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Communication practices with patients using a language other than French: a crosssectional survey in a university hospital in France



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Abstract

Aims This paper aims to shed light on routine communication practices between all types of hospital workers– medical, administrative and psycho-social -, and patients using a language other than French.

Methods A cross-sectional survey was conducted at a University Hospital, located in a Parisian suburb, where the proportion of immigrants is high. The survey targeted any type of hospital employee, provided that the employee was in contact with patients. The survey items included: routine communication practices with patients using a language other than French; perceived quality of communication; issues experienced when communicating with non-French speaking patients; main languages raising communications difficulties; ways to improve communication with patients using a language other that French. Descriptive and bivariate analysis were conducted with R software. Survey findings were cross-analyzed with 2-year records of professional interpreter services at the University hospital.

Results A total of 362 participants responded in June 2022 to the online survey, of which 353 had no missing value. All types of hospital staff were represented, the majority being paramedics and medical doctors. "The use of a professional interpreter" was ranked as third most used practice, behind "getting by" and "use of an accompanying adult". South Asian languages were those fueling the most important communication issues. Medical doctors and psychologists had significantly more access to professional interpreters, whereas paramedics and administrative staff made more use of application software. Several negative consequences on everyday care, significantly impacting its perceived quality, were raised.

Conclusions Our findings showed the importance of alleviating communication difficulties with patients using a language other than French, in order to achieve health equity, and means to achieve this are discussed.

Keywords Patients using a language other than French, Allophone, Language barriers, Communication barriers, Healthcare access, Healthcare quality, Digital translation tools, Professional interpreter, Legal literacy, Health equity, Workplace satisfaction

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Background

As the worldwide migration flow increases, at the healthcare system level, there is an increase in the number of patients not fluent in the country dominant language. Consequences of low level understanding between care providers and patients are difficult to evaluate rigorously, due to the inconsistent record of the existence of language barriers, and heterogeneous assessment of language proficiency [1]. However, a growing number of studies report effects of language barriers in healthcare context, such as concerns around the quality and security of care, poorer health outcomes and deepening healthcare disparity [2–4]. Institutional constraints and lack of training of healthcare professionals are significant challenges for overcoming language barriers in health care [5, 6]. Some interventions were implemented in order to equip health professionals -especially medical doctors -with cultural competencies during their curricula, or to raise their use of interpreter services [7, 8], with sometimes limited effects [9]. A further layer of complexity lies in the tension between a globally increased work pace and complexified work setting, and the legal requirement of getting the informed consent from the patient.

In 2017, the French Health Authority released guidelines on the use of professional interpreters in healthcare setting [10]. However, its implementation stays irregular as interpretation services are rather expensive and time consuming. Its use hence stays most limited to public hospitals, through a public procurement system. Meantime, in order to mitigate the pre-cited challenges, numerous digital tools are being developed, in France and worldwide, while their validity and usefulness still need to be carefully assessed.

In this context, our study aims to report the communication practices of our university hospital staff, when dealing with patients using a language other than French (LOF). Our specific aims were to compare, across categories of hospital professionals: frequency of language barrier perceived; resulting perceived quality of care; solutions usually used by the staff; and knowledge of the existence of an interpretation service.

Methods

Design

The study, a cross sectional survey in order to understand hospital staff perceptions of and practices of communication with LOF patients, was embedded in a larger quality improvement process.

Setting

The setting is a university hospital of a socio-economically disadvantaged suburb of Paris, France. The administrative area where the hospital is located has a rate of 30% of immigrants, which is the highest in mainland France [11]. Moreover, newcomers originated from many non-French-speaking countries, mainly located in South Asia. The hospital offers a professional interpreting service, available instantaneously over the phone, via a specific procedure delivered to all head of departments and chief nurses. The service is granted 24/7, for all existing languages and dialects. An on-site interpreting service is also available on appointment. The hospital is billed by the company providing the interpreting services, based on a combination of *pro-rata* and flat rates.

On April 2021, an interprofessional working group (WG), including nurses, social workers, psychologist, pharmacist, medical doctors (MD), and representatives of quality of care / logistic / financial departments was set within the hospital. The WG goal was to devise the way forward to improve the quality of care for non-French speaking patients. The first move of the WG was to set up a survey, for the whole hospital staff, - and not restricted to health professionals -, in order to understand their perceptions and practices of communication with LOF patients, including the use of professional interpreting services.

