

Critical case analysis of adverse events associated with failure to use interpreters for non-English speaking patients.



Authors: Dr Janine Rowse, A/Prof Katrina Anderson, A/Prof Christine Phillips, Dr Brian Chan
Australian National University Medical School.

Background

One in 35 Australians has limited English proficiency (LEP). Patients with LEP are likely to suffer more frequent and severe adverse events in hospital (1--3). There are case reports of unnecessary invasive interventions and missed diagnoses resulting in death occurring due to lack of interpreter use (4, 5)

Despite the availability of a national telephone interpreter service (TIS) and state-funded interpreter services in Australia, interpreter services remain alarmingly underused by health care staff (6). Research indicates there is persistent use of untrained ad hoc interpreters (7), including friends and relatives, which can be ethically hazardous (4) and result in greater number of clinically significant errors (8). It is estimated that an interpreter provided by TIS is used in 1 in every 100 consultations with patients with LEP (9) by doctors in private practice.

The majority of existing research into failure of appropriate interpreter use has been conducted in the hospital inpatient setting, and has relied on hospital recording systems or records associated with target outcome measures (e.g. length of stay, adverse events and information retention) (11) to collect data.

Aim:

The aim of this study was to describe adverse outcomes described by patients attending a refugee health service attributable to failure of appropriate interpreter use in health consultations.

Methods

This study was a clinical audit of all patient records of those attending a community based refugee health service.

The study population was all patients who first presented to the service between 1 July 2011 and 31 June 2013 (n= 471). A structured data collection sheet was used to extract data from the medical software system for the study population who for every consultation between study enrolment and 28 February 2014, or the patient left the medical service, whichever occurred first (total consultations, n=2530). Three reasons for encounter were coded in the ICPC-2 format for every consultation, and a brief summary of the issue was noted if the reason for encounter was a health care system problem. Cases of interest relating to inappropriate interpreter use were examined in further detail in a critical incident analysis.

Results

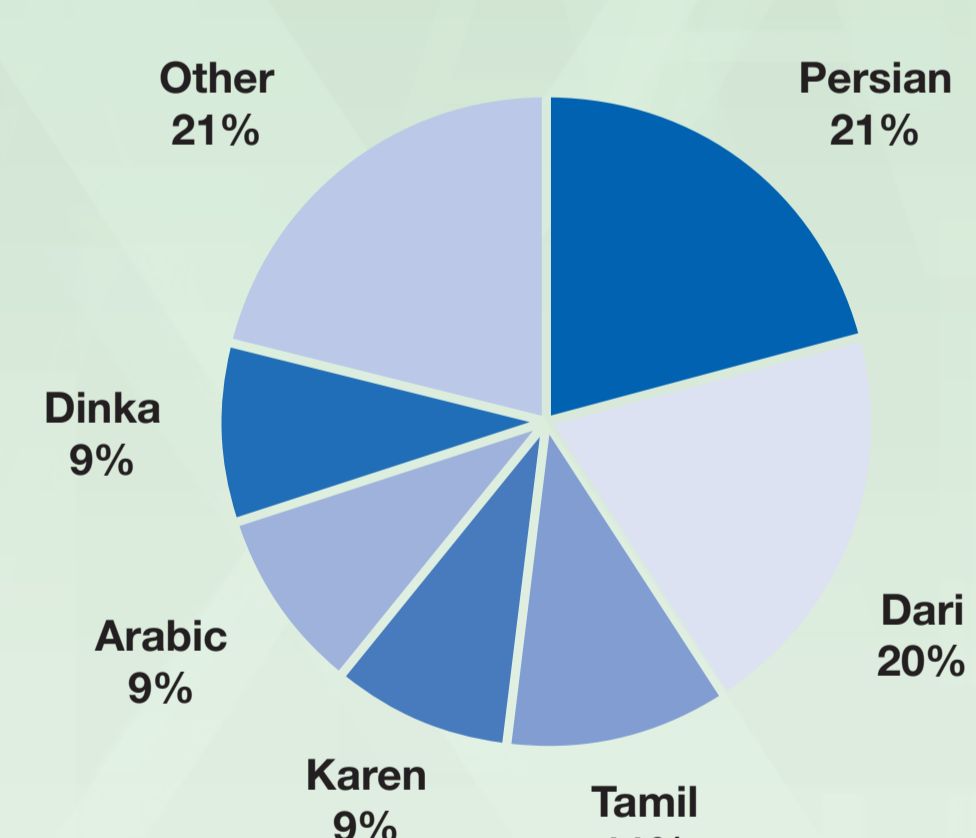
Of the 471 patients included in the study period, 357 (74.5%) were documented as requiring an interpreter, with languages spoken including Persian, Dari, Tamil, Karen, Arabic and Dinka.

