

## Original Article

### Provision of pharmaceutical care in patients with limited English proficiency: Preliminary findings

Devinder Singh Arora<sup>1,2</sup>, Amary Mey<sup>2</sup>, Satish Maganlal<sup>1</sup>, Sohil Khan<sup>1,2,3</sup>

<sup>1</sup>School of Pharmacy, Griffith University, Gold Coast, Queensland, Australia

<sup>2</sup>Menzies Health Institute Queensland, Griffith University, Gold Coast, Queensland, Australia

<sup>3</sup>Mater Research Institute, The University of Queensland, South Brisbane, Queensland, Australia

Received: March 2015  
Accepted: June 2015

Corresponding author:  
Dr. Sohil Khan,  
E-mail: s.khan@griffith.edu.au

#### ABSTRACT

**Objective:** Overcoming language and cultural barriers is becoming ever challenging for pharmacists as the patient population grows more ethnically diverse. To evaluate the current practices used by the pharmacists for communicating with patients with limited English proficiency (LEP) and to assess pharmacists' knowledge of, attitude toward, and satisfaction with accessing available services for supporting LEPs patients within their current practice settings.

**Methods:** Semi-structured interviews were conducted with five pharmacists employed in pharmacies representing multiple practice settings Queensland, Australia. Thematic analysis was primarily informed by the general inductive approach. NVivo software (QSR International Pty Ltd.) was used to manage the data.

**Findings:** Three interlinked themes emerged from the analysis of interview data: (1) Barriers to the provision of pharmaceutical care, (2) Strategies employed in dealing with LEP patients, and (3) Lack of knowledge about existing services. Pharmacists recognized their lack of skills in communicating with LEP patients to have potential negative consequences for the patient and discussed these in terms of uncertainty around eliciting patient information and the patient's understanding of their instructions and or advice. Current strategies were inconsistent and challenging for LEP patient care. While the use of informal interpreters was common, a significant degree of uncertainty surrounded their actual competency in conveying the core message.

**Conclusion:** The present study highlights a significant gap in the provision of pharmaceutical care in patients with LEP. Strategies are needed to facilitate quality use of medicines among this patient group.

**Keywords:** Limited English proficiency; patient care; pharmacist; public health; thematic analysis

#### INTRODUCTION

Overcoming language and cultural barriers is becoming ever challenging for pharmacists as the patient population grows more ethnically diverse. In 2011, approximately 9% (44,699) of population in Gold Coast City communicates through non-English

language (NEL), and 1.3% (6648) of the population have limited English proficiency (LEP), which is defined as a self-assessed proficiency in spoken English of people who speak a language other than English at home.<sup>[1]</sup> Language barriers, low levels of cultural competency of health systems, and the experience of navigating an unfamiliar medicines

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DOI: 10.4103/2279-042X.162358

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**How to cite this article:** Arora DS, Mey A, Maganlal S, Khan S. Provision of pharmaceutical care in patients with limited English proficiency: Preliminary findings. J Res Pharm Pract 2015;4:123-8.

system pose significant challenges to the culturally and linguistically diverse (CALD) population in Australia.<sup>[2-5]</sup>

Pharmacists are responsible for providing pharmaceutical care, defined as the provision of drug therapy for the purpose of achieving definite outcomes that improve patient's quality of life.<sup>[3]</sup> Poor communication is a known barrier to providing and receiving medical care and carries potential adverse clinical consequences. Patients with linguistic barriers are likely to report being less satisfied with treatments, and are less likely to understand medication instructions. Formative research by multicultural community quality use of medicines program has revealed a range of factors that pose challenges in the quality use of medicines for some CALD Australians.<sup>[6,7]</sup>

The objectives of the research project are to evaluate the current practices used in the pharmacies to provide prescription labels, information packets, and verbal communication in NELs. Additional aims included assessing pharmacies' satisfaction with their ability to communicate with patients with LEP, the resources and services used for translation/interpretation and identifying their suggestions for improving communication with patients with LEP.

