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Research paper

Health services: knowledge, use and satisfaction of Afghan, Iranian and Iraqi settlers in Australia

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ABSTRACT

This paper reports the findings of a study examining the knowledge of, use of and satisfaction with local primary healthcare services reported by new arrivals to Australia from Iran, Iraq and Afghanistan. The study sample consisted of a purposive sample of 98 new settlers from the selected countries and used a semi-structured questionnaire and focus groups to attain information. Key findings were that friends and family were the greatest sources of health provider information and there was a lack of both more general health information and understanding of the health system. While study participants were able to access primary healthcare services and were generally satisfied, several major operational deficiencies were reported. General practitioners

(GPs) were the major health providers for these groups. Health-seeking behaviours were strongly influenced by the country of birth in comparison with the other examined factors, and experiences of health service encounters also varied greatly between countries of birth. The facility's proximity to the participant's home was a strong influence in the selection of health services. The researchers recommend that a network of appropriately supported and staffed community health centres and/or GP clinics is needed in areas where there are high concentrations of refugees and immigrants.

Keywords: Afghanistan, asylum seekers, health service access, immigrant health, Iran, Iraq, refugees

Introduction

People born in Iraq, Iran and Afghanistan constitute an increasing proportion of settlers in Australia, with the majority of persons from these countries accepted under the humanitarian programme. For the period

1 January 1998 to 30 September 2003, 91% of Afghans, 84% of Iraqis and 61% of Iranians settling in Australia did so under either the offshore or onshore humanitarian programme and settlers from these three

countries comprised 35% of total humanitarian arrivals. More than 70% of these new arrivals have settled in the metropolitan areas of New South Wales or Victoria (Department of Immigration and Multicultural Affairs (DIMA), 2006).

People who flee their birth country due to conditions of conflict, political unrest or fear of persecution are likely to suffer poorer health relative to their host community due to a range of factors. These may include traumatic experiences encountered in fleeing their country of birth and the journey to resettlement (Gagnon *et al*, 2001), and limited access to healthcare in the country of birth or origin (Grove and Zwi, 2006). After migration, people experience social marginalisation and loss of social networks (Lipson and Meleis, 1983), disempowerment, anxiety regarding insecure residency in the new country (Grove and Zwi, 2006), prolonged processing of asylum claims, detention (Steel *et al*, 2006), and challenges in accessing the health system of the host country (Norredam *et al*, 2006).

In Australia, barriers to accessing the health system for refugees and asylum seekers have been identified, including financial and employment difficulties, cultural differences, language difficulties and a lack of interpreters. These barriers are intensified by immigration policy, lack of information and confusion regarding the health system, and a health workforce untrained in issues specific to refugee health (Davidson *et al*, 2004; Correa-Velez *et al*, 2005; Murray and Skull, 2005; Omeri *et al*, 2006).

While internationally a number of papers describe the mental health issues and infectious diseases commonly experienced, and access to services by this group of settlers (Gerritsen *et al*, 2006; Norredam *et al*, 2006), there is a lack of information about how knowledge is attained regarding local health services and the use of and satisfaction with these services. It was therefore the aim of this study to examine the knowledge of, use of and satisfaction with local primary healthcare services for new arrivals to Australia from Iran, Iraq and Afghanistan.

Methods

Study population and recruitment

The study population consisted of a purposive sample of members of the Iraqi, Iranian and Afghan communities residing in Victoria, Australia. The inclusion criteria were: born in one of the three study countries, Iraq, Iran and Afghanistan, aged 18 years or over and arrival in Australia during or after 1998. After discussion with and approval of the project by community leaders, initial recruitment was conducted via an

advertising campaign within community organisations and radio programmes in appropriate languages with participants self-selecting by contacting the research team in response to the advertisements. A snowballing technique was then used to extend the sample; initial respondents were asked to provide contact details of other members of their communities. The initial target sample size was 50 participants of equal gender distribution per community group.

Research methods and collection of data

The study tools consisted of a community survey comprising face-to-face interviews, and focus group discussions. A semi-structured questionnaire was developed in consultation with community members for use in face-to-face interviews. The questionnaire contained a combination of multiple-choice and open-ended questions, and collected information regarding socio-demographics and each participant's knowledge of, utilisation of and satisfaction with local health services. Questionnaires were translated into Dari for Afghan participants and Arabic for the Iraqi participants, and were back-translated and pilot-tested with members of the respective communities prior to the commencement of the study. Iranian questionnaires were verbally translated, administered and recorded by the community worker and primary researcher.

