

Language difficulties in outpatients and their impact on a chronic pain unit in Northwest Switzerland

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Summary

Introduction: Many foreign patients attending our pain clinic are unable to understand one of the four Swiss national languages and are also unable to speak English. Therefore, communication with these patients can be very difficult or even impossible. Consequently, diagnosis and treatment may also prove difficult. Recognizing that language barriers can have deleterious effects, the use of an interpreter is at times the only way to communicate, however, the financial responsibility becomes that of the health care provider.

Methods: The aim of this paper was to study the aspects of communication with immigrants and to discuss the effect of language difficulties on the organizational structure of a pain clinic. In our analysis, we prospectively included all patients attending our pain clinic between January 1st and December 31st, 2006 and 2008. The mother tongue, rather than the nationality, of the patients and their ability to communicate was registered.

Results: In 2006, the communication of 92% of the patients was “good” or “very good”. Communication was extremely difficult or impossible in 6% to 7%. No statistically significant difference was found between the number of consultations per patient per mother tongue, irrespective of the patient’s ability to communicate. Additionally, the consultation times were significantly shorter in patients with a poor ability to communicate.

Discussion: In 6% to 7% of our pain patients, communication was impossible or extremely difficult. Language barriers can be problematic in all cultures and consultation situations. The average consultation length may be associated with better outcomes in chronic pain patients.

Key words: pain therapy; language problems; communication problems; financial impact; immigrants

Introduction

Chronic pain is a common problem in Switzerland, with 16% of its residents suffering from it [1]. In the European contingent the number averages 19% [1]. The socioeconomic impact of this substantial number of patients is enormous. In Switzerland, it is estimated that the cost of treatment is between 4.3 and 5.8 billion Swiss Francs each year [2]. This exceeds the total costs associated with the treatment of osteoporosis or respiratory diseases [2].

In 2005, Switzerland was estimated to have 7.5 million inhabitants [3]. Although the Swiss government recognizes four languages (German, French, Italian and Romansh) as official, it is not uncommon for foreigners to communicate in their native language. A total of 1.54 million residents (roughly 20%) consist of foreigners [3]. This segment of the population regularly converses in languages unfamiliar to most Swiss citizens.

The pain clinic of the University of Basel is

part of the Swiss National Health System. In our district consisting of the cantons Basel-Country and Basel-City, there were approximately 454 000 citizens (6% of the Swiss population), as estimated in 2007 [4]. In addition, Basel as a multilingual/multicultural city bordering Germany and France, attracts many day-workers and commuters.

Most Swiss physicians speak or understand three to four languages (German, French, Italian and/or English), including their mother tongue, as these languages are part of the basic Swiss education system. Nevertheless, many foreign patients are unable to speak or understand one of the aforementioned languages. Communicating with these patients is often tedious or even impossible.

Poor communication is the most common source of dissatisfaction with medical care and most diagnoses are made from history alone [5]. Psychological support for patients can be severely restricted [6], especially concerning complex pa-

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tients such as those suffering from chronic pain. Therefore, language barriers can be problematic in all cultures and consultation situations [5–7]. International literature [6] raises concern regarding inequalities in service provision and the quality of care provided to patients with difficulties in communicating. To facilitate an initial medical assessment, we use preconsultation pain questionnaires available in different languages. Questionnaires written in the patients' mother tongue were sent to the patients' residence a few days before the first medical consultation.

Nevertheless, language barriers can have deleterious effects [8] and the use of an interpreter is at times the only way to communicate. However, the financial responsibility becomes that of the health care provider.

The aim of this study was to acquire data on the communication profile of immigrants and to analyze the impact of potentially difficult communication on the organizational structure of a pain clinic.

Methods

All patients attending our pain clinic were prospectively registered in a Microsoft Access (Microsoft Corp, Redmond, WA, USA) database. In addition to other items recorded, patient data included the patient's mother tongue and ability to communicate. The investigator noted the patient's mother tongue and subjectively evaluated their ability to communicate as "very good", "good", "bad" or "hardly possible". The ability to communicate referred solely to the communication possibilities (fluent versus non-fluent) between the investigator and patient, not to other barriers such as level of intelligence or different disease pattern.

Romansh was not included in our analysis. It only accounts for about 0.48% of the Swiss population, and most Romansh-speaking Swiss are equally proficient in German. All languages other than the Swiss national languages have been referred to as foreign languages.