The survey

The questionnaire was drafted according to the literature review [12], and using a previous survey conducted at Assistance Publique - Hôpitaux de Paris (APHP). The items of the questionnaire were discussed within the WG (see annex). Questions included: main languages generating communication issues and their frequency; the way the staff used to overcome these issues; staff's perception of the consequences of communication issues; staff's knowledge and perception of pro and cons of interpretation services; staff's current use or suggestion of alternative solutions. The questionnaire was pilot-tested with 3 members of the hospital staff (one nurse, one MD and one pharmacist).

All hospital staff received an email explaining the aim of the survey, with a weblink sending them to the Limesurvey page, where they could fill in the survey anonymously. Posters and flyers were also distributed to all the departments, with a QR code that would take the participants to the Limesurvey page. In parallel, WG members promoted the survey. The supervising staff of all hospital departments ensured that a computer was available when a participant did not have access to it on a routine basis.

Statistical analysis

Data were transferred from Limesurvey to Excel[©], in order to clean the database.

Statistical analysis was then conducted with R software. The full dataset was described variable by variable. Hospital staff were categorized into five broad types in order to have sufficient number of samples in each group, and

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to ensure the heterogeneity among staff. Those groups comprised: MD, paramedics, psychologists, administrative staff, and social workers, setting aside the group 'others'. Bivariate analysis was performed to statistically test the heterogeneity across the categories of staff in terms of several research questions, namely frequency of language barrier perceived; solutions usually used by the staff; perception of the quality of care resulting from the language barrier; knowledge of the existence of an interpretation service. MDs, regarded as a high-level service provider, differed from other professionals in two ways: (1) have higher access to services, such as interpreter, using sophisticated technology in translation, (2) and have high skills and knowledge in treating patients.

Therefore, we chose MD as a reference category and compared all other categories one by one to MD, while performing the bivariate analysis. Given that we had multi-category dependent and independent variables, the bivariate analysis used in our study is Fisher's exact test. This non-parametric statistical technique relaxes the rigid requirement of Chi square test that at least 80% of the cells should not have less than 5 expected counts [13].

Complementary source of data

In parallel to the survey, hospital data on outsourced interpreting services over 2 years (2021 and 2022) were analyzed by the WG. The volume of interpreting services was analyzed according to: type of hospital staff booking the interpreting service, time of the day, day of the week, language.

Ethical considerations

There was no need for ethical clearance as the survey was categorized as "internal research" under French ethics clearance rules. General data protection regulation did not apply as the survey was anonymous. Participants who agreed to participate to the survey had first to read an information document online, and their consent was asked for. Their participation to the survey was equivalent to a consent.

Results

Survey results

They survey was completed online between June 15th and July 15th, 2022.

Amongst the 364 who completed the questionnaire, 353 had no missing value for our 4 main questions. Ten respondents had missing value for the variable "knowledge of interpreter procedure", but sensitivity analysis did not change the statistical conclusion significantly (results not shown). The 10 respondents were then kept because otherwise it would have affected samples of previous analyses (perception of quality, own solutions).

Description analysis

Amongst the 353 participants who had no missing data: 150 (42.5%) were paramedics, 124 (35.1%) were medical doctors, 41 (11.6%) were admin staff, 14 (4%) were psychologist and 14 (4%) social workers, the remaining ones occupying various positions, named 'others' (security, technical worker). Less than two-thirds (59.2%) were fluent in English beside French, while 25.8% spoke only French. As for comparison, hospital was staffed with 4409 persons in 2022, amongst whom 56% were health professionals (without distinction between MDs, psychologists and paramedics), 11% admin staff and 1% social workers.

The 5 most cited languages as generating communication difficulties were Tamil (cited by N=260 (73.6%)); Arabic (N=236 (66.8%)); Hindi (N=160 (45.3%)); Roma language (N=155 (43.9%)); Bengali (N=143 (40.5%)). If South Asian languages (Hindi, Tamil, Pashto, Urdu, and Bengali) were gathered, they constituted the most frequently cited group of language generating difficulties, before Sub Saharan African, Arabic, European and South East Asian languages.

