Prevalence of patient communication difficulties in urban family practice

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2010-06-07
Abstract

Objective
To estimate the prevalence of communication barriers (as defined by limited proficiency in the official languages (LLP) and hearing loss) in primary care in urban practice in Montreal, Canada.

Methods
We conducted a cross-sectional survey of 579 patients (73.2% of those approached) at 6 family practice clinics and 34 physicians (45% of those approached) at one of the 6 clinics.

Results
Based on patient report, 16.9% were unable to speak English or French well enough to talk with their doctor, 14.1% had a hearing loss and 10.9% were accompanied by someone to assist in communication. Based on physician report in one clinic, 4.5% had LLP and 1.8% were accompanied by someone to interpret. The respective rates for patient report in this clinic were 10.7% and 7.5%.

Conclusion
Family physicians in Canadian cities are faced with particular challenges in communicating with approximately 14% of their patients because of impaired hearing and 17% of their patients because of their limited proficiency in either of Canada’s official languages. Moreover, physicians may be overestimating their patients’ language proficiency.

Practice Implications
Identification of these communication difficulties is a necessary first step in the process of providing effective care to these vulnerable patients.
Introduction

Effective physician-patient communication is vital to achieve medical care goals: symptom resolution, emotional health, improved physiologic measures (e.g., blood pressure and blood sugar level) and pain control. (Beck, Daughtridge, & Sloane, 2002; M. Stewart et al., 2000; M. A. Stewart, 1995) Communication between patients and physicians is less effective when the patient has limited language proficiency (LLP) in the official language(s) of the locality (Chowdhury, Lasker, & Mahfuz, 2006; McElduff et al., 2005; Mukhopadhyay, Forouhi, Fisher, Kesson, & Sattar, 2006; Sent, Ballem, Paluck, Yelland, & Vogel, 1998) or is unable to understand the physician because of impaired hearing. (Iezzoni, O'Day, Killeen, & Harker, 2004a; Wallhagen & Pettengill, 2008; Woodcock & Pole, 2007; Zazove et al., 1993) Patients with communication difficulties: limited proficiency in the local official language (LLP) or hearing impairment are less likely than others to receive preventive services and symptom treatment (Bowen, 2001) and more likely to experience unintended injuries due to health care. (Bartlett, Blais, Tamblyn, Clermont, & MacGibbon, 2008)

Physicians in Canada, the US and European countries are increasingly frequently called upon to treat immigrants and refugees. In 2006, more than 6 million Canadians (18% of the population) were immigrants. (Statistics Canada, 2006) The prevalence of LLP has not been measured in Canada. However, Statistics Canada measures the prevalence of the severest degree of LLP (speaking no English or French). Of the immigrant population in Canada, 9.2% speak no English or French (Statistics Canada, 2007) and there is a continuum of language ability among
members of minority language populations. Moreover, the complexity and specific nature of medical vocabulary also poses particular difficulties (Jackson, 1998). In Canada, most LLP patient-physician encounters take place without a professional interpreter (Clifford, Gill, Martin, & Séguinot, 2004; Sasso, 2004).

The literature on the consequences of communication problems other than LLP is limited. Hospitalized persons identified by nurses as having a communication difficulty had higher rates of preventable adverse events (any unintended injuries caused by health care management) than persons without communication difficulties (Bartlett et al., 2008). Canadians reporting hearing problems were significantly more likely to report heart disease, the presence of chronic conditions, being injured in the past 12 months, and to experience depression compared with respondents not reporting hearing problems (Woodcock & Pole, 2007). Physicians may fail to identify their patients with hearing loss. In a small study, 85% of older Americans with hearing loss indicated their primary care providers had never asked about possible hearing loss (Wallhagen & Pettengill, 2008).

We were unable to find data on the prevalence of communication difficulties in patients consulting in primary care. Nurses documented a communication problem due to a language barrier or a physical problem such as blindness or deafness in the charts of 3.6% of patients admitted to acute care hospitals in the province of Quebec (Bartlett et al., 2008). In 2000-2001, 4% of Canadians over age 12 reported a hearing impairment (Woodcock & Pole, 2007). In the US, 11.8% of the non-institutionalized population reported a hearing impairment to the National Center for Health Statistics (Lam, Lee, Gomez-Martin, Zheng, & Caban, 2006) and 41.99% of
Medicare beneficiaries had difficulty hearing. (Hoffman et al., 2005) Most Medicare beneficiaries are ≥ 65 years old. In these surveys, it is not possible to differentiate persons who use sign language from other hearing impaired people.

