, even when they required it (33/155 [21%]; 95% CI, 15%–29%).

Some respondents reported that they were afraid to call an ambulance because, in their countries, when the police heard the ambulance sirens, they sometimes came as well as, or instead of, an ambulance. This was a more frequent theme among sub-Saharan African refugees than among Middle Eastern refugees. Some respondents reported that they would not call an ambulance because they feared they would not understand or be understood by emergency staff. This was more commonly the case with refugees from Middle Eastern backgrounds than the African refugees, and may explain their greater reluctance to use emergency services in preference to GP services.

Logistic analysis shows that there were significant differences between the African and Middle Eastern newly arrived refugee

## 3 Beliefs about emergency health care

Survey statement	African country of origin (n = 106)			Middle Eastern country of origin (n = 49)			P
	No	Unsure	Yes	No	Unsure	Yes	
It is better to get traditional healing than use the ED	56.6%	12.3%	31.1%	61.2%	24.5%	14.3%	0.032
Emergency health services save lives	2.8%	29.2%	67.9%	10.2%	14.3%	75.5%	0.032
In my country of origin, emergency health services were well established	77.4%	18.9%	3.8%	28.6%	24.5%	46.9%	<0.001
Urgent medical attention can save lives	0%	20.8%	79.2%	4.1%	14.3%	81.6%	0.078

ED = emergency department. ◆

groups in seven issues of access to the emergency department, after adjusting for the potential confounding of four socioeconomic indicators (Box 4). Other variables that we tested but found not to be significant include: participants' access to Liverpool Hospital ED; participants had used an ED service in other countries; participants used ethnic communities as a source of information about medical care; and participants had access to a GP.

Overall, 87/155 (56%) of those who accessed Liverpool Hospital ED rated the service received at the ED as excellent, good or average. Qualitative data, however, revealed that the refugees believed they accessed a health professional more quickly at a GP service. Box 4 shows some of the sentiments reflecting the refugees' variable experiences of care.

There was no significant disparity between refugee groups in relation to knowledge, beliefs and attitudes about use of emergency health services. Box 3 presents their beliefs about emergency health care.

Respondents regarded communication, convenience and efficiency as important elements in distinguishing whether to use GP or ED services.

There were no significant differences between the two refugee groups in access to information about the ED service, as shown in Box 4. There were notable differences between preferred ways of accessing urgent medical help, as described in Box 4.

## DISCUSSION

Our study shows that the need for improvement in health service delivery to recently resettled refugees<sup>7</sup> also applies to emergency services, and there are two major implications for policy and training that emerge. The first is the need for a well trained and diverse health care workforce in Australia to

understand patient needs, and to explain assessments, diagnoses and procedures in ways the patients will understand.<sup>14,15</sup> This may involve community outreach and enhanced information technology systems for integrated care across health sectors. The second implication from our study is that policymakers need to identify and act on differences between ethnic groups, which are often mistakenly regarded as homogeneous.

Our study has some limitations which point to topics for further research. Generalisation to other ethnic groups is limited because the sample was not representative of the Australian refugee population. Future researchers might, for example, investigate individual emergency services, enabling comparison of use of EDs and ambulance services. A community-based survey might identify a segment of the refugee community (that was not identified by our hospital-based sample) who have less access to health care. Further research might subdivide refugee participants by country of origin, and elaborate on and control for socioeconomic indicators and other potentially influential factors, such as English language competency and length of time in Australia.

Further research is also needed to explore the reasons why many of the respondents were afraid of calling an ambulance, despite their ability to do so and their conviction that such a call was needed. ED use by refugees needs to be compared with ED use by the general population, and the reasons that refugees accessed particular emergency services on a particular occasion. Enhancing access, equity and quality health care delivery will enhance the socioeconomic situation of newly resettled refugees. It will develop a more holistic health care service that will cater for this growing group of marginalised people.

#### 4 Logistic analysis examining differences between African and Middle Eastern groups in perceived access to emergency services