The main practice cited by a professional facing a language barrier was "getting by" (65.7%), (e.g. using a third language (English), their hands, visuals...). The second most commonly cited practice was "to get support from an adult accompanying the patient" (57.5%). The "use of a professional interpreter" was only cited in third position (42,2%). About a third of the respondents cited "the use of an application software (apps)" (36.8%), and 32.6% of them cited "asking a colleague speaking the same language as the patient". Of note, the answer "asking accompanying child for translation" was not rare (13%). Proportions of responses about the main difficulties (multiple choice possible) encountered were as follow: care pathway orientation issue (55.8%), disorganization of planned care (48.1%), administrative and financial misunderstanding (43.9%), uncertainty over patient consent (29.2%), confidentiality breach (21.5%), unnecessary examinations or hospitalizations (12.7%), and diagnosis error (11.3%). The three main obstacles reported were: being unaware of the existence of the interpreter service / of how to access it (33.4%); a lack of time (28.9%); a fear of high cost for the hospital (28%). Eventually, the respondents rated their preferred solutions as follow: facilitating access to interpreter (81%); translating a selection of documents in the main foreign languages (80.1%); making apps and translating devices available (68.5%); hiring an interpreter locally (63.2%).

Bivariate analysis

Results for the 4 main questions are shown in the 4 tables below.

The percentage of perception of communicationissues was significantly higher for paramedics and social

Table 1 Frequency (%) of perception of communication issue due to Language barrier, by type of hospital professional (N = 35	i3)
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	MD	Administrative staff	Paramedics	Psychologists	Social workers
At least one a day	44 (34.6%)	14 (32.6%)	62 (40.0%)	5 (35.7%)	2 (14.3%)
Less than once a day but several times per week	49 (38.6%)	13 (30.2%)	42 (27.1%)	5 (35.7%)	6 (42.9%)
Less than once a week but more than once a month	30 (23.6%)	11 (25.6%)	33 (21.3%)	2 (14.3%)	2 (14.3%)
Less than once a month but more than once a year	4 (3.1%)	5 (11.6%)	17 (11.0%)	1 (7.1%)	4 (28.6%)
Never	0 (0.0%)	0 (0.0%)	1 (0.6%)	1 (7.1%)	0 (0.0%)
P-values	0.04*	0.19	0.03	0.15	0.01

*p value for grouped Fisher's exact analysis

Table 2Frequency (%) of perception of the negative impactof the Language barrier on quality of care, by type of hospitalprofessional

	MD	Ad- minis- trative staff	Paramedics	Psychologists	Social work- ers
High	89 (70.1%)	22 (51.2%)	101 (65.2%)	11 (78.6%)	8 (57.1%)
Sig- nifi- cant	29 (22.8%)	15 (34.9%)	48 (31.0%)	2 (14.3%)	4 (28.6%)
Weak	8 (6.3%)	6 (13.9%)	5 (3.2%)	0 (0.0%)	2 (14.3%)
No im- pact	1 (0.8%)	0 (0.0%)	1 (0.6%)	1 (7.1%)	0 (0.0%)
P-val- ues	0.05*	0.08	0.29	0.25	0.37

*p value for grouped Fisher's exact analysis

workers, compared to MD (Table 1). More paramedics perceived communications issues to occur on a daily basis compared to MD.

The perception of negative impact of the language barrier on the quality of care was significant for all categories of hospital professionals (Table 2). When adding the answers "very strong impact" and "strong impact", all professionals' categories outweighed 90%, even peaking at 96% for paramedics.

Compared to MD, paramedics, administrative staff and social workers were more frequently "getting by" when

communicating with LOF patients and making use of an accompanying adult more, while they used a professional interpreter less (Table 3). Administrative staff and paramedics used apps more frequently compared to MD.

MD were significantly more aware than administrative staff and paramedics regarding how to access to interpretation (Table 4).

Analysis of health interpretation services data over 2 years

Over 2021 and 2022, 7626 interpretation services were recorded (one third face to face and two thirds by phone). South Asian languages represented 48.4% of the records. The majority of use occurred between 9am and 6pm (91.5%) and during weekdays (97.7%). Three departments concentrated almost half of the use of the interpretation services (47.3%, infectious diseases, ambulatory care and pediatric unit). Among users, the most represented staff were MD (70.7%), psychologists (7.7%), followed by social workers (4.6%).

Discussion

Our cross-sectional survey revealed that in our university hospital, the staff was frequently facing communication issues, negatively influencing their perception of the quality of care. There were interprofessional inequalities in the knowledge of and in the access to interpreter services. Those having less access to interpreters, such as admin staff and paramedics, used apps and other technologies.