## METHODS

Semi-structured interviews were conducted with five pharmacists employed in pharmacies from three different suburbs in the Queensland State of Australia. These include Gold Coast, City of Logan, and South Brisbane. The study sites were selected based on the diverse consumer population, which include airport pharmacy, urban shopping center, medical center, hospital, and a tourist shopping destination pharmacy [Figure 1]. Pharmacists working experience were divided into following categories based on years of practice at the present site: 1–2 years (Airport), 2–5 years (Hospital, Shopping center), and more than 5 years (Tourist destination, Medical Centre).

Only one registered pharmacists were selected from each study site for preliminary feedback as a process of standardizing questionnaire for a

larger trial. Pharmacies were selected irrespective of the native English proficiency and/or age of the practitioner. The registered pharmacist was the point of contact representing their pharmacy with regard to demographics of LEP patients and provision of pharmaceutical care based on their years of working experience. In case if a minor is an interpreter for patients with LEP, they were defined as younger companions of LEPs with age 7–17 years.

Griffith University Ethics Committee approved the study (Ethics approval number: PHM/04/14/HREC). Interviews were audio recorded [Appendix A for questionnaire], transcribed verbatim and prepared for analysis by (i) conducting quality checks of a sample of the transcribed interviews; (ii) removing identifiable information; and (iii) storing the recordings and transcripts in a secure location accessible only to research team members. NVivo software (QSR International Pty Ltd., Version 10, 2012) was used to manage the data.<sup>[8]</sup>

Thematic analysis was primarily facilitated by the general inductive approach.<sup>[9]</sup> Transcripts were read and re-read by the two researchers to gain an understanding of the broad issues relative to the key evaluation questions. To ensure reliability, the two researchers agreed on a coding framework to create key themes. An additional consistency check was conducted on a sample of transcripts to verify that data were coded in a similar way by a third researcher who had not been involved in conducting or transcribing the interviews.

## RESULTS

Based on the current practices used by the pharmacists for communicating patients with LEP, three interlinked themes emerged from the analysis of interview data:

- Barriers to the provision of pharmaceutical care
- Strategies employed in dealing with LEP patients, and
- Lack of knowledge about existing services.

The letter *P* followed by 0 and number 1–5 presents the five practice locations in which the interview was conducted.



**Figure 1:** Sample study sites representing multiple pharmacy practice setting

Pharmacists' knowledge of, attitude toward, and satisfaction with accessing available services for supporting LEPs patients within their current practice settings were presented based on the interlinked themes described as below:

### Barriers to the provision of pharmaceutical care

All five participants identified LEP patients to represent a significant proportion of the patient groups they encountered in their current practice settings. The types of LEPs patients varied between the five locations as reflected in the following comments:

*"...we get a lot of refugees...like the Afghani refugees, and a lot of islander communities. So their English isn't fantastic, so we find that quite difficult sometimes"* P04.

*"...older people with their medication that haven't got a great grasp of English"* P02.

All participants acknowledged their lack of skills in dealing with LEP patients and discussed the potential negative consequences for the patient in terms of (i) uncertainty around eliciting patient information and (ii) the patient's understanding of their instructions and or advice.

*"...we struggle. We absolutely struggle. Because quite often the patient will just nod and go yeah yeah yeah...they understand because they're embarrassed. From our side of the fence, we go well, we don't know how to help you any more, it's a stand-off. They get their stuff, they go. We don't know what they're doing with it. Frustrating"* P05.

*"...it's quite difficult sometimes to, in the first place, figure out the person's actual complaint. And then I find that the amount of care that you can give to them is a bit basic because of the language barrier. You can't really go beyond this and have to take it, as you can't really offer much more advice because of the language barrier. I do get frustrated with it, I do feel like I don't give as good a care to people with English difficulties"* P01.

*"You can't get a list of patient's medication or can't elicit an allergy history. You can't elicit what's wrong with the patient. They can't tell you their symptoms. We've already got multiple barriers to finding what's wrong and to getting the patient the medication they need"* P03.