Twenty-four separate incidents of adverse outcomes related to failure of appropriate interpreter use were reported by a total of 21 patients (two patients reported multiple incidents).

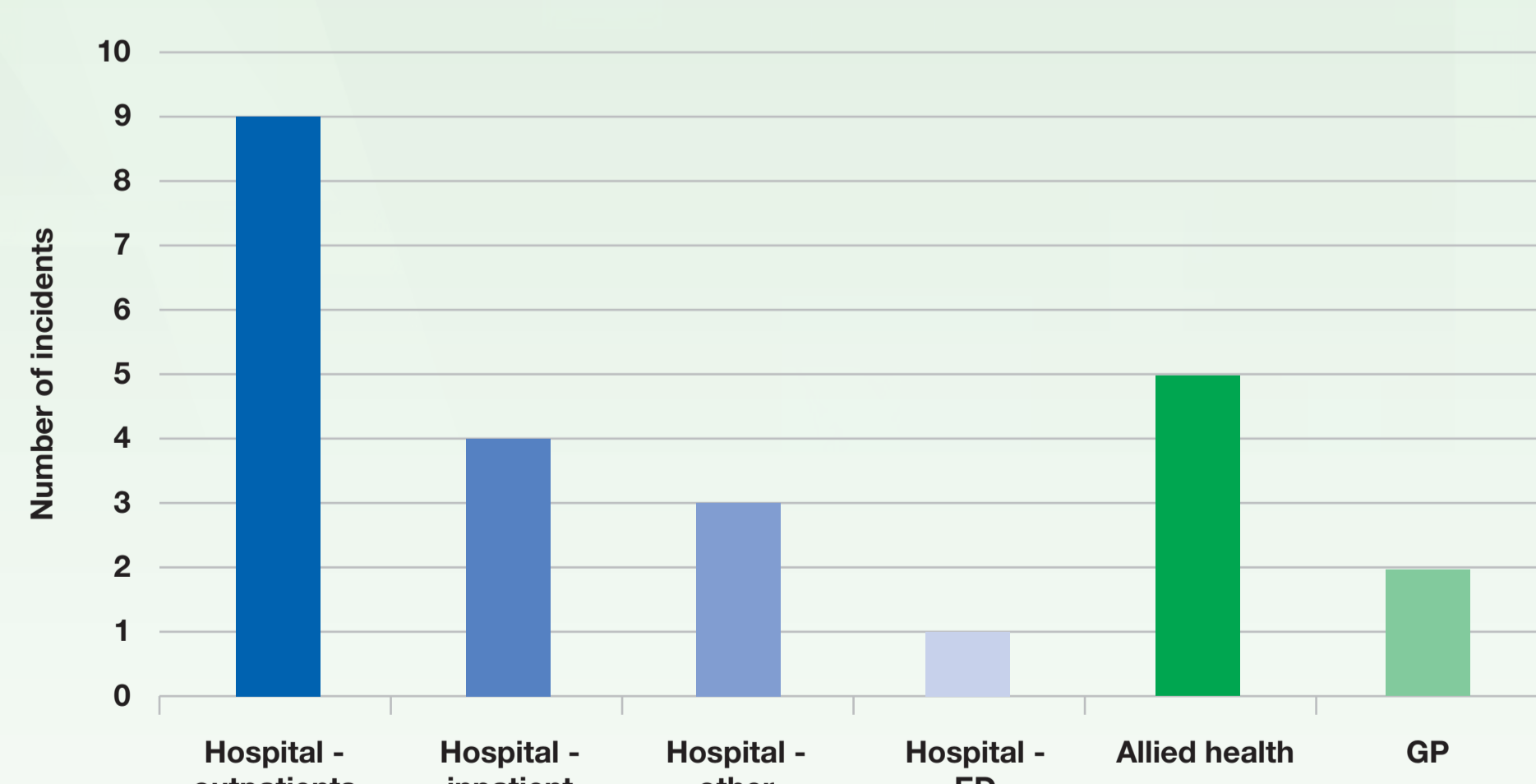
71% of reported incidents occurred in the hospital setting (outpatients, inpatient, and emergency), 21% in community allied health (including optometry, imaging and physiotherapy), and 8% occurred in general practice.