Table 3	Usual	practice with a	patient with l	ow French	proficiency,	, by type c	of hospital	professional
						' / /		

	MD	Administra- tive staff	Paramedics	Psychologists	Social workers
I tried to get understood by various means (gesture, third lan- guage– English, visuals)	67 (52.8%)	32 (74.4%)*	120 (77.4%)*	5 (35.7%)	12 (85.7%)*
l get support from an accompanying adult	94 (74.0%)	22 (51.2%)*	80 (51.6%)*	3 (21.4%)*	6 (42.9%)*
l get support from an accompanying child, if no adult	20 (15.7%)	5 (11.6%)	19 (12.3%)	0 (0.0%)	3 (21.4%)
I get support from a colleague who speaks the same language	35 (27.6%)	16 (37.2%)	60 (38.7%)	1 (7.1%)	6 (42.9%)
l use an app (Google, medipicto)	39 (30.7%)	21 (48.8%)*	67 (43.2%)*	1 (7.1%)	5 (35.7%)
l use a professional interpreter	72 (56.7%)	7 (16.3%)*	46 (29.67%)*	14 (100.0%)*	11 (78.6%)
l refuse to take the patient	3 (2.4%)	1 (2.3%)	1 (0.6%)	0 (0.0%)	1 (7.1%)

*p < 0,05 when comparing Medical Doctor's practices and other health professionals' practices

Table 4 Knowledge of interpretation service in own unit

	MD	Ad- minis- trative staff	Paramedics	Psychologists	Social work- ers
No	60 (47.2%)	32 (74.4%)	98 (63.2%)	2 (14.3%)	7 (50.0%)
Yes	64 (50.4%)	9 (20.9%)	52 (33.5%)	12 (85.7%)	7 (50.0%)
Miss- ing	3 (2.4%)	2 (4.6%)	5 (3.2%)	0 (0.0%)	0 (0.0%)
P-val-	< 0.01*	< 0.01	0.01	0.05	1.00

*p value for grouped Fisher's exact analysis

Degraded mode of communication, leading to a perception of decreased quality of care

Our survey pointed out the high level of awareness of the hospital staff about language issues as being a threat to quality of care. It also highlighted the difficult working conditions these staff face. The perception of threat to quality of care is subjective. However, this perception is concordant with an increasing body of literature pointing at, on one hand, at an increased quality of care when delivering a language concordant care, and on the other hand, a substandard care for patients non-fluent in the dominant language. A systematic review by Diamond et al. found that 76% of the 33 studies (94% originating from USA) reported at least one improved outcome (including quality of care), in case of language-concordant care [14]. A retrospective study conducted in 2019 in USA compared emergency department unplanned visits between low English proficiency patients and primary Englishspeaking patients. Unplanned visits rates were significantly higher amongst low English proficiency patients, shedding light on substandard quality of care delivered to this category of patients [15].

Relatively low use of professional interpreters, and inequitable access within hospital

Use of professional interpreter represented only the third most frequent practice, after "getting by" and "asking an accompanying adult", and is similar to the literature. In a national survey at primary health care level in Switzerland, physicians reported that "asking an accompanying adult" was the most frequent practice when communicating with LOF patients, and "getting by" was the second commonest practice [12]. In Australia, a mixed-methods study found that health professionals made frequent use of family members, while the use of professional interpreters was much less frequent [16].

The bivariate analysis by category of hospital professionals showed that MDs were largely dominant among interpreting service users, while nurses were almost absent. However, nurses are amongst the health professional category of those who spend the longest accumulated time with inpatients. Several hypotheses could be drawn upon. The institutional communication about interpreter service could have an unequal reach across all categories of health professionals in our hospital. The level of involvement of each head of department in explaining the usefulness of interpretation may be a significant pushing factor for MDs, but since heads of department are MDs, they may reach more their own colleagues. A structural and professional hierarchy might also persist, shaping the way MDs (and psychologists) make more use of the interpreter services, as compared to nurses, who are known to less exert their clinical leadership [17, 18]. Eventually, the organizational structure may not facilitate the use of interpreter services equally across staff categories, as suggested by Hsieh [19]. A systematic review on interventions aiming at improving the quality of care provided to refugees identified that MDs were the main recipients of skills development, including training for online digital tools, compared to the rest of the team [20], raising a similar question of equity between hospital staff. In our study, the use of interpreters during nights and weekends was also extremely low. Staff on night and weekend shifts have a different organization as their day counterparts and this might partly explain the differences reported.