Data were prospectively collected between January 1st, 2006 and December 31st, 2006, and again from Janu-

ary 1st, 2008 until December 31st, 2008. Rather than the patients' nationality, their mother tongue and knowledge of a Swiss national language (if very good or excellent) was registered. Ability to communicate was rated as "very good", "good", "bad", or "hardly possible". The number of consultations and the duration of consultation(s) were recorded. The requirement for the need of professional interpreters was analyzed, and additional costs were calculated.

Kruskal-Wallis and Mann-Whitney U tests were used to compare the number of consultations between all groups and between two groups, respectively. The distribution of the number of consultations was assumed to be non-parametric and was analyzed using a Kolmogorov-Smirnov test. GraphPad Prism Version 4 (GraphPad Software, San Diego, CA, USA) was used for all statistical calculations. A *p* value <0.05 was considered significant.

Results

In 2006, 285 patients were treated. Patients attended our pain clinic an average of 4.0 times per year (95% confidence interval [CI] 3.6–4.4). The number of consultations ranged from 1 to 22 (median 3.0). In 2008, we treated 363 patients and every patient was seen an average of 4.2 times (95% CI 3.7–4.5) per year (median 3.0, range 1–26). In 2006 and 2008, there were 1141 and 1532 consultations, respectively. The median age

in the group with good communication skills was 55 years, compared to 53 years in patients with a poor ability to communicate (*p* = not significant).

In 2006 and 2008, 53 (19%) and 67 (19%) of the patients, respectively, attending our pain clinic had English, Serbo-Croatian, Spanish, Turkish or another foreign language as their mother tongue (table 1). In 2006, 198 patients (69%) attending our pain clinic had German as their mother tongue or had an excellent knowledge of German. French or Italian was the mother tongue of 13% of the patients. In 2006 and 2008, the mother tongue of nine patients and one patient, respectively, could not be specified because of missing entries.

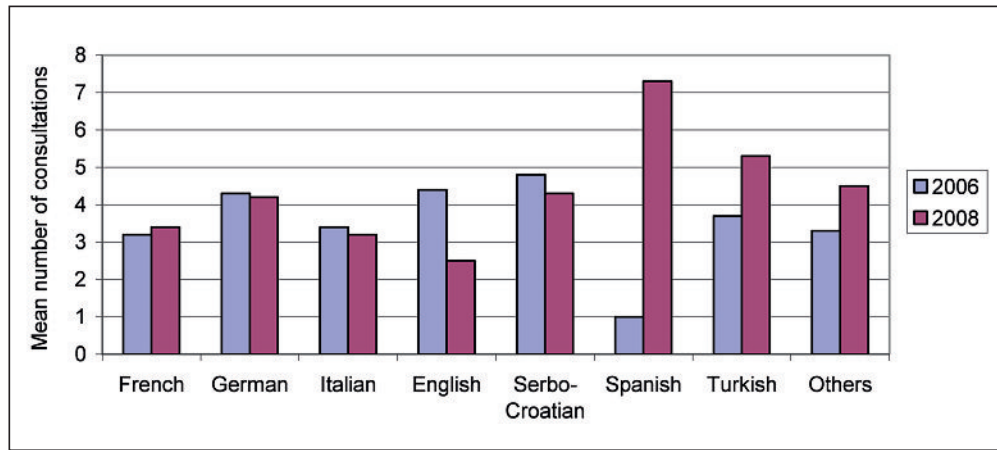
There was little difference in the distribution of languages between 2006 and 2008 (fig. 1). The number of consultations per patient in the Spanish speaking group, in 2008, was an exception. However, the small number of patients (*n* = 4) must be taken into account (fig. 1). In 2008, there were no significant differences in the number of consultations per patient between the different language groups (*p* = 0.64) (fig. 2).

Table 1
Number of patients and number of consultations per mother tongue.