Given the present patterns of immigration to Canada, the prevalence of LLP persons has increased and is likely to continue to do so. Because hearing loss disproportionately affects older persons and the Canadian population is aging, hearing loss will become more prevalent. (Statistics Canada, 2006)

In order to assess the frequency with which urban family physicians are faced with patients with communication difficulties, we conducted a survey to estimate the prevalence of LLP and hearing loss in family practice ambulatory care settings in Montreal, Canada.

Methods

Subjects.

We surveyed all adult patients who presented for appointments at six family medicine group practices and all physicians at clinic 6, all in Montreal, Canada. Characteristics of the sites are reported in Table 1.

Procedures.

The project was approved by the Research Ethics Committees of each of the clinics and the Institutional Review Board of McGill University. The research assistant spent one week in the waiting room of each clinic and 2 weeks in clinic 6 (1 week in each of its 2 waiting rooms. The
The survey contained four questions requiring ‘yes’ or ‘no’ answers about communication barriers. Most researchers studying care of LLP persons have identified them using the U.S. Census question “How well do you speak English?” (scored on a 4-point scale). Respondents were defined as LLP if they responded “not well” or “not at all.” Even individuals who can carry on an everyday conversation in English or French may face communication difficulties in a health encounter. (Bowen, 2001) Therefore, we asked questions specific to the task of communicating with one’s physician. The following three questions addressed language proficiency: 1) Can you speak English well enough to talk with your doctor? 2) Can you speak French well enough to talk with your doctor? 3) Does someone ever come with you to help you to talk with the doctor? To assess for hearing loss we used the question recommended by Bagai et al (Bagai, Thavendiranathan, & Detsky, 2006) as a screening test on the basis of a systematic review in 2006: Do you feel you have a hearing loss?

In clinic 6 we also elicited physician perceptions of the existence of language barriers. Working from a list of all the adult patients he or she had seen over the previous year, each physician identified patients with whom there was a language barrier and those who were accompanied by a person who served as an interpreter.
Results

Of the 791 people approached, 579 (73.2%) accepted to participate and completed the questionnaire. Of the 60 physicians working at clinic 6, 26 (43%) provided data about their patients. Rates of LLP and hearing loss varied widely from one clinic to another (see Table 2). Hearing loss rates ranged from 8.2% to 29.2%, mean 14%. LLP based on patient responses to a direct question ranged from 4.6% to 49.2%, mean 17%. Of the 63 patients who reported being accompanied by someone to assist with communication, 20 also reported hearing loss, 32 reported LLP, 9 reported both difficulties and 9 reported neither.

Being accompanied was more common in both LLP (29.3%) and hearing loss (24.7%) persons compared to LP (6.7%) and normal hearing (7.9%) respondents.

We also found important differences in the rates of patient and physician reports of LLP (16.9% and 4.5% respectively) and of the presence of someone to assist with communication (7.5% and 1.8% respectively).

The patient’s sex was not correlated with patient-reported LLP or with hearing loss. Patient age was correlated with hearing loss [chi-square 1.288, p <.0001] but not with patient-reported prevalence of LLP or of being accompanied.
Discussion

Based on our data, family physicians in Montreal are faced with particular challenges in communicating with approximately 14% of their patients because of impaired hearing and 17% of their patients because of their limited proficiency in either of Canada’s official languages. Moreover, while 17% of patients perceived themselves to be LLP, only 4.5% of physicians in the survey perceived their patients to be LLP. This may provide a partial explanation for the under use of interpreting services (Agence de la santé et des services sociaux de Montréal, 2007).

This was the first survey to estimate the prevalence of limited language proficiency (LLP) in patients in Canada. In a recent study in England, Gill et al (Gill, Shankar, Quirke, & Freemantle, 2009) used multi-stage, stratified probability sampling surveys to estimate the number of adults from the four main minority ethnic communities (Indian, Pakistani, Bangladeshi and Chinese) who have no functional English to communicate with their health professional. In total 21.8% of adults from these 4 groups reported speaking English ‘slightly’ or ‘not at all’. In Gill et al’s study, in contrast to ours, the proportion of individuals unable to speak English increased with age and fewer women than men spoke English (67% versus 86%). Strikingly, 91.1% of Bangladeshi women of age 55 and older spoke little or no English.