### Current strategies for improving communication

Various strategies were employed by the pharmacist to try and improve communication with LEP patients. However, there is acknowledgement among all participants about the lack of effectiveness in many of these strategies.

*"Well, we explain things extremely slowly and if we have someone in the store that can speak the language we can involve them. If it's a prescription related issue we can involve the doctor"* P02.

*"Sometimes we've tried to use like Google Translator and stuff like that on the internet, they're not always that great. We usually try and do things like, like we do drawings, use a lot of nonverbal language like hand signals and stuff like that to try and get across...Sometime it works. Other times ...I don't think it always translates exactly what you're trying to say. And I can tell that because sometime you'll show them what google translator said and it doesn't make sense to them. So, sometimes it works, sometime it not fool proof"* P01.

*"...because I'm Chinese myself, sometimes I can get away with speaking Cantonese to some of the patients. But all the culturally diverse ones I find it really hard...most of them come in with a carer, so we can relay the information through the carer and 8 times out of 10 that works really well"* P04.

Additional aims of the present study included assessing pharmacies' satisfaction with their ability to deal with interpreters/translators and identifying their suggestions for improving communication with patients with LEP.

The involvement of interpreters appeared to greatly enhance pharmacists' confidence in the provision of pharmaceutical care. LEP patients presenting at the pharmacy with a carer or someone who can relay pharmacists' information to the patient appeared to be welcomed by the majority of participants.

*"Quite often though they will come in as a group and there'll be someone in the group with some...limited English that we can work our way around it. There is the occasional time where we have no idea what they're talking about"* P04.

*"Every now and then people do have someone with them that can speak a little bit of English that will interact as an interpreter in some cases"* P01.

However, when LEP patients do present with an interpreter, often they are family members who also have LEP, or are minors or both.

While pharmacist perceives the usefulness of informal interpreters, there is a significant degree of uncertainty surrounding their actual competency in conveying the core message.

*"I'm not always 100% certain that what I'm saying is being translated appropriately across. So there still a bit, it helps when there is an interpreter than when there isn't an interpreter, but there are still some concerns when that's happening that things are not being translated appropriately"* P01.

One participant indicated that using family and/or minors as interpreters are the least favorable of options within his/her current practice setting.

*"We try to avoid using family as the mediator or the interpreter, but sometimes in an emergency situation we have no choice"* P03.

Participants' views about the competency of minors to act as interpreters differed greatly. While some perceived minors to be highly capable.

*"Most of the time the kids are pretty good, they seem ok with it so you would trust that the information has gone through accurately as much as it possibly can"* P04.

Others questioned their capability to understand complex issues and their ability to relay the full context of the information as intended.

*"...their scope of what they can understand or what they can pass on is a concern as well. The point I was just saying is that I'm not always certain or confident that what I'm saying is being translated as what I actually want it to come across. And also, when dealing with minors, because you are limited by what you can tell them health wise to pass on to the actual parent or the adult. Their understanding of health issues is a little bit more limited than an adult's, so I'm not sure how much they can explain on your behalf"* P01.

*"Particularly where a very young child is accompanying, the language used by them is very different. The language used in pharmacy is different. You want to make sure that the message is being delivered, and sometimes a child does not have that sort of high level of knowledge to be able to pass on the information"* P03.

Some also identified the content of information and subject matter to be inappropriate for a minor to have to relay.

*"Well, if there medication is, shall we say, on a touchy subject. Something that's not quite as simple as an antibiotic. Might be you know, could be for erectile dysfunction, or it could be a complicated diabetes sort of issue...you know...where's there's multiple products being dispensed, then I think the minor does struggle"* P02.

One participant reported they had a strategy for assessing the minor's capability.

*"I will often ask the minor to ask the patient to repeat back what they've said, and then for them to tell exactly what they've said to see if the message has been transferred through"* P03.

A participant who reported trust in the capability to minors as interpreters appeared to question whether this trust could be misplaced.

*"...the challenge is whether the information that we're relaying to them is entirely accurate. Obviously I don't speak Afghani, I don't speak Fijian or whatever... obviously you don't know because you don't speak the language"* P04.