Three community workers from the countries of origin who were bilingual in English and Arabic, Farsi or Dari, were recruited and trained in the project's aims and field-collection methods, and assisted in the conduct of community surveys and focus groups. Community surveys were conducted between October 2003 and March 2004. Two focus groups were conducted between April and June 2004 with female members of the Iraqi community. Ethics approval for the study was obtained from the Melbourne Health Human Research Ethics Committee (HREC), and written consent was obtained from all participants in their language of choice.

Outcome measures

Self-reported information was recorded with regard to the key outcomes of knowledge of, use of and satisfaction with local healthcare services (see Box 1). Other recorded self-reported information regarding socio-demographics (as potential determinants) included: country of birth, age, gender, English proficiency, migration history, employment status, education level, household size, year of arrival in Australia and current visa status. The main outcome measures from the questionnaire formed the basis of focus group discussions.

Box 1 Categories for self-reported information

- *Knowledge*: knowledge of health services available in the participant's local area and where the knowledge of these services was obtained.
- *Use*: which health service participants used when they needed medical assistance; the reasons for using this health service; if the participant always went to the same health service; and when the participant last used health services.
- *Satisfaction*: satisfaction or otherwise with local health services using a scale of -5 (not satisfied) to +5 (satisfied) and the reasons for satisfaction or dissatisfaction.

Analysis

Statistical analysis of data was conducted using STATA Version 9.0. Pearson chi-square tests and odds ratios (ORs), with 95% confidence intervals (CIs) calculated by univariate logistic regression analyses, were used to examine potential determinants and differences in the use, knowledge and satisfaction of health services. Factors independently associated with the use of, knowledge of and satisfaction with health services were identified by performing multivariate logistic regression using all independent variables with an association with the outcomes, including country of birth, gender, family size, education, employment, spoken English proficiency, current visa type and time in Australia, to calculate the adjusted OR. Themes were drawn from open-ended questions and focus group discussions, using qualitative methods.

Findings

Characteristics of the study population

The final study sample for the community surveys consisted of 98 persons, of whom 35 were Iraqi, 40 were Afghan and 23 were Iranian. Despite the aim of equal representation from each gender group, there were 62 female and 36 male participants. Table 1 illustrates the number and characteristics of community survey participants in total and per country of origin. Fifty-seven percent of the study group was educated for more than 12 years, 84% were unemployed (more than 90% of Iraqis and Afghans and 47% of Iranians), 22% had no ability to speak English (more than 30% of Iraqis and Iranians and 7% of

Afghans), and 53% were residing in Australia on a humanitarian visa. The mean family size was 4.3 (range 1–15), with Iranians having the smallest families (mean 3.3, range 2–6) and Afghans the largest (mean 5.2, range 1–15).

Twenty participants had spent time in a refugee camp prior to arrival in Australia with a mean length of stay of 22.8 months (standard deviation (SD) = 14.8). All participants residing in Australia on a Temporary Protection Visa had spent time in a detention camp with a mean length of stay of 5.8 months (SD = 2.6; see Box 2).

Box 2

A Temporary Protection Visa is a 3-year visa granted to unauthorised onshore arrivals who are found to be refugees.

Two focus groups were conducted with female members of the Iraqi community and comprised 8 and 11 participants.

Knowledge of healthcare services and associated factors

The descriptive findings in relation to the participants' reported knowledge of local health services are illustrated in Table 2. Ninety-three percent ($n = 97$) of respondents knew of a general practitioner (GP) clinic within their local area, while only 21% knew of a community health centre and 20% a hospital emergency department in their area. Fifty-one percent of Iraqis knew of more than one service within their local area in comparison to 10% of Afghans and 22% of Iranians, although this result was not significant following multivariate adjustment (OR = 4.57, 95% CI 0.9–21.7).

The most common source of knowledge of local health services was friends and relatives, with 80% ($n = 94$) of respondents reporting they had obtained knowledge in this manner. However, some respondents had no support in making initial contact with the health system.

'You come here, you do not speak English, you do not have information and your relative in Australia do not live close by, and you need a doctor. What will you do? Simple, the first time we needed a doctor we drove in the streets until we found a medical sign and we went in.' (Iranian man)

In addition to knowledge of local health services, confusion and lack of knowledge/information regarding Australian healthcare including the public and private systems emerged as a recurring theme from focus group discussions and open-ended questions.

