How accessible are interpreter services to dialysis patients of Non-English Speaking Background?

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RESEARCH

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Abstract

Background
Benefits of utilising professional interpreters in clinical settings have been well documented. However, not many studies have focused on use of professional interpreters by dialysis patients of Non-English Speaking Background (NESB) who are in the clinical settings every second day of their lives. The underlying question for this research was to determine the level of interpreter utilisation by dialysis patients of NESB at a major urban teaching hospital.

Method
A multi-method approach was used involving (a) in-depth interviews of health care professionals working with dialysis patients to elicit their views regarding interpreter access and use by dialysis patients of NESB, (b) observations of interactions between staff and dialysis patients of NESB and (c) review of medical records belonging to dialysis patients of NESB who were admitted 24 months prior to the study.

Results
Interviews revealed that only 50% of Health Care Workers (HCWs) had accessed an interpreter for dialysis patients of NESB over a period of six months. Observations of staff/NESB patient interactions showed that professional interpreters were used in only 25% of the observed occasions. The review of medical records revealed that there was no evidence of interpreter use in 32% of the records belonging to dialysis patients of NESB. The study also showed that non-compliance with dialysis treatment regime was more likely to occur among patients who had limited access to interpreters.

Conclusion
The study demonstrated a suboptimal utilisation of interpreter services by dialysis patients of NESB. Several barriers to inaccessibility and underutilisation of professional interpreters were identified. Recommendations to improve communication between HCWs and dialysis patients of NESB are suggested.

Key Words
Dialysis; Chronic Kidney Disease; Non-English Speaking Background; Communication barriers; Professional interpreter

Background

Chronic Kidney Disease (CKD) like many other chronic diseases requires patients to actively and effectively participate in their medical care. This participation requires clear two-way communication between health care workers (HCWs) and patients so that both parties can contribute effectively. Communication becomes more problematic where language barriers exist. Dialysis for patients with CKD requires patients to attend the clinical setting regularly. In addition to difficulties in understanding medical terms and concepts, patients who are of NESB could potentially be affected by language barriers in terms of understanding their condition and recommended management. Paradoxically, their frequent attendance for health care could prejudice against their access to interpreters at times when they are needed.

That language barriers can impede patient-provider communication is well illustrated by a study on consequences of miscommunication in Aboriginal health care by Cass et al [1]. Similarly, Villarba and Warr [2] identify cultural and language impediments to be among the challenges within community-based hemodialysis therapy offered to Indigenous Australians living in remote areas of Western Australia.

According to Atkin [3], evidence and quality standards support the use of professional interpreters in clinical settings and use of interpreter services is acknowledged as an important component of meeting the Victorian government's commitment to cultural diversity [4]. Much work has been done on use of interpreters in other clinical settings worldwide, but there is a gap as far as utilisation of interpreters in dialysis settings is concerned. There are very few studies done so far on interpreter use by dialysis patients of NESB in Australia. The underlying question for this research was to determine the level of interpreter utilisation by dialysis patients of NESB at a major urban teaching hospital.

The study was undertaken in the adult haemodialysis unit at Monash Medical Centre (MMC) (Clayton Campus), a large tertiary hospital located in the southeast of Melbourne that services a multi-culturally diverse population. The top five languages among NESB patients are Vietnamese, Greek, Chinese, Arabic and Italian. The hospital also caters for a very small number of Indigenous Australians who may have difficulties in communicating in English.

Method

There are inherent difficulties in asking patients about their experience of access and use of interpreters without funding for interpreters which was not available to the researchers. Therefore, this study relied upon a multi-method approach that avoided direct interviews with renal dialysis patients about their experiences with interpreters. Use of both qualitative and quantitative methodology that examined interpreter usage from several perspectives provides triangulation that can strengthen the study findings. Several studies have demonstrated that success of research relating to the provision of health care to patients with chronic diseases requires application of both qualitative and quantitative research perspectives, methods and tools [5]. The interviewer and lead researcher was a nurse working in renal dialysis and of a culturally and linguistically diverse background. This was important for feasibility in both the development and conduct of the research. Data collection occurred over three months from August to October 2008. Three distinct methods were utilised for data collection.

i) Key Informant Interviews

Key informants were hospital HCWs involved in the provision of care to dialysis patients. Purposive sampling was utilised to ensure that all HCW groups dealing with dialysis patients at MMC were represented. Fifteen prospective participants were approached by the interviewer and given information and consent forms about the study. One week later, the researcher followed up making bookings for interviews with those willing to participate.