### Lack of knowledge about existing services

While all participants acknowledging their awareness of the availability of translating services, all but one discussed the routine inclusion of translating services in their strategy for delivering pharmaceutical care to LEP patients.

*"...we organize for an interpreter to come in person to speak with the patient. Sometimes that's not possible if it's out of hours, and we can have a phone interpreter service in that case, where they can be connected over the phone for a fee"* P03.

Numerous factors were provided by pharmacists to justify their lack of utilization of these resources. These are summarized in Table 1. Primarily, study participants expressed a lack of knowledge on how to access these services within their current practice setting. Strategies to improve Pharmacists communication with LEP patients are presented in Table 2.

## DISCUSSION

The present pilot study helped identifying the key issues surrounding the challenges faced by practicing Pharmacists while providing pharmaceutical care to patients with LEP. Semi-structured interviews aided in assessing the themes. Pilot testing of the semi-structured questionnaire provided a feasible opportunity to design and standardize questionnaires for a future larger sample of pharmacies from rural and urban areas. Pharmacists are the first line of contact for medication-related issues and easily accessible through community and hospital pharmacies.<sup>[10]</sup> Effective communication between pharmacists and patients is crucial for encouraging the

**Table 1: Factors associated with lack of utilization of interpreting services**

| Element | Description  | Participants comments   |
|---------|--|---|
| Access  | Lack of awareness of how to access the existing services within their current practice setting | I do know that there are interpreter services available, but I do not really know the specific details and stuff about that. I have never used one in the past. P01<br>I am, yes with the Medicare, but I honestly don't know how it works. So I do not know whether I would investigate it, which I should actually. I know it is available, but I am not sure if there's a lag time that you have to t-up the appointment. I do not know. P04 |
| Scope   | Can it meet the need of people from various linguistic backgrounds?                            | You wouldn't know if they had a person who can speak Lao or Afghani just sitting there waiting on the phone. P04  |
| Timing  | Availability after hours, service booking requirements   | So, the interpreters familiar with African languages are limited; and they are very difficult to get in a timely way. So sometimes it can be a couple of days. P03  |
| Cost    | Fee for service  | Like if there's a charge for any interpreting service. P04  |

**Table 2: Strategies to improve pharmacists communication with LEP patients**

| Strategies                                | Description   |
|---|---|
| Decision algorithm for communication      | A decision tree summarizing key steps while communicating LEP patients will help provide pharmaceutical care on a timely basis. The components of the decision tree may include guidance on interpreting services, timeline, dealing with minors as interpreters, etc.  |
| Awareness of interpretation services      | Brief orientation for practicing pharmacists on information on the local, statewide and nationwide interpreting services will help facilitate ease in provision of pharmaceutical care to LEP patients  |
| Accessibility of interpretation services  | Pharmacists need to be familiar with the process of accessing the interpreting services. Familiarity of such services post working hours is crucial   |
| Fostering supportive culture and learning | Educational seminars focusing on fostering supportive care for LEP patients; developing strategies to encourage pharmacists to report challenges and/or medication errors while communicating with LEP patients. Education programs targeting strategies to improvement and error prevention will be beneficial |

LEP=Limited English proficiency

quality use of medicines and optimizing patient health outcomes. It becomes of utmost importance when the patient has LEP.<sup>[11]</sup> According to the recent settlement data (Australian Government Department of Social Services; 2014),<sup>[12]</sup> more than 50% of the settlers from October 2009 to September 2014 are from non-English speaking countries. Among this list around 40% belongs to the skilled list (presumably proficient in English), and 60% comprises of family, humanitarian, and others of unknown reasons (presumably LEP). This trend is similar in South-East Queensland.