Table 1 Characteristics of Iraqi, Afghan and Iranian participants in a community survey, October 2003 to March 2004

Characteristic	Total (<i>n</i> = 98)	Country of birth		
		Iraq (<i>n</i> = 35)	Afghanistan (<i>n</i> = 40)	Iran (<i>n</i> = 23)
Gender				
Male	36 (36.7)	10 (28.6)	16 (40.0)	10 (43.5)
Female	62 (63.3)	25 (71.4)	24 (60.0)	13 (56.5)
Age mean years (SD)	36.3 (10.4)	35 (7.9)	35.6 (12.2)	39.4 (9.9)
Family size, mean (SD; <i>n</i> = 93)	4.3 (2.2)	4.1 (1.79)	5.2 (2.9)	3.3 (1.1)
Education				
<6 years	17 (17.4)	10 (28.6)	7 (17.5)	0
6–12 years	25 (25.5)	6 (17.1)	9 (22.5)	10 (43.5)
>12 years	56 (57.1)	19 (54.3)	24 (60.0)	13 (56.65)
Employment (<i>n</i> = 97)				
Full-time/part-time	15 (15.5)	1 (2.9)	2 (5.2)	12 (52.2)
Unemployed	82 (84.5)	34 (97.1)	37 (94.8)	11 (47.8)
Spoken English proficiency				
Good/functional	76 (77.6)	23 (65.7)	37 (92.5)	16 (69.5)
None	22 (22.4)	12 (34.3)	3 (7.5)	7 (30.4)
Time in Australia, mean (SD) years (<i>n</i> = 97)	3.3 (1.8)	3.5 (1.3)	3.4 (2.0)	2.8 (2.1)
Current visa type (<i>n</i> = 39)				
Refugee	24 (24.5)	7 (20.0)	0	17 (73.9)
Temporary Protection Visa	28 (28.6)	23 (65.7)	5 (12.5)	0
Citizen/resident	46 (46.9)	5 (14.3)	35 (87.5)	6 (26.1)

Unless otherwise shown, number (percentage) of respondents is presented. Total number of respondents equals total number per group unless otherwise indicated.

'The problem is lack of information, there is a need to teach us how to live in Australia and about the health services.' (Iranian man)

'... we have Medicare and we have private insurance ... although we have insurance, they do not bulk bill and we can't get money from the private company.' (Iranian woman)

Use of healthcare services and associated factors

The descriptive findings in relation to the use of healthcare services within the participant group are illustrated in Table 3. Univariate analysis of factors potentially influencing the use of healthcare services yielded significant associations with country of birth groups, type of visa, English language ability and employment status. Following adjustment for all

variables using multivariate analysis, the following statistically significant findings were found: Iraqi respondents were more likely to indicate that they attended the health service because the GP spoke their language (OR = 20.8, 95% CI 5.5–78.9). Conversely, ease of making an appointment (OR = 0.1, 95% CI 0.02–0.6), a perception that the GP was good (OR = 0.1, 95% CI 0.03–0.4) and friends utilising the same services (OR = 0.1, 95% CI 0.02–0.5) were all less likely to influence the choice of health service for Iraqi respondents. Respondents that spoke English functionally or well were more likely to visit the service closest to their home (OR = 5.6, 95% CI 1.6–20.1), while the availability of bulk billing was less likely to influence their choice of health service (OR = 0.2, 95% CI 0.02–0.67; see Box 3). Afghan participants indicated they were more likely to utilise a health service if their friends went there (OR = 7.5, 95% CI 1.0–55.1), bulk billing was available (OR = 8.1, 95% CI 1.6–41.2)

Table 2 Descriptive knowledge of health services reported by recent Iraqi, Afghan and Iranian settlers, October 2003 to March 2004