Ten staff consented to take part. Written informed consent including permission for interviews to be recorded was obtained prior to all interviews which were audio taped using a small, unobtrusive digital recorder. A semi-structured interview schedule guided the interviews. Interview questions focused on four main areas of interest as shown by Table 1.

Interviews with informants were transcribed verbatim and a thematic analysis of content undertaken through systematic coding of the data as described by Boyatzis [6]. Initial themes were identified after careful reading through all transcripts to find repeated patterns of meaning, generating initial codes, collating codes to potential themes and identifying all information consistent with that theme, generating a thematic map of the analysis and further work in refining and narrowing themes. Data analysis also involved consideration of reflections made after each interview and relating these to the identified themes and objectives of the study.

ii) Observations of Interactions of Staff and Patients of NESB

The lead researcher's employment as a nurse within the renal dialysis unit provided the opportunity for observations of the interactions of staff and patients of NESB as a rich source of data for the study, without introducing behaviour change as a result of a person being aware of being observed or being part of a study [7]. Observations of the interactions between dialysis patients and HCWs were therefore effectively covert. According to Taylor-Powell and Steel, observations provide the opportunity to document activities, behaviour and physical aspects without having to depend upon people's willingness and ability to respond to questionnaires [8]. This method is valuable in that individual consent is not required for a study involving observations, reducing the likelihood of respondent bias. In this study, opportunistic observations were made of interactions occurring between HCWs and dialysis patients of NESB who were dialysing at MMC. Patients

were classified as of NESB if their first language as documented in their medical records was not English and if they did not speak English at home. Box 1 summarises variables of interest assessed during observations of patient-staff interactions which were captured in field notes along with reflections upon the observations. Observation, analysis and identification of key issues occurred concurrently.

Box 1: Variables recorded during observations of patient-staff interactions

Effectiveness of communication
Non verbal behaviour
Level of patient participation
Power balance between staff and patients
Time taken to complete specific procedures
Interpreter use
Was an interpreter used?
Was a relative used for translation?
Assessment of Effect
Any signs of irritation or frustration by patient or staff member

iii) Medical Record Auditing

Since medical records provide a lasting record of health professional and patient interaction, [9] an audit of medical records of dialysis patients identified as being of NESB and who had commenced dialysis at MMC within the last 24 months was undertaken. The ward clerk of the dialysis unit and the lead researcher used the data base of admissions maintained by the ward clerk and their experience with dialysis patients, to identify patients of NESB who had commenced dialysis at MMC from September 2006 to August 2008. The medical records of 30 patients were requested for review, and 25 were available for this study. Variables extracted from the medical records are shown in Box 2. Data was analysed using SPSS version 17.

Box 2: Variables extracted from medical records

Demographic data (age, sex)
Date of dialysis commencement
Flagging of the record by an 'interpreter required' label
Are occasions when an interpreter was used documented?
Number of admissions and diagnoses
Primary language of patient

Ethical Considerations

Standard ethical requirements were followed in accordance with the National Health and Medical Research Council (NHMRC) so that key informants interviewed were volunteers and gave written informed consent, including for recording of the interview. Care was taken to make a distinction between the roles of the interviewer as researcher and as work colleague. Information obtained from medical records was treated confidentially. Data was identified by codes and not by patients' names. The research study was approved by the Human Research Ethics Committee (HREC) of Curtin University and Southern Health.

Results

Key Informant Interviews

Two thirds (67%) of those approached agreed to participate and all target groups of HCWs were represented. These included doctors, nurses, dieticians, ward clerks and social workers. Key informants commented that interpreter services were not always available for use when needed. Some participants attributed this inaccessibility of interpreters to the small number of interpreters employed by the health service.

"I really feel that the number of interpreters we have does not cope with the expanding need of interpreter use we are currently faced with" (N1)

Another problem identified was with the online booking system for interpreters introduced within the health service a few years previously. A majority of participants

involved with booking interpreters for dialysis patients commented that the new booking system was not user friendly and that it could be contributing to the inaccessibility of interpreter services. Costs associated with interpreter use were also cited as a barrier to interpreter utilisation. Participants were asked to provide an estimate of how often they had accessed interpreters for dialysis patients of NESB over a period of six months. At least 50% of the participants did not use a professional interpreter for dialysis patients over this period. Interpreter use was common among doctors, social workers and dieticians.