Access to emergency services	Variable	Odds ratio (95% CI)	P
Afraid to call for an ambulance when required	African*	0.38 (0.16–0.90)	0.028
	Owens a car	1.62 (0.63–4.18)	0.317
	Can easily read English	0.16 (0.05–0.49)	0.001
	Unemployed	1.29 (0.41–4.05)	0.659
	Has a health care card	0.53 (0.17–1.61)	0.260
Prefers an emergency health care service for getting urgent medical help	African	2.27 (1.09–4.73)	0.028
	Owens a car	1.03 (0.50–2.14)	0.935
	Can easily read English	1.16 (0.59–2.31)	0.666
	Unemployed	0.45 (0.18–1.18)	0.104
	Has a health care card	1.42 (0.52–3.86)	0.496
Prefers family general practitioner for getting urgent medical help	African	0.43 (0.21–0.87)	0.020
	Owens a car	1.16 (0.56–2.42)	0.685
	Can easily read English	1.00 (0.50–2.00)	0.995
	Unemployed	1.72 (0.66–4.52)	0.269
	Has a health care card	1.61 (0.58–4.50)	0.363
Ever felt critically ill or been seriously injured enough to require an ambulance or emergency medical attention	African	2.76 (1.27–6.01)	0.010
	Owens a car	1.03 (0.49–2.18)	0.940
	Can easily read English	1.12 (0.56–2.26)	0.751
	Unemployed	0.76 (0.28–2.05)	0.590
	Has a health care card	3.11 (1.02–9.52)	0.046
Ever called for an ambulance	African	3.77 (1.60–8.85)	0.002
	Owens a car	1.35 (0.61–3.00)	0.459
	Can easily read English	0.52 (0.24–1.10)	0.088
	Unemployed	0.66 (0.23–1.88)	0.437
	Has a health care card	5.91 (1.68–20.80)	0.006
Been treated by ambulance or paramedic staff at home	African	2.40 (1.03–5.61)	0.044
	Owens a car	0.94 (0.42–2.08)	0.877
	Can easily read English	0.77 (0.36–1.66)	0.512
	Unemployed	0.99 (0.34–2.91)	0.985
	Has a health care card	5.08 (1.24–20.77)	0.024
Use health professionals (eg, doctors, nurses) as source of information about health and emergency medical care	African	3.57 (1.31–9.73)	0.013
	Owens a car	0.36 (0.10–1.24)	0.106
	Can easily read English	0.95 (0.35–2.61)	0.921
	Unemployed	1.05 (0.30–3.66)	0.944
	Has a health care card	2.18 (0.61–7.84)	0.231

\* Group variable of African (n = 1) and Middle Eastern (n = 0).

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#### COMPETING INTERESTS

None relevant to this article declared (ICMJE disclosure forms completed).

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#### REFERENCES

- 1 Neale A, Ngeow JY, Skull SA, Biggs BA. Health services utilisation and barriers for settlers from the Horn of Africa. *Aust NZ J Public Health* 2007; 31: 333-335.
- 2 Kessler RC, House JS, Turner JB. Unemployment and health in a community sample. *J Health Soc Behav* 1987; 28: 51-59.
- 3 Klein H. Health inequality, social exclusion and neighbourhood renewal: can place-based renewal improve the health of disadvantaged communities? *Aust J Primary Health* 2004; 10: 110-119.
- 4 Tiong AC, Patel MS, Gardiner J, et al. Health issues in newly arrived African refugees attending general practice clinics in Melbourne. *Med J Aust* 2006; 185: 602-606.
- 5 Woloshin S, Schwartz LM, Katz SJ, Welch HG. Is language a barrier to the use of preventive services? *J Gen Intern Med* 1997; 12: 472-477.
- 6 Omeri A, Lennings C, Raymond L. Beyond asylum: implications for nursing and health care delivery for Afghan refugees in Australia. *J Transcult Nurs* 2006; 17: 30-39.
- 7 Sheikh M. The health and wellbeing of newly resettled refugee children in Sydney [doctoral thesis]. Sydney: University of New South Wales, 2007.
- 8 Buron A, Cots F, Garcia O, et al. Hospital emergency department utilisation rates among the immigrant population in Barcelona, Spain. *BMC Health Serv Res* 2008; 8: 51.
- 9 Norredam M, Mygind A, Nielsen AS, et al. Motivation and relevance of emergency room visits among immigrants and patients of Danish origin. *Eur J Public Health* 2007; 17: 497-502.
- 10 DeShaw PJ. Use of the emergency department by Somali immigrants and refugees. *Minn Med* 2006; 89: 42-45.
- 11 Colic-Peisker V, Tilbury F. "Active" and "passive" resettlement: the influence of host culture, support services, and refugees' own resources on the choice of resettlement style. *Int Migr* 2003; 41: 61-91.
- 12 Nugus P, Braithwaite J. The dynamic interaction of quality and efficiency in the emergency department: squaring the circle? *Soc Sci Med* 2010; 70: 511-517.
- 13 Nugus P, Carroll K, Hewett DG, et al. Integrated care in the emergency department: a complex adaptive systems perspective. *Soc Sci Med* 2010; 71: 1997-2004.
- 14 Sheikh-Mohammed M, MacIntyre CR, Wood NJ, et al. Barriers to access to health care for newly resettled sub-Saharan refugees in Australia. *Med J Aust* 2006; 185: 594-597.
- 15 Pesata V, Pallija G, Webb AA. A descriptive study of missed appointments: families' perceptions of barriers to care. *J Pediatr Health Care* 1999; 13: 178-182.

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