Characteristic	Total (<i>n</i> = 97)	Country of birth		
		Iraq (<i>n</i> = 35)	Afghanistan (<i>n</i> = 39)	Iran (<i>n</i> = 23)
Knowledge of health services close to home ^a (<i>n</i> = 97)				
GP	90 (92.8)	31 (88.6)	36 (92.3)	23 (100.0)
Community health centre	20 (20.6)	14 (40.0)	4 (10.3)	2 (8.7)
Hospital emergency department	19 (19.6)	13 (37.1)	3 (7.7)	3 (13.0)
24-hour medical clinic	3 (3.1)	2 (5.7)	1 (2.6)	0
Knowledge of more than one service	27 (27.9)	18 (51.4)	4 (10.3)	5 (21.7)
How knowledge of services close to home obtained ^a (<i>n</i> = 94)				
Relatives	21 (22.3)	9 (28.1)	7 (17.9)	5 (21.7)
Friends	54 (57.5)	16 (50.0)	26 (66.7)	12 (52.2)
Migrant resource centre	18 (19.2)	9 (28.1)	6 (15.4)	3 (13.0)
DIMA	3 (3.2)	1 (3.1)	2 (5.1)	0
Victorian Foundation for Survivors of Torture	3 (3.2)	1 (3.1)	0	2 (8.7)
Other (e.g. saw a sign)	7 (7.4)	0	0	7 (30.4)

^a May give more than one response.

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

and if they felt it was easy to make an appointment (OR = 6.0, 95% CI 1.3–28.1). Respondents in full- or part-time employment indicated they were more likely to utilise a health service if bulk billing was available (OR = 7.1, 95% CI 1.1–45.4), while their friend going to a particular service was less likely to be of influence (OR = 0.1, 95% CI 0.01–0.5).

Box 3

Bulk billing is a payment option under Australia's universal health insurance scheme – Medicare. The doctor is paid directly by the government through the use of the patient's Medicare card.

In addition to the above, two main themes emerged as being factors in the use of healthcare services through focus groups and open-ended questions: gender of the treating doctor and communication. Communication with the treating doctor was shown to be more than purely an issue of language but also related to culture and perceived understanding of the patient's condition.

'It is not the language; I can speak English very well. The doctor needs to understand your thinking. I mean your culture, so it is better to go to an Iraqi or even Arab doctor, who at least understands our culture.' (Iraqi man)

'... it is hard to get an interpreter ... they need Iranian doctors who speak the language and understand the illness ...' (Iranian woman)

'... got to be more doctors who can speak different languages. I do not want an interpreter to know my medical problem ...' (Iranian man)

Both male and female participants noted a preference for female doctors to deal with women's health issues.

'First the clinic close by our house, she [a woman doctor] can understand what we are talking about, she speaks the same language and she understands Iranian culture. The other GP we had to pay money. Here we get the service free, we do not have to pay for anything. The most important thing is she is a woman and my wife can feel better with her, she can understand my wife problem better' (Iranian man)

Table 4 Satisfaction with health services reported by Iraqi, Afghan and Iranian settlers in Melbourne, Australia

Characteristic	Total (<i>n</i> = 84)
Satisfied with local health services	62 (73.8)
Reasons for satisfaction ^a (<i>n</i> = 62)	
Doctor treats respondent well (<i>n</i> = 58)	51 (87.9)
Positive manner of doctor (<i>n</i> = 56)	49 (87.5)
Positive staff attitude (<i>n</i> = 55)	41 (74.6)
Can get referral to a specialist (<i>n</i> = 58)	40 (69.0)
Staff and service availability (<i>n</i> = 55)	32 (58.2)
There is always an interpreter (<i>n</i> = 55)	6 (10.9)
Reasons for dissatisfaction ^a	
Respondent waits a long time (<i>n</i> = 27)	17 (63.0)
Can't get referred to other services (<i>n</i> = 22)	9 (40.9)
Nurse is not helpful (<i>n</i> = 22)	8 (36.4)
No one to help answer questions (<i>n</i> = 27)	6 (22.2)
Doctor does not listen to respondent (<i>n</i> = 21)	3 (14.3)

^a May give more than one response.

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

Satisfaction with healthcare services and associated factors

The descriptive findings in relation to satisfaction with healthcare services reported by the participants are illustrated in Table 4. There were no significant associations found following multivariate analysis with the independent variables.

Again, focus group discussions and open-ended questions yielded an additional range of factors that impacted on participants' satisfaction with local health services. These included dental care, a perception of the treating doctor's expertise, and referral procedures to specialists.

Difficulty in accessing dental services was raised by participants as being of great concern to themselves and their families. This was due to cost, a long waiting time for public services, and lack of after hours care.