Concerns were also expressed about the lack of interpreters for some population groups within the hospital's catchment area. For these rarer languages, the hospital depended on locum interpreters who were sometimes not available. HCWs also reported that on occasions when they did access interpreters for NESB patients on dialysis, they could not have them for the entire session because of other demands on the interpreters' time.

"The biggest problem we have in the renal clinic is getting interpreters for some of these rare languages especially for those patients from the Central and East African countries. (D2).

Other barriers to interpreter use identified, include concerns about confidentiality where patients of NESB were reluctant to divulge information to an interpreter they know from within their small ethnic community. This was most commonly reported for patients who speak some of the less common languages. Participants also reported that some patients were unaware of the existence of an interpreter service and therefore did not request an interpreter.

There were mixed feelings about adverse outcomes associated with language barriers among dialysis patients of NESB. Some informants believed that adverse events were not common while others emphasised that many adverse outcomes were not being noted. Most participants agreed that consent for dialysis was not always properly obtained. Legally, a patient must give signed consent before the first dialysis session. For patients of NESB, this can be challenging since in some cases dialysis needs to be initiated with urgency and consent may be obtained without the services of an interpreter. Adverse events such as missing dialysis appointments, taking medications inappropriately and non-compliance with renal diet and fluid restrictions were also reported.

Observations of Interactions of Staff and Patients of NESB

Twenty cases of NESB patient-staff interactions were observed. The language distributions of patients observed were: Greek (10), Vietnamese (4), Italian (3), Cambodian (1), Cook Islands (1), and Portuguese (1). The interpreter service was used on only 5 of the 20 cases, and for others staff either used a relative (n=7; 35%) or no one (n=8; 40%) for translation.

On one occasion, a new patient was dialysed against his wishes resulting in the patient being aggressive towards staff. An interpreter was later brought in when staffs were informed that the patient preferred to cease dialysis. Some dialysis patients experience complications such as hypotension and cramps during dialysis, but with early identification of the problem and intervention these side effects can be reduced in severity. Within this study, dialysis complications occurred to 20% of the observed cases, largely attributable to dialysis staff not being alerted by the patient as a result of communication barriers and resulting in poorer patient experiences and outcomes.

Medical Record Audit
The language distribution of the 25 dialysis patients identified as of NESB who had been newly admitted to MMC in the previous 24 months and whose medical records were reviewed is shown in Table 2. The number of occasions an interpreter was used for each patient was noted (Table 3), with 32% of the records not showing any evidence of interpreter use. As the number of admissions for an individual increased, interpreter use decreased, probably reflecting that interpreters were mostly used during the initial sessions of dialysis for patients of NESB. Admission diagnoses were also noted during the audit of medical records. Particular attention was paid to diagnoses related to patient non-compliance such as hyperkalemia, fluid overload and hypertension as shown by Figure 1. From this figure, it can be deduced that non-compliance was more likely to occur among patients who had limited access to interpreters.

Discussion

The review of medical records of patients flagged as of NESB showed that 32% of these patients did not use an interpreter during the period under review. The observations of staff-patient interactions also revealed that 40% of the time, an interpreter was not used for dialysis patients of NESB. This trend was reported by Cass et al [1] in a study on improving communication between Aboriginal patients and health care workers which highlighted the need for interpreter use by dialysis

patients of NESB and the risks of miscommunication in cross-cultural situations.

Given the importance of communication between HCWs and dialysis patients of NESB, relatives and friends are used for language translations much of the time as shown both in the medical record audit and the observation study. This occurs despite studies having documented that use of *ad hoc* interpreters such as friends and family results in inaccurate interpretations and decreased patient satisfaction [10].

Failure to use professional interpreters was largely attributed to accessibility issues with many informants reporting that there were times when they wanted to use an interpreter but could not get one. In this study, only 50% of the HCWs interviewed had used an interpreter in the past six months. This problem is well known, with the Department of Health, South Australia finding that 66.9% of patients of NESB did not have access to an interpreter when required [11]. In line with this, the findings of this study revealed that it is very challenging arranging an interpreter for patients of NESB, particularly those who speak languages that are less common in Australia.