The majority (62.5%) of reported incidents involved obtaining informed consent. Incidents involving inappropriate ad-hoc interpreter use (16.7%), discharge medication instructions (12.5%) and other incident types (8.3%) were also reported. Four incidents resulted in physical harm, and nine incidents resulted in delays in investigations and diagnosis.

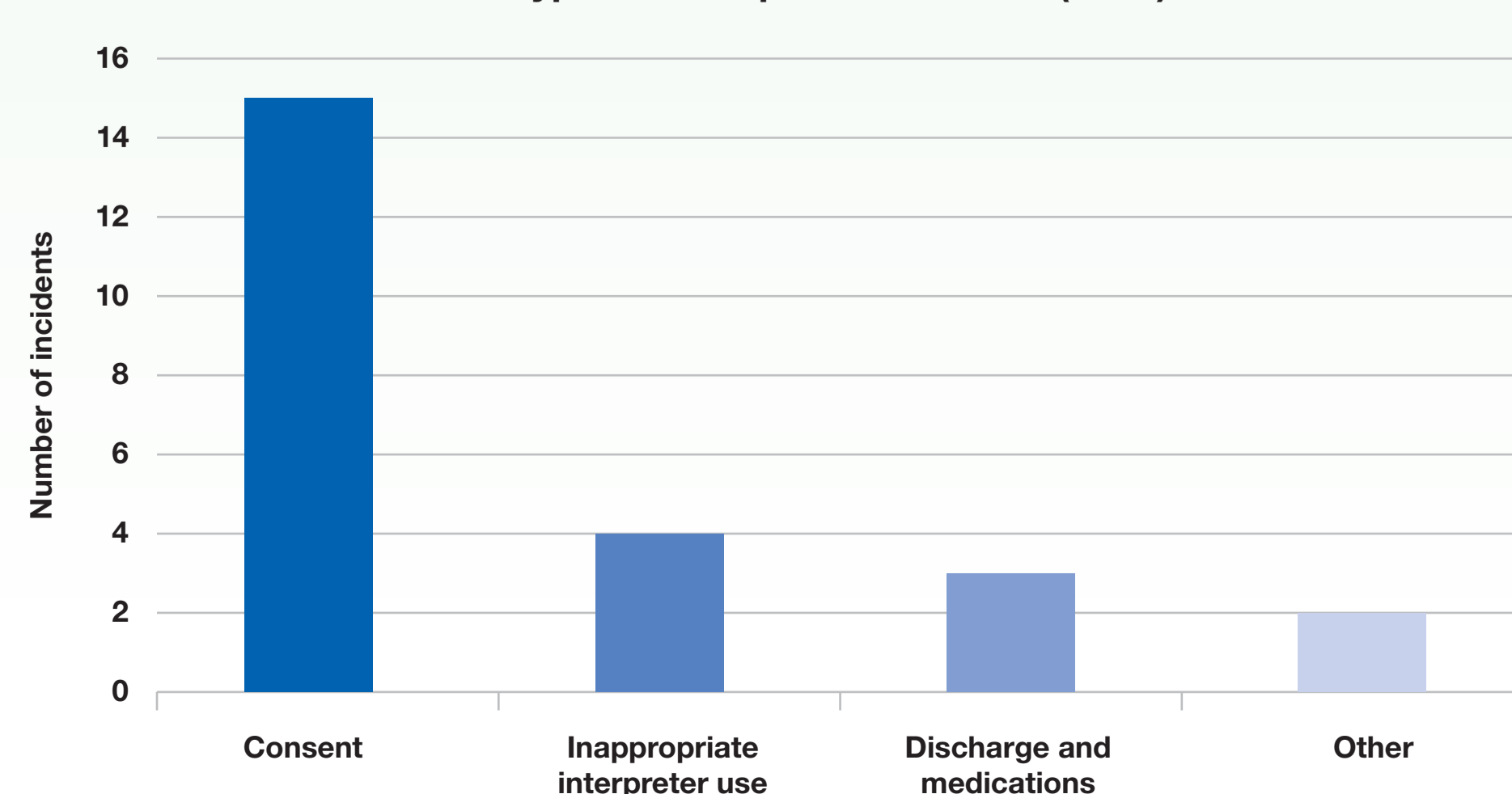
Languages spoken by patients (n=357) requiring interpreters