In this preliminary survey, we have targeted the Gold Coast-Brisbane areas as these are the hubs for both humanitarian and skilled class immigrants. Due to limited number of existing evidence specifically targeting the provision of pharmaceutical care for LEP patients, our first aim was to assess whether pharmacists perceived this patient group as a challenge, and if so, what strategies they have employed to address the present challenge.<sup>[13]</sup>

Our findings highlight that while patients with LEP are encountered on a regular basis by pharmacists they lack the knowledge and confidence to provide pharmaceutical care for this patient group. While a range of strategies are employed by pharmacists in dealing with LEP patients, there is a clear lack of knowledge about the existing services that would facilitate this process. Some of the strategies practiced by the pharmacists to address these challenges include drawings, nonverbal languages, and signal languages to communicate with such patients. Using the dosing administration timings, empty stomach signs are commonly employed. Pharmacists expressed uncertainty around patient understanding of the intended information.

In Australia, translating services such as the Translation and Interpreting Services National (TIS National)<sup>[14,15]</sup> provided by the Department of Social Services are available to all health professionals and health care providers to facilitate communication

of health information to people who have limited or no English proficiency. However, of participants who indicated their awareness about these services, delays incurred in accessing these services was cited as a major discouraging factor for their utilization. Instead, the usefulness and availability of free internet interpreter services (most commonly "Google Translator") were rated of better use than the Department of Immigration Interpreter Services.

Many of the LEP patients are accompanied by a family member, a carer or a minor who communicated with the pharmacist on their behalf. Frequency of informal interpreters ranged from 10 patients/week to 50 patients/day. Even though accompanying minors were considered to be handy with English, present finding supports the common issues with the minors as "complexity of the problem," "lack of complete interpretation" and "inability of using medical terminology."<sup>[16]</sup> All of the respondents were uncertain of how much and how correctly the information has been conveyed to the patient via informal interpreters. Pharmacists tried to reassure and ask the minor to translate and repeat "word by word" what the patient has understood. In one case of adverse drug reaction, it was the minor who pointed out existing allergic reactions to penicillins, about which even the prescribing doctor was not aware of and the case was referred back to the doctor for review.

In the majority of settings, pharmacists appeared to also rely on the bilingual support staff as the first line option for communicating with LEP patients. However, as pointed out by one participant that with such a growing multilingual society in certain regions it is difficult to manage with bilingual support staff. They would need multilingual staff or to employ numerous staff who spoke the languages common to the region, however, this is economically not viable.

With this preliminary data, it is evident that barriers to quality use of medicine and pharmaceutical care in patients with LEP is a growing issue in the areas with

high immigrant populations that leaves the healthcare providers struggling in the delivery of better patient care. While practitioners perceived effective communication crucial for the quality use of medicines, the lack of availability of resources limits their professional role in dealing with LEP patients. Present findings highlight the need for further research across rural and urban centers with a larger sample size in proposing a definite need to identify the specific resources needed for the practitioners to ensure effective communication with the patients and carers with LEP.

## AUTHORS' CONTRIBUTION

Arora DS: Study design, Data collection, Data analysis, Manuscript writing; Mey A: Data analysis, Manuscript writing; Maganlal S: Study design, Data collection; Khan S: Study design, Data collection, Data analysis, Manuscript writing.

### Financial support and sponsorship

This study is funded by Pharmaceutical Society of Australia (Queensland Branch). The funding body has no involvement in study design, data collection, analysis and interpretation, and in writing of the article. The supporting source has no control or influence the decision to submit the final manuscript for publication.

### Conflicts of interest

There are no conflicts of interest.

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## APPENDIX

### Appendix A: Study Questionnaire (semi-structured interview)

- How pharmacies deal with patients with limited English proficiency (LEP)?
- Whether language barrier is an issue for better patient care?  
Yes No Not sure
- How often you come across LEP patients accompanied by minors as interpreters?  
Sometimes (0-5/day) A lot (<5/day) Rarely (1-5/week) Not at all
- Is there a challenge in dealing with LEP patients accompanied by a minor as an interpreter?  
Yes No Not sure
- What are the problem/challenges in dealing with LEP patients accompanied by a minor as an interpreter?
- If there is a problem, what is the present approach used to address it?
- Future strategies to address this issue?
- Are you aware of the present services available for patient with LEP?  
Yes No Not sure
- If yes, please provide details
- Would you like to comment on any other issues related to patients with LEP?