Several barriers to interpreter use were identified, the most fundamental of which was the shortage of interpreters to the health service. This shortage was conspicuous especially with regards to minority languages such as the Central and East African languages. In practice, the booking system required a minimum of 24 hours to arrange for an interpreter. Hence, patients who arrived at the hospital unexpectedly were less likely to be attended in the presence of an interpreter. Not all patients are aware that an interpreter service exists that they could utilise.

The cost of interpreters to the health service is the primary barrier to interpreter use [12].This accords with the findings of this study which found that the health service has few permanently employed interpreters and relies heavily on locum interpreter services which are sometimes unavailable. Most interpreters were made available for periods not exceeding one hour, even though some HCWs would have liked to have them for longer periods. A national survey conducted by the Health Research and Educational Trust in the United States of America also found that inadequate funding of language services was a major barrier to interpreter use by patients with limited English proficiency [13].

Confidentiality issues were also identified as a barrier to interpreter use by dialysis patients of NESB among minority population groups who have higher chances of knowing the interpreter from the community. In view of this, the Victorian Transcultural Psychiatry Unit stresses the importance of confidentiality by health staff and interpreters with regards to information gathered during translation [14].

Failure to use interpreters for patients of NESB may compromise the care of the patient, including problems with obtaining informed consent [15]. This study provided evidence that inadequate use of professional interpreters may be associated with some adverse outcomes. Although not all informants reported adverse outcomes associated with language barriers, several participants had witnessed such occurrences and highlighted the potential for these occurrences. Dialysis patients have complex drug regimes with medications changed frequently. If they do not adequately understand reasons for medication changes, patients of NESB may be at higher risk of taking incorrect doses, especially if an interpreter has not been accessed. The Health Research and Educational Trust conclude that when communication is compromised by language barriers, the quality of care is compromised as well [13].

Several benefits for both patients and staff of interpreter use have been reported. Jacobs and colleagues showed that interpreter use enhances the delivery of health care to patients of NESB [16]. In this study, key informants echoed the same sentiments, that interpreter use improved communication between staff and patients thereby promoting better patient outcomes. There is strong evidence that effective communication between patients and clinicians is a critical component of providing high quality health care [13]. Lack of access to interpreters to assist with patient education and understanding of their disease fails to support the emphasis on self-management that is regarded as a key component of effective management of chronic disease with the National Chronic Disease Strategy prioritising recommending reorienting the health system to support self-management, prioritising patient participation in care planning and ensuring quality of care [17].

Due to limited funding in some health care settings with dialysis patients of NESB, the role of professional interpreters may be complimented by the use of printed and audiovisual materials in different languages. Telephone interpreters may also be utilised. In this regard, HCWs need to be properly educated on how to utilise telephone interpreters. In some cases, it may be economic for a group of patients speaking the same

language to receive health information via an interpreter simultaneously.

Further study of interpreter use is recommended and should include the perspectives of dialysis patients of NESB. Review of previous studies on issues affecting NESB patients show that the particular circumstances of patients requiring dialysis has not been well represented and there is need to involve these patients in future studies. A more comprehensive examination of the languages used by NESB patients serviced within Southern Health could help inform further efforts to improve the delivery of interpreter services by identifying less commonly used languages to assist planning and organising of interpreter services.

While it may not be practical to have interpreters with dialysis patients of NESB every time they dialyse, there are evident benefits in involving interpreters during the first few sessions of dialysis. It is during this time that consent needs to be obtained and procedures explained. An initial assessment of the patient is also done during this period. Given the intensity and depth of what patients are expected to grasp during the initial stages of dialysis, interpreters should be prioritised for this time. It should also not be assumed that they are not needed after the first few occasions of dialysis as messages need to be reinforced and new issues arise during treatment.

This study identified that the interpreter booking system is not popular with clinical staff working directly with dialysis patients of NESB. Providing staff with education on how the booking system operates and its benefits may improve the situation. Additionally, changes appear to be needed to make the booking system more user-friendly. For example, due to time constraints, many participants did not like the idea of going back to the booking system to check on the status of their booking, yet simple solutions such as paging staff could improve the practical operation of the service.

Discrepancies with regards to identification of patients of NESB were also highlighted. The potential to use computer technology to flag patients of NESB is possible now that most information about patients is stored in electronic records. However, this does not replace the need for staff training and awareness of cultural safety and the importance of understanding a person's linguistic and cultural background.