Encounter setting of interpreter incidents (n=24)



Types of interpreter incidents (n=24)



Type of harm	Critical incident examples	Interpreter related problem
Physical harm due to misdiagnosis.	Patient with subdural haematoma requiring emergency evacuation. Two presentations to health services with symptoms were dismissed as "non-specific" and not investigated.	Neighbour used as interpreter.
Psychological and physical harm.	Female who underwent gynaecological procedure without informed consent, unaware it was permanent.	Spouse used as interpreter to gain consent for procedure.
Psychological harm to son and father.	Child co-opted to interpret father's torture history at the request of the hospital specialist.	Child used as interpreter in specialised complex area, against the wishes of father. Parent's request for interpreter refused.
Psychological harm.	Child admitted for elective dental procedure after long waiting period. Parents did not understand what procedure was, and were refused an interpreter when they requested one.	No interpreter used to explain reason for admission or to obtain consent. Parents' request for interpreter refused.
Psychological harm.	Patient had abdominal surgery performed without knowing what the procedure was. Post-operatively awoke in state of terror due to abdomen wound.	No interpreter used for consent.
Potential harm due to failure of test to be performed correctly, psychological harm.	Anxious patient underwent a stress ECG without understanding what it was or that he needed to report pain during the procedure.	No interpreter used to explain procedure.
Harm due to medication effect.	Patient discharged from hospital later presented with an acute dystonic reaction due to taking a discharge medication too frequently.	No interpreter used to explain medications at discharge.

Procedures reportedly performed without informed consent

- Nerve root injection
- Exercise stress test
- Cholecystectomy
- MRI
- Joint injection under ultrasound
- Gynaecological procedure

Limitations

Limitations of a study of this design include the potential for bias in relying on patient reporting of events they have experienced. In most of the case studies presented, the patients' treating general practitioners advocated on their patient's behalf (via correspondence with the involved health practitioners), and in all the cases that were able to be followed up it was confirmed that an interpreter had not been used.

Implications

- This study identifies particular situations at risk of harm resulting from failure of interpreter use including consent for procedures, instruction of hospital discharge medications, and inappropriate use of family members as interpreter.
- As health professionals, we have both a legal and ethical obligation to ensure that informed consent is obtained in competent patients prior to invasive procedures, with respect for patient autonomy, and provision of adequate information with discussion of alternatives. Multiple overseas studies have shown the effect of language barrier resulting in lower rates of appropriate informed consent obtained in the hospital setting (12-14), however to our knowledge this is the first study capturing such incidents in the Australian setting, where a free interpreting service is easily accessible.
- In our study, neighbours, community members and children were used as interpreters, or the patient's limited English was considered adequate for consent. There is particular risk of misleading information and miscommunication occurring when using relatives or friends as interpreters.