On the issue of hearing, we have found only one study reporting rates of hearing loss in Canada by age group. As we can see in Table 3, rates of reported hearing loss in our patients were higher in every age group than were rates in the Canadian Community Health Survey (CCHS). CCHS classification was based on whether or not respondents reported being ‘usually unable to hear what is said in a conversation’. The broader question we used had a sensitivity of 66% and
specificity of 76% in a US population. (Nondahl et al., 1998) Equivalent information is not available for the CCHS questions.

Inadequate communication with physicians is a concern for persons who are deaf or hard of hearing. Hearing impaired people were concerned with medication safety. (Iezzoni, O'Day, Killeen, & Harker, 2004b) They reported that physicians were disinterested in their treatment decisions and did not take the time to ensure that they understood everything that had been said. These findings highlight the need to accommodate the patient population with hearing difficulties in order to ensure effective patient-doctor communication.

Conclusion

Although our survey is based on a small population of patients seen in primary care in Montreal, it provides an important estimate for Canadian physicians of the prevalence of communication difficulties. Effective doctor-patient communication is an essential component of patient-centered care. Hence, health care providers must learn to attend to the special needs of this vulnerable and growing patient population.

Acknowledgment

This study was funded by a Janus grant from the College of Family Physicians of Canada.
References


Statistics Canada. (2007). *Detailed mother tongue (103), Knowledge of official languages (5), Age groups (17A) and sex (3) for the population of Canada, provinces, territories, census divisions and census subdivisions, 2006 census - 20% sample data*. Retrieved from.


Table 1

Clinic Characteristics

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Teaching Practice</th>
<th>LLP</th>
<th>Professional Interpreters Used</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>No</td>
<td>Few</td>
<td>No</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>Few</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Yes</td>
<td>Many</td>
<td>Infrequently</td>
</tr>
<tr>
<td>4</td>
<td>Yes</td>
<td>Many</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>No</td>
<td>Many</td>
<td>Infrequently</td>
</tr>
<tr>
<td>6</td>
<td>Yes</td>
<td>Some</td>
<td>No</td>
</tr>
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</table>
Table 2

Prevalence of Patient Reported Communication Difficulties

<table>
<thead>
<tr>
<th>Clinic</th>
<th>Number</th>
<th>Language limitation&lt;sup&gt;1&lt;/sup&gt;</th>
<th>Hearing loss</th>
<th>Accompanied&lt;sup&gt;2&lt;/sup&gt;</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>81</td>
<td>9 (11.1)</td>
<td>15 (18.5)</td>
<td>8 (9.9)</td>
</tr>
<tr>
<td>2</td>
<td>79</td>
<td>7 (8.9)</td>
<td>10 (12.7)</td>
<td>7 (8.9)</td>
</tr>
<tr>
<td>3</td>
<td>65</td>
<td>3 (4.6)</td>
<td>19 (29.2)</td>
<td>10 (15.4)</td>
</tr>
<tr>
<td>4</td>
<td>107</td>
<td>29 (27.1)</td>
<td>13 (12.1)</td>
<td>17 (15.9)</td>
</tr>
<tr>
<td>5</td>
<td>61</td>
<td>30 (49.2)</td>
<td>5 (8.2)</td>
<td>7 (11.5)</td>
</tr>
<tr>
<td>6</td>
<td>186</td>
<td>20 (10.7)</td>
<td>20 (10.8)</td>
<td>14 (7.5)</td>
</tr>
<tr>
<td>Total</td>
<td>579</td>
<td>98 (16.9)</td>
<td>82 (14.1)</td>
<td>63 (10.9)</td>
</tr>
</tbody>
</table>

<sup>1</sup> Can you speak English or French well enough to talk with your doctor? = No
<sup>2</sup> Does someone usually come with you to help you talk with the doctor? = Yes
Table 3

Reported Hearing Loss Rates by age

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Our study</th>
<th>(Woodcock &amp; Pole, 2007)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>(%)</td>
</tr>
<tr>
<td>under 20</td>
<td>0</td>
<td>(0)</td>
</tr>
<tr>
<td>20-29</td>
<td>8</td>
<td>(8.5)</td>
</tr>
<tr>
<td>30-39</td>
<td>6</td>
<td>(4.2)</td>
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<tr>
<td>40-49</td>
<td>10</td>
<td>(8.1)</td>
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<tr>
<td>50-59</td>
<td>9</td>
<td>(10.7)</td>
</tr>
<tr>
<td>60-69</td>
<td>9</td>
<td>(16.4)</td>
</tr>
<tr>
<td>70-79</td>
<td>19</td>
<td>(42.2)</td>
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<tr>
<td>80 or older</td>
<td>21</td>
<td>(72.4)</td>
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