'Dental care ... is a problem, very expensive and hard to get an appointment ... in public clinics dental care is not comprehensive ...' (Iraqi woman)

While the majority of participants expressed satisfaction with the care provided by their treating doctor, a number expressed concern with a perceived lack of experience of their doctor and 'unease' with the treatment provided.

'Our family doctor is kind, but one doctor cannot heal all diseases. There should be different doctors for different sort of diseases. As far as I know there should be specialised doctor for each disease in one clinic. So the

patient is introduced to the right doctor. Unfortunately, it happens the opposite in Australia.' (Afghan man)

'I go to the GP, but I need a specialist. I have skin problem, I got it in the camp, the GP keep giving me ointment and it does not work. I tell him I need to do some lab tests but he keeps telling me no need and won't refer me to a skin specialist. If I were in Iraq, I do not have to wait for him, I can go by myself to any doctor I choose.' (Iraqi woman)

Participants expressed frustration at the length of time and 'complicated' procedure to be referred to a specialist.

'... patient contact his family Doctor, when he is unable to give needed treatment, he refers the patient to the specialist ... it takes three to six months to see the specialist ... the patient dies or aggravates [sic] until his/her turn comes.' (Afghan man)

Discussion

This study provides valuable information about the knowledge, satisfaction and use of health services by immigrants from Iraq, Iran and Afghanistan residing in Melbourne. It has highlighted that local GPs are the major health providers for these community groups. Even though the study participants were able to access primary healthcare services and were generally satisfied, several major operational deficiencies were reported. Friends and family were the greatest sources of

health provider information but there was a lack of both more general health information and understanding of the health system.

As well as being the major health providers for study participants, GPs are largely responsible for undertaking initial health assessments for new immigrants settling in Victoria (Caruana *et al*, 2006). In order to ensure a quality health service is provided to these new settlers, it is important that GPs themselves are supported through improved professional development in refugee health to enable appropriate medical care for complex health problems (Harris and Zwar, 2005) and improved communication with patients through the use of professional interpreters, including longer consultation times. In May 2006, the federal government recognised some of these needs and introduced a specific Medical Benefits Schedule number for initial detailed health assessments for refugee clients (Department of Health and Ageing, 2006). While this is only a single payment, it should assist with more detailed health checks using professional interpreters, which have been shown to improve reporting of symptoms and appropriate referral to other health providers (Bischoff *et al*, 2003). It does not, however, assist other health providers caring for these persons, including allied health professionals and dentists.

The strong influence of country of birth, in comparison with the other examined factors, on health-seeking behaviours has been illustrated in our study. The finding concurs with those of other studies of Iranian and Afghan immigrants in New South Wales, Australia (Omeri, 1997; Omeri *et al*, 2006), and with recent research about Afghan, Iranian and Somali refugees and asylum seekers in Holland, where statistical differences in usage rates of health services were found between country of origin groups (Gerritsen *et al*, 2006). Lipson and others (Lipson and Meleis, 1983; Meleis *et al*, 1992; Lipson and Omidian, 1997) highlighted the differences between and within national groups of immigrants from Middle Eastern countries and Afghanistan settling in the US, including the wide socio-economic spectrum and different levels of education as well as cultural factors, which impact on the relationship with health professionals.

Gerritsen *et al* (2006) showed no difference between the health service usage rates of refugees and asylum seekers. A limitation of our study was that it did not allow for the examination of any possible impact of arrival status and circumstance on knowledge, utilisation and satisfaction with health services. This could form the basis of future research, as the impact of Australia's current immigration policy on access to health services has been described by a number of authors (Correa-Velez *et al*, 2005; Murray and Skull, 2005; Steel *et al*, 2006), as have the impacts of detention and temporary protection visas on psychiatric symptoms and associated disabilities (Steel *et al*, 2006).

The study suggests that experiences of health service encounters also vary greatly between country of birth groups, with Iraqi and Iranian participants able to seek and access GPs who speak the same language and/or are from a similar ethnic background. This finding supports an analysis of general practice encounters (Knox and Britt, 2002) that found bilingual GPs were more likely to have encounters with non-English-speaking patients. It appears that Afghan participants were unable to access health providers who spoke the same language or were from a similar ethnic background, due to a lack of medically trained Afghans within the Melbourne metropolitan area. The uniqueness of individuals within broad cultural communities, including differences in education and understanding of health concepts, was highlighted by Meleis and Jonson (1983), and also needs to be considered in the development of appropriate health services for refugees and immigrants.