Conclusion

This is the first study to explore the situations surrounding and repercussions of failure of health professionals to use appropriate interpreter services, from the unique perspective of a LEP patient's description of events at a refugee health clinic. Failures occurred in the areas of consent, complex instructions, and in obtaining proper history. This research highlights the urgent need for proactive service policies and health staff education around appropriate use of interpreters. Health workers should focus on at a minimum using interpreters in which there is any doubt about the patient's English proficiency for consultations involving the four Cs: Consent, Complexity, Crisis and Competence (15).

References

1. Flores G. The impact of medical interpreter services on the quality of health care: a systematic review. *Medical Care Research and Review* : MCCR. 2005 Jun;62(3):255-99.
2. Anderson LM, Scrimshaw SC, Fullilove MT, Fielding JE, Normand J. Culturally competent healthcare systems. A systematic review. *American Journal of Preventive Medicine*. 2003 Apr;24(3 Suppl):68-79.
3. Divi C, Koss RG, Schmaltz SP, Loeb JM. Language proficiency and adverse events in US hospitals: a pilot study. *International Journal for Quality in Health Care* : Journal of the International Society for Quality in Health Care. 2007 Apr;19(2):60-7. 4. Bird S. Failure to use an interpreter. *Australian Family Physician*. 2010 Apr;39(4):241-2. 5. Tate RC, Kelley MC. Triage in the Tower of Babel: interpreter services for children in the prehospital setting. *Pediatric Emergency Care*. 2013 Dec;29(12):1280-2.
6. The Victorian Foundation for the Survivors of Torture. Promoting the engagement of interpreters in Victorian health services (June 2013). Foundation House Publication http://www.foundationhouse.org.au/resources/publications_and_resources.htm
7. Huang YT, Phillips C. Telephone interpreters in general practice - Bridging the barriers to their use. *Australian Family Physician*. 2009 Jun;38(6):443-6. 8. Flores G, Laws MB, Mayo SJ, Zuckerman B, Abreu M, Medina L, et al. Errors in medical interpretation and their potential clinical consequences in pediatric encounters. *Pediatrics*. 2003 Jan;111(1):6-14.
9. Phillips CB, Travaglia J. Low levels of uptake by doctors of a national free health interpreter service: secondary analysis of Australian data. *Australian Health Review* 2011; 35(4): 475-479.
10. Moreno G, Tarn DM, Morales LS. Impact of interpreters on the receipt of new prescription medication information among Spanish-speaking Latinos. *Medical Care*. 2009 Dec;47(12):1201-8.
11. Lindholm M, Hargraves JL, Ferguson WJ, Reed G. Professional language interpretation and inpatient length of stay and readmission rates. *Journal of General Internal Medicine*. 2012 Oct;27(10):1294-9.
12. Hunt LM, de Voogd KB. Are good intentions good enough? Informed consent without trained interpreters. *Journal of General Internal Medicine*. 2007 May;22(5):598-605. 13. Clark S, Mangram A, Ernest D, Lebron R, Peralta L. The informed consent: a study of the efficacy of informed consents and the associated role of language barriers. *Journal of Surgical Education*. 2011 Mar-Apr;68(2):143-7.
14. Schenker Y, Wang F, Selig SJ, Ng R, Fernandez A. The impact of language barriers on documentation of informed consent at a hospital with on-site interpreter services. *Journal of General Internal Medicine*. 2007 Nov;22 Suppl 2:294-9. F.
15. Phillips. CB. Using interpreters: a guide for GPs. *Australian Family Physician* 2010; 39(4): 188-195.