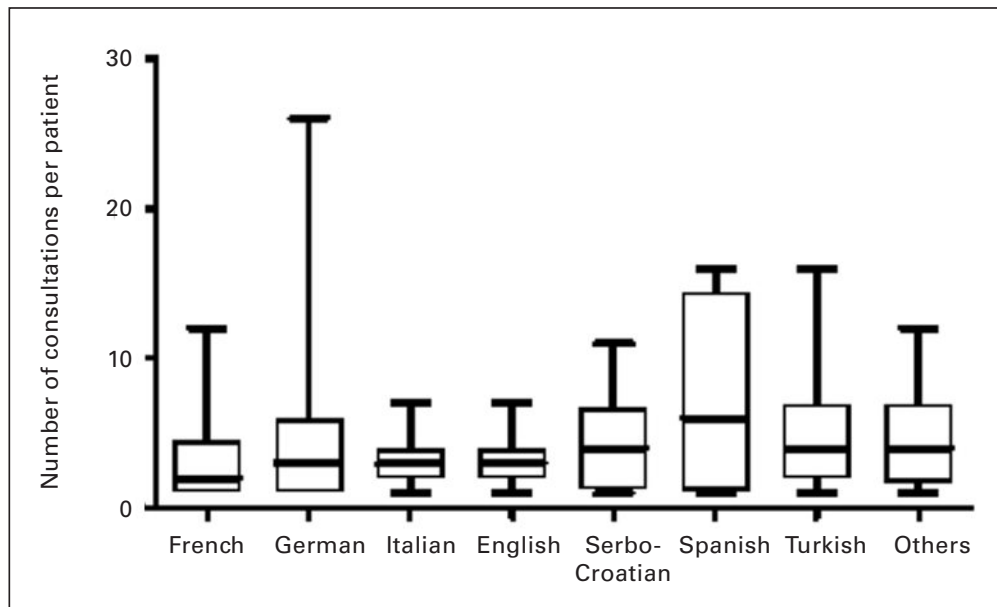
	Patients		Consultations per patient	
	2006	2008	2006	2008
French	13	13	3.2	3.4
German	198	265	4.3	4.2
Italian	12	17	3.4	3.2
English	5	2	4.4	2.5
Serbo-Croatian	23	20	4.8	4.3
Spanish	3	4	1.0	7.3
Turkish	15	19	3.7	5.3
Other	7	22	3.3	4.5

Figure 1

Number (mean) of consultations per patient per mother tongue in 2006 and 2008.

**Figure 2**

Box and whiskers diagram (minimum, maximum, median, 25th and 75th percentiles) displaying the distribution of the number of consultations per patient per mother tongue in 2008.



Communication was rated “good” or “very good” in 92% and 94% of patients in 2006 and 2008, respectively. Communication was very difficult or not possible in 20 patients (7%) in 2006 and in 22 patients (6%) in 2008. In 2006, these 7% of patients made 111 visits (9%), accounting for 4.8 consultations per patient (95% CI 3.2–6.4). In 2008, these 6% of patients made 95 visits (6%), accounting for 4.5 consultations per patient (95% CI 2.8–6.2). These proportions do not differ from the average number of consultations per patient in the whole patient population ($p = 0.36$ for 2006; $p = 0.43$ for 2008). Most patients with a poor ability to communicate had Serbo-Croatian or Turkish as their mother tongue. In 2006, communication was difficult or not possible in 26% of the Serbo-Croatian patients ($n = 6$) and in 46.7% of the Turkish speaking patients ($n = 7$). In 2008, poor language skills were observed in 15% and 42% of the Serbo-Croatian ($n = 3$) and Turkish

($n = 8$) speakers, respectively. Together, Serbo-Croatian and Turkish speaking patients accounted for 20% ($n = 234$) of the consultations in 2006 and for 12% ($n = 186$) in 2008. A professional interpreter was required for approximately 40 hours in 2008, amounting to 3316 CHF of additional costs. Approximately, 150 CHF in extra costs was spent for each of the 22 patients with a poor ability to communicate.

In 2008, we recorded the time per consultation. Patients with good communication abilities ($n = 341$) had a median consultation time of 45 minutes, whereas patients with poor communication abilities ($n = 22$) had a median consultation time of 35 minutes. This difference was statistically significant ($p = 0.015$).

The distribution of the amount of consultations was non-parametric (Kolmogorov-Smirnov test: $p < 0.0001$).

Discussion

Relevant literature addressing difficult communication in chronic pain patients is scarce. The aim of this study was, therefore, to obtain basic data on communication aspects associated with immigrants and to discuss these results in view of the associated organizational consequences.

Not surprisingly, the patient collective was similar for both 2006 and 2008. Attending our pain clinic in 2006 were 69% German speaking patients, 13% French or Italian speaking patients, and 18% foreign speaking patients. As we did not record the nationality of our patients, we cannot definitively conclude whether foreign speaking patients visited our pain clinic more often. However, proportionally, the number of non-Swiss attending our clinic does not seem to be much higher than the number of Swiss citizens.

This study provides no evidence indicating that immigrants and foreigners attend medical institutions more often because of pain.

