

# Examining Teach-back Strategies in Healthcare Interpreting through Case Study Research

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#### Abstract

Clinicians engage in interactions with migrant patients that often experience low health literacy levels and linguistic barriers. Institutions are tasked to provide adequate interpreting services and ensure effective communication strategies. Among these, the teach-back (TB) method allows clinicians to check the patient's level of understanding by asking them to repeat what they have understood after health information is delivered. Despite its relevance in mono-/bilingual consultations, studies on TB when an interpreter is present are scarce. Drawing on case-study research and conversational analysis, this paper examines a dataset of interpreted-mediated interactions involving TB and occurring in a Spanish hospital. We aim to I) isolate instances of TB, II) detect scenarios where TB is used, III) develop an exploratory and descriptive analysis of two illustrative cases, and IV) provide suggestions for interpreter-clinician collaborative usage of TB in migrant healthcare provision.

#### Key words

Healthcare interpreting, Teach-back, Health literacy, Cross-cultural communication, Case-study, Conversational analysis, Interprofessional collaboration

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#### Introduction

Communication in medical settings is complex. Throughout their education, providers are taught to use jargon to describe body structures and processes, disorders, and treatments, which may hinder patients' understanding and even

jeopardise effective, safe, patient-centred care (Kimbrough, 2007; Pitt and Hendrickson, 2020). In this context, plain language communication has gained increasing support, as healthcare providers are responsible for educating patients and conveying their goals and outcomes in an understandable and meaningful way (Mendoza, 2018). The teach-back (TB) method is one of the strategies available to medical staff to achieve this goal. It helps to assess the patients' knowledge after health education is provided, by requesting them to state in their own words what they have heard and understood, thus giving providers an check comprehension, and clarify concepts opportunity to misunderstandings (Mahramus et al., 2014; Slater et al., 2017). This is relevant for migrant healthcare delivery, as it is riddled with language and cultural differences and conditioned by the effect of cultural shaping of symptoms, diagnosis, and illness management (Rousseau and Frounfelker, 2018). In this sense, TB has proved to be particularly useful in populations with low levels of health literacy, including immigrants, ethnic minorities, and people who did not speak the local language during early childhood (Caplin and Saunders, 2015; Tamura-Lis, 2013).

Among available facilitators of communication in language-discordant medical consultations (visual cues, hand-made writings, body language, web-based translation applications, dictionaries, flow charts, ad hoc interpreting, etc.), relying on professional interpreters has been described as the most effective strategy, since they are key actors to improve health and patient safety (Kletečka-Pulker et al., 2021). Although the usage of TB with migrant patients and/or refugees has been documented in the literature (e.g., Juckett, 2013; Patel et al., 2021; van der Giessen et al., 2021; Morony et al., 2017), the data are sparse on its efficacy when interpreters are involved (see Brega et al., 2015; Drebold, 2020; Riggs et al., 2021 for some exceptions). Drawing on case-study research (Yin, 2009), this paper resorts to conversation analysis (Pomerantz and Fehr, 2011) to examine a selection of interpreter-mediated interactions in which TB is present and which occurred in a hospital in Madrid, Spain. This general aim is divided into four specific objectives: I. isolating instances of TB in a dataset of languagediscordant, interpreter-mediated medical interactions, II. proposing a taxonomy of scenarios where TB is used, III. developing an exploratory and descriptive analysis of two illustrative cases, and IV. providing suggestions for interpreterclinician collaborative usage of TB in migrant healthcare provision.

Delivery of care for migrants: balancing different languages, cultures, and health literacy levels

Migrant patients are vulnerable in ways local patients are not. They may experience poor health status and face linguistic, bureaucratic, social, and cultural barriers when accessing primary and specialised care, especially upon arrival. To illustrate, migrants often face violence before, during and after their migratory journeys, putting them at a higher risk of experiencing mental health issues (Carruth et al., 2021; MHealth4All, 2022). They must live and function in a foreign community where a different language is spoken, and it has been demonstrated that low levels of language proficiency affect health outcomes and even use of services (Njoki-Yli Panula and Racasag-Niemi, 2020). Additionally, migrant patients follow unfamiliar (administrative) procedures to navigate the host system for referrals, follow-up visits or medication. This is further exacerbated for patients with irregular status and/or constraints, such as housing, education, income, or employment situation. Another thing to consider is that migrant patients potentially have their own set of health beliefs, including relying on traditional healing specialists, as opposed to biomedical practitioners, and varying interpretations of symptoms, treatments, or attitudes to self-care (Juckett, 2013; Patel et al., 2021). These elements translate into dissimilar levels of health literacy, which is reportedly lower in migrants (Wernly et al., 2020; Njoki-Yli Panula and Racasag-Niemi, 2020; Zdanuczyk, 2022).