Limitations for this study centre around the sample sizes, with only a small number of staff interviewed as key informants; formal observations occurring over a short period and the limited number of patient records audited. Nevertheless, all components of the study were consistent in suggesting system problems in identification of NESB patients who would

benefit from use of interpreters and access to an interpreter. The interest of the staff member researcher on staff/NESB patient interactions was known to several HCWs which potentially could have had some impact on their interactions with NESB patients. However, the findings identify an important area where safety and quality of care may be compromised. While it is unclear if the results of this study can be widely generalised, they are consistent with the published literature where adverse outcomes from lack of access to interpreters have been demonstrated.

Lastly, the study did not include the perspectives of the dialysis patients of NESB regarding interpreter use. This would have generated a more complete picture of interpreter use in this setting. Although considered in the original methodology, this approach raised complex logistical and ethical issues and was not feasible within resource and time constraints given that interpreters would have been needed to interview patients in their preferred language

Conclusion

Given the importance of communication in health care settings, it is vital to reduce barriers that exist in communication between dialysis patients of NESB and HCWs. This study has identified an inadequate utilisation of interpreter services by dialysis patients of NESB at one tertiary teaching hospital and that this impacts upon the quality and safety of care for some NESB patients. This study has also revealed gaps and failures of care when there are language barriers between patients of NESB and the staff caring for them. The drive for equality and quality and safety for all in health care will not be realised if interpreter use among non-English speaking patients is not supported and improved. As the health system strives for equity and reduction of health disparities, addressing communication barriers in caring for culturally and linguistically diverse clients warrants greater attention.

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PEER REVIEW
Not commissioned. Externally peer reviewed.

CONFLICTS OF INTEREST
The authors declare that they have no competing interests.
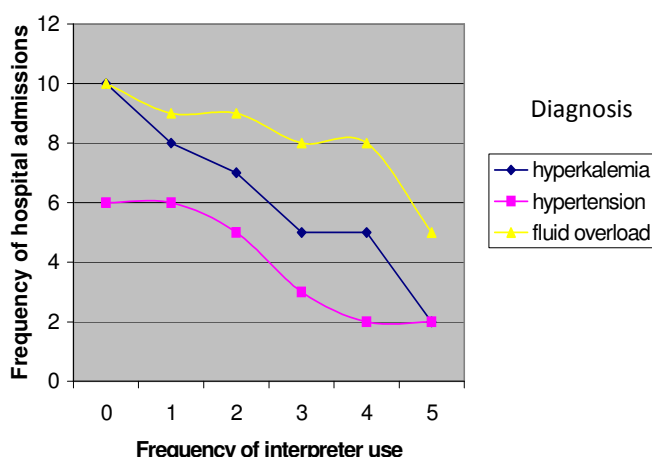
Figures and Tables

Figure 1: A comparison of hospital admissions and frequency of interpreter use by dialysis patients of NESB

Table 1- Semi-structured interview schedule

Areas of interest	Sub-questions
Level of interpreter service utilisation	How often did you use the interpreter service in the last 6 months? Are you happy with the current level of interpreter use? What can be done to improve interpreter use by dialysis patients of NESB?
Awareness of the availability of interpreter service	Are dialysis patients of NESB aware of the availability of the interpreter service? How could they have heard about this service?
Barriers to interpreter use	In your opinion, what prevents dialysis patients of NESB from using interpreters? What prevents health staff working with dialysis patients of NESB from using interpreters? Have you had any difficulties accessing interpreters?
Adverse outcomes	Have you ever witnessed adverse outcomes that occurred to dialysis patients of NESB which may be attributed to language barriers? Do you feel that your services to dialysis patients of NESB are compromised due to language barriers?

Table 2: Language distribution among Medical records reviewed

Language	Relative frequency	%
Arabic	0.04	4
Cantonese	0.12	12
Dari	0.04	4
Greek	0.32	32
Italian	0.08	8
Portuguese	0.04	4
Romanian	0.04	4
Teochew	0.04	4
Tongan	0.08	8
Vietnamese	0.20	20
Total	1.00	100

Table 3: Occasions of interpreter use in Medical record cases

Interpreter use	Relative frequency	%
0	0.32	32
1	0.20	20
2	0.16	16
3	0.12	12
4	0.08	8
5	0.08	8
6	0.04	4
Total	1.00	100