The rising tide of apps and artificial intelligence-based technologies

Those who have less access to and use less professional interpreters stated to make more use of apps and machine translation in our survey. Digital technologies are globally on the rise, given the expanded access to digital devices by individuals. While the exponential growth of these devices and technologies is an opportunity for improving communication in healthcare settings, the human interpreter should be kept in mind as the gold standard. Hence, caution should be exerted to use only validated tools, given the risk of medical errors. In 2018, a systematic review pointed at the lack of precision of all the machine translating tools that were assessed [21]. More recently, a number of studies started to assess alternate digital tools relevance and effectiveness in enhancing communication with LOF patients [22-24], and some small evidence which may validate their use in clearly defined specific settings / situations started to get published [25]. In addition to technical concerns, artificial intelligence- based technologies raise important and multiple ethical concerns. Main concerns are a lack of patient informed consent on the use of their data and a risk of breach of confidentiality leading to potential threating consequences for patients [26]. A lack of accountability and transparency about the way data are processed were also reported [27]. Language learning process may also

lead to bias which must be constantly monitored [28]. As technologies' development pace became exponential, there is an urgent need to regulate their use in clinical settings.

Concerns about the cost and time of interpretation service

Surprisingly, the argument of high cost constituting a barrier to professional interpreter was frequent in our sample, as if they feared of an excessive expenditure for their hospital.

Our survey results were presented during a dedicated meeting in September 2022, to hospital decision makers. A dilemma was visible between increasing the cost for the hospital of providing a larger access to interpreters, versus the cost of the quality of care, and frustration of the hospital professionals. The current model of health care financing in France, based on fee-for-services, does not leave space for covering translation costs. A transformation of the health system financing, taking more in consideration the rights to communication for patients [29], and the improvement of patient-provider communication, as well as hospital staff and providers satisfaction into financial benefit could constitute the first step. In the USA, using the 1964 rights act, cases of complaints when no translation was available started to appear, and proposals were made to compensate translation cost [30]. In 2019, the General Inspector of Social Affairs released a report on cost-effective ways to scale-up the use of professional interpreter in French health care system [31], albeit the current French political climate does not favor such positive change.

The argument of the lack of time, also reported by our participants, is similar to findings of other surveys on barriers to use interpreters [9, 19, 32]. A high turnover/volume of patients and the high pressure on celerity might exert an organizational constraint to the use of interpreter service, such as in the emergency department [15].

However, it should also be noted that behind arguments of lack of time and/or cost, other reasons may be hidden, such as a resistance to true health democracy [33], or implicit bias leading to discrimination [34].

Limitations of our study

Our study has some limitations. First, the sample of respondents is biased, as the survey was released on a voluntary basis. Only those who felt concerned by the topic of communication with LOF patients responded, as proven by the over-representation of health professionals and social workers in our sample, compared to hospital staffing data. Secondly, the rating of the frequency of communication practices is a rough self-assessment by the respondent, and might over or underestimate the true frequency. However, the triangulation with interpretation services data allowed to assess at least the concordance with answers to the questionnaire, with regards to languages used, and categories of hospital staff using the services. Also, the survey goal was not tailored to provide a precise description but only trends, and this goal was fulfilled.

Thirdly, we did not conduct systematic data collection of patients' perceptions, due to lack of time and resources to conduct interviews. However, all participants to the WG had personal experience, of patients reporting them despair, anger or shame and of not being able to communicate efficiently. Albeit at the core of the communication, patient's perception and experiences of communication barriers are less described in the literature, similarly to our study. The reason behind it might be the difficulty to perform studies with LOF populations (permissions, language barrier again). Some of the few published studies reported, in pediatric and maternity settings, mothers' fear, frustration and perception of stigma in their "battle of managing language barriers in health care" [35, 36].

Conclusion

This paper, by looking at one university hospital staff perception and practices of communication with LOF patients, points at the complex interactions between healthcare financial and institutional constraints, global migration and digital technologies development patterns- including their ethical concerns -, legal requirements in patients' rights, and persistent interprofessional inequalities. Health organizations need therefore to transform into health literate organizations [37], while respecting ethical framework, and in-service trainings, besides being interprofessional, now need to address cultural safety [38]. Further steps for research include patients' perceptions, which constitute the missing link for now, an assessment of their legal literacy [39], as well as institutional and/or individual implicit bias and resistance to health democracy leading to low use of interpreters. Meanwhile, French public health institutions face now tremendous budget-cuts, including for translation costs. It is therefore urgent to reassert that addressing language proficiency and health literacy in a holistic way is essential to achieve health equity.

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Supplementary Information

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Supplementary Material 1

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Author contributions

JC wrote the main manuscript text. All authors except for SJ conceptualized the study and analyzed the preliminary data. SJ did the descriptive and bivariate analysis and draw all the tables; All authors reviewed the final version of the manuscript.

Data availability

Data will be provided as supplementary information files.

Declarations

Competing interests

The authors declare no competing interests.

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