The study illustrated the need for clear, culturally and linguistically appropriate general information regarding Australia's health system. While participants accessed information through family and friends, the effectiveness of this form of knowledge sharing is limited by the base knowledge of peers, and open to misunderstanding and misperception (Manderson and Allotey, 2003). Knowledge attained through more conventional sources such as Migrant Resource Centres and the Department of Immigration and Multicultural Affairs was surprisingly low. Information translated into relevant languages needs to be widely available, especially to GPs who are often the first point of contact with the Australian health system. Studies of the values, beliefs and practices of Iranian and Afghan immigrants in New South Wales highlight the importance of using appropriate language and cultural meanings in these health messages (Omeri, 1997; Omeri *et al*, 2006). Our results also demonstrate that information to assist new arrivals in the navigation of our complex health system and provide for possible differences in cultural understanding of illness and disease would be particularly useful.

An unexpected finding in the selection of health services by participants was the strong influence of the facility's proximity to their home. Through focus groups and open-ended questions, respondents reported a range of factors including transport, family care issues, and lack of family or community support as contributing to utilising health services close to their home. This finding suggests that a network of appropriately supported and staffed community health centres and/or GP clinics is needed in areas where there are high concentrations of refugees and immigrants.

Challenges in accessing dental care were raised by respondents as affecting their satisfaction with health-care services. This finding, combined with that of Kingsford Smith and Szuster (2000), who showed

that refugees had significantly more untreated tooth decay than other disadvantaged Australians, provides solid support for improved access to public dental care for new settlers.

Recruitment challenges in hard-to-reach or hidden populations have been well documented (Spring *et al*, 2003; Magnani *et al*, 2005; Steel *et al*, 2006). We used a non-random sampling technique after extensive community consultation and the recruitment of community workers to the research team. It is not possible to generalise the findings to the broader community, although this type of sampling provides a strong basis for the theoretical understanding of social processes within the participant groups and for further work, and is commonly used for immigrant groups (Faugier and Sargeant, 1997).

The study used a variety of methods in recruitment, including advertising in media and community spaces before extending the sample through snowballing, and thus generated a more diverse sample than that provided if only one method is utilised (Magnani *et al*, 2005). However, the risk of selection bias in this sample persists due to influence of initial respondents on the eventual sample composition and the dependence on members knowing each other; therefore those members of the communities who are socially isolated may be under-represented in the study. Potential interviewer bias in administering the questionnaire was controlled by extensive training of community workers and the presence of the primary researcher for the majority of interviews. Another possible source of bias in this study is the recall bias of respondents. Although multivariate statistical techniques were used, and 95% confidence intervals reported, great care should be exercised in generalising the findings to the larger populations of immigrants from the three target countries

Despite a concerted effort, the recruitment target of 150 participants was not reached. Recruitment was hindered by the reluctance and anxiety of potential participants in signing the consent form, in spite of reassurance regarding the aims of the study, participant confidentiality, anonymous reporting of results and independence from government of the research group. Political refugees are likely to be suspicious of the questions of any person thought to have an official role and possible links with government authorities (Lipson and Meleis, 1983), and while a possible impact of the timing of the study relative to both the Iraq war and the so-called 'global war on terror' is not known, it cannot be discounted. Both researchers and ethics committees need to consider that many refugees and immigrants may have high levels of anxiety and mistrust about signing lengthy and complicated documents. This may be due to a range of factors, including fear of impact on asylum or residency applications, prior detention as an asylum seeker or refugee, and

previous negative experiences with government or health authorities in their country of birth or origin (Davidson, *et al*, 2004). Verbal consent strategies such as that recently utilised in Holland (Gerritsen *et al*, 2004) should be considered in further research with refugee and asylum-seeker groups within Australia and elsewhere.

The use of health services within the two weeks prior to the survey by 45% of the participants seems remarkably high. While we are unable to draw extensive conclusions from this finding without knowledge of participants' health status, this finding does provide evidence that most people knew how to and were indeed accessing health services. The challenge now is to ensure that healthcare services that cater for refugees and immigrants are culturally sensitive, comprehensive and linked with other health and community services, to ensure clients receive the appropriate level of care they require in a timely manner.