Communication was almost impossible in 7% and 6% of the patients in 2006 and 2008, respectively. This patient group is challenging [5]. Particularly in chronic pain therapy, communication and the patient's psychological status are important components of illness and suffering. Another problem in this patient group is obtaining valid written informed consent, in case intervention is necessary. As a result, caring for such patients requires additional financial resources (e.g. interpreter) and more patience, as it can sometimes be almost impossible to explain complex facts of the case to this patient group. The extra cost per patient for a professional interpreter assisting patients with poor language skills was about 150.-CHF. This amount can be saved when relatives act as translators. Therefore, relatives can be helpful as translators or as people of reference. However, one should be aware that the presence of relatives may influence the course of consultation [6]. An ad hoc interpreter, including family members, friends or untrained members of the support staff, are considerably more likely than professional interpreters to commit errors that may have adverse clinical consequences [8]. Furthermore, their presence may inhibit discussion regarding sensitive issues such as domestic violence, substance abuse, psychiatric illness and sexual health [6].

The financial aspects of extra costs must be considered when computing diagnosis-related cases in the near future. As at least 7% of our patients are faced with communication difficulties, the extra costs generated are considerable. In the future, billing systems should be designed to integrate these extra costs for health care providers caring for patients with a poor ability to communicate.

One aspect not considered by our analysis, was the rate of unemployment and the collection of invalidity insurance among foreign-speaking patients. Such data would be relevant for political

decision making and to optimize planning of resource budgets in the medical establishment. Our own data in the context of a bachelor's thesis in social work (unpublished), which recorded a patient audit based on 48 questionnaires with a backflow rate of 43% in autumn 2008, revealed that 47% of our patients, in the workforce in particular, had financial and social problems. As many as 71% reported restrictions in their private activities. This is a further point underlining the importance of comprehensive and extended communication with chronic pain patients.

The median age of patients with poor language skills was 53 years; only two years younger than the population with good communication abilities. This difference was not statistically significant. This means that our average patient would have to remain in the workforce for a minimum of ten years. Therefore, the socio-economic impact of language difficulties in this patient group seems to be substantial, even more so when considering the difficult treatment circumstances and the eventual, less than optimal care. This study did not follow the treatment outcome of these patients. Further studies focusing on these aspects are mandatory.

Surprisingly, the number of consultations per patient did not differ between patients with good versus poor communication abilities. We assumed that patients with a poor ability to communicate would tend to have fewer consultations per patient. In addition, we assumed there to be a tendency for reduced number of consultations on the part of both the doctor and the patient due to potential difficulties during patient interviews and consultations.

Although we did not record consultation time in 2006, we had considered whether it would differ between foreign speaking patients compared with those proficient in German or another national language. On one hand, consultations have the potential to be prolonged when an interpreter or relative is actively translating the dialogue. On the other hand, dialogues with poorly communicating patients without the help of an interpreter could be shorter due to language difficulties and the mutual limitation of communication for the most important aspects. The 2008 data demonstrate that the consultations of patients with difficulties in communicating were on average ten minutes shorter than those proficient in a national language. This difference was statistically significant.

A 2002 review by Wilson and Childs [7], which considered consultation length as a marker of physicians, reported that doctors who spend more time with their patients were more likely to cover important elements of care. Longer consultation times are essential for providing high quality clinical care [9], especially in chronic diseases such as chronic pain, asthma, diabetes, or angina. Furthermore, doctors who have longer average

consultations prescribe less and were more likely to include lifestyle advice and preventative activities [7]. This could explain why they also had fewer consultations. Based on these data, the authors suggested that average consultation length may be associated with improved short-term outcomes [7], especially for patients with chronic diseases [9]. Preventative care was worse in practices located in socioeconomically deprived areas.

All of the above findings support our empirical experience that patients with poor communication abilities are at a disadvantage. Explaining a patient's disease, their therapy, or to obtain written informed consent is quite often impossible or very hard to perform. How can we improve this situation? The only apparent solution is to be aware of these problems and to strive to facilitate communication that is as clear as possible.

In conclusion:

1. There were no significant differences in the number of consultations per patient between the different mother tongue groups.
2. The number of consultations per patient was similar between groups with poor and those with proficient language skills.
3. In 6% to 7% of our pain patients, communication was impossible or extremely difficult.
4. Consultation times were significantly shorter in patients with a poor ability to communicate compared to those where communication posed no problem.
5. The average consultation length may be associated with improved short-term outcomes, especially for patients with chronic diseases.
6. Poor ability to communicate results in extra costs.

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