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REFERENCES

- Bischoff A, Bovier PA, Rrustemi I *et al* (2003) Language barriers between nurses and asylum seekers: their impact on symptom reporting and referral. *Social Science and Medicine* 57:503–12.
- Caruana SR, Kelly HA, Ngeow JY *et al* (2006) Undiagnosed and potentially lethal parasitic infections among immigrants to Australia. *Journal of Travel Medicine* 13:233–9.
- Correa-Velez I, Gifford SM and Bice SJ (2005) Australian health policy on access to medical care for refugees and asylum seekers. *Australian and New Zealand Health Policy* 2:23.
- Davidson N, Skull S, Burgner D *et al* (2004) An issue of access: delivering equitable health care for newly arrived refugee children in Australia. *Journal of Paediatrics and Child Health* 40:569–75.
- Department of Health and Ageing (2006) *Health Assessments for Refugees and other Humanitarian Entrants to Australia*. Canberra: Australian Government, www.health.gov.au (accessed 15 August 2007).
- Department of Immigration and Multicultural Affairs (2006) *Settlement Database Canberra: Department of Immigration and Multicultural Affairs*. Available at: www.settlement.immi.gov.au/settlement (accessed 15 August 2007).

- Faugier J and Sargeant M (1997) Sampling hard to reach populations. *Journal of Advanced Nursing* 26:790–97.
- Gagnon A, Merry L and Robinson C (2001) A systematic review of refugee women's reproductive health. *Refugee* 21:6–17.
- Gerritsen AA, Bramsen I, Deville W *et al* (2004) Health and health care utilisation among asylum seekers and refugees in the Netherlands: design of a study. *BMC Public Health* 10:4–7.
- Gerritsen AA, Bramsen I, Deville W *et al* (2006) Use of health care services by Afghan, Iranian, and Somali refugees and asylum seekers living in The Netherlands. *European Journal of Public Health* 16:394–9.
- Grove NJ and Zwi AB (2006) Our health and theirs: forced migration, othering, and public health. *Social Science and Medicine* 62:1931–42.
- Harris M and Zwar N (2005) Refugee health. *Australian Family Physician* 34:825–9.
- Kingsford Smith D and Szuster F (2000) Aspects of tooth decay in recently arrived refugees. *Australian and New Zealand Journal of Public Health* 24:623–6.
- Knox SA and Britt H (2002) A comparison of general practice encounters with patients from English-speaking and non-English-speaking backgrounds. *Medical Journal of Australia* 177:98–101.
- Lipson JG and Meleis AI (1983) Issues in health care of Middle Eastern patients. *Western Journal of Medicine* 139:854–61.
- Lipson JG and Omidian PA (1997) Afghan refugee issues in the US social environment. *Western Journal of Nursing Research* 19:110–26.
- Magnani R, Sabin K, Saidel T and Heckathorn D (2005) Review of sampling hard-to-reach and hidden populations for HIV surveillance. *AIDS* 19 (suppl 2):S67–72.
- Manderson L and Allotey P (2003) Storytelling, marginality, and community in Australia: how immigrants position their difference in health care settings. *Medical Anthropology* 22:1–21.
- Meleis AI and Jonson AR (1983) Ethical crises and cultural differences. *Western Journal of Medicine* 138:889–893.
- Meleis AI, Lipson JG and Paul SM (1992) Ethnicity and health among five Middle Eastern immigrant groups. *Nursing Research* 41:98–103.
- Murray SB and Skull SA (2005) Hurdles to health: immigrant and refugee health care in Australia. *Australian Health Review* 29:25–9.
- Norredam M, Mygind A and Krasnik A (2006) Access to health care for asylum seekers in the European Union – a comparative study of country policies. *European Journal of Public Health* 16:286–90.
- Omeri A (1997) Cultural care of Iranian immigrants in New South Wales, Australia: sharing transcultural nursing knowledge. *Journal of Transcultural Nursing* 8:5–16.
- Omeri A, Lennings C and Raymond L (2006) Beyond asylum: implications for nursing and health care delivery for Afghan refugees in Australia. *Journal of Transcultural Nursing* 17:30–9.
- Spring M, Westermeyer J, Halcon L *et al* (2003) Sampling in difficult to access refugee and immigrant communities. *Journal of Nervous and Mental Disease* 191:813–19.
- Steel Z, Silove D, Brooks R *et al* (2006) Impact of immigration detention and temporary protection on the mental health of refugees. *British Journal of Psychiatry* 188:58–64.

CONFLICTS OF INTEREST

None.

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