Health literacy is defined as the patient's ability to obtain, understand, and use the information required to make wise health choices (Kimbrough, 2007). This includes, but is not limited to, understanding health promotion materials, patient information leaflets, informed consents, and instructions given by clinicians. Language and access to education play an important part in health literacy, but also the idiosyncratic cultures and beliefs surrounding health, as these aspects affect how (often) migrant patients utilise care and preventive services, interact with providers, perceive medical needs, understand oral or printed instructions, and adhere to medical recommendations (Kalmanek, 2020; Paasche-Orlow and Wolf, 2007). Consequently, optimal health literacy involves adequate health promotion and disease prevention, whereas patients with poor health literacy fail to understand and interpret medical information (linguistically or culturally) and may experience shame and discomfort asking for additional information (Zdanuczyk, 2022) or even avoid appointments due to fear or stigma associated

with poor comprehension levels (Drebold, 2020). Insufficient health literacy is thus associated with health disparities, poor outcomes and increased health system utilization and expenditure (Hersh et al., 2015; Wu et al., 2013; Lynch and Franklin, 2019). Lastly, health literacy also affects how migrant patients navigate the heath institutions (Zdanuczyk, 2022), as bureaucratic procedures may vary from one country to another.

It should be noted that health literacy is not merely a patient-related phenomenon and more recent definitions expand the emphasis on the individual to include the role of institutions. In this sense, the Healthy People 2030 Framework distinguished between personal and organizational health literacy, the latter being understood as "the degree to which organizations equitably enable individuals to find, understand, and use information and services to inform health-related decisions and actions for themselves and others" (ODPH, 2022, para. 3). This means that responsibility for health literacy includes professionals and organizations offering health services and information (ibid.), which calls for health-based institutions to communicate relevant information clearly and sensibly, beyond one's proficiency in the host country language (Zdanuczyk, 2022). Since literacy assessment plays a major role in the success of patient-clinician communication (Kimbrough, 2007) and migrant patients usually do not share the provider's language, the teach-back method (TB) and the provision of healthcare interpreting services and intercultural mediation are useful strategies to facilitate delivery of care in multilingual, multicultural appointments. Both concepts will be addressed in the next sections as part of our theoretical framework.

# Introducing the teach-back method: usage and advantages

TB is a health-literacy-informed strategy by which patients describe in their own words the information presented and, when comprehension is not demonstrated, it allows clinicians to reteach or modify teaching (Yen and Leasure, 2019; Vianin, 2021). This can be done in one visit or across several ones (Mendoza, 2018). From a linguistic viewpoint, TB utterances can be considered illocutionary and perlocutionary speech acts as defined by Austin (1962), since they entail uttering sentences in a given context (medical) for a particular purpose (assessing the patient's understanding) and seeking a certain response from the addresses (convincing or persuading patients to do or realise something concerning their health status). Underlying is the fact that professional

interpreters must be capable of understanding the speaker's wilfulness beyond the linguistic level, so they can create a communicate response in listeners similar to the one which would occur if sharing the same language (Pöchhacker, 2004).

According to the Agency for Healthcare Research and Quality (AHRQ, 2020), TB should be utilized in high-risk clinical situations (i.e., scenarios requiring immediate attention to avoid adverse events among patients), including discharge, medicine reconciliation, informed consent, and Emergency Department or surgical care. In such contexts, patients must be able to explain in their own words: 1. the diagnosis and health problem for which they require(d) assistance, 2. the nature of the necessary service, treatment, or procedure, and 3. worsening symptoms and how to act (Tamura-Lis, 2013).

When using the teach-back method in patient education, it is important for clinicians to emphasise that their goal is to check their own ability to explain health information, rather than testing the patient's knowledge (Mahramus et al., 2014; AHRQ, 2020). To do so, providers must create a shame-free environment in which plain language and encouraging requests facilitate understanding and promote questions (Yen and Leasure, 2019; Slater et al., 2017; Mendoza, 2018). Thus, asking "do you understand?" or "do you have any doubts?" is not advisable, as patients will answer "no" due to fear, lack of literacy or intimidation (Weiss, 2007). Instead, it is preferrable to resort to more open statements that give patients an opportunity to interact actively, such as "We covered a lot today and I want to make sure that I explained things clearly. So let's review what we discussed. Can you please describe the 3 things you agreed to do to help you control your diabetes?" (AHRQ, 2020). Additionally, information overload must be avoided by using "chunk and check", which consists in delivering small blocks of information followed by TB before proceeding to the next topic (Brega et al., 2015).

Previous research supports using TB to reduce hospital readmission rates and improve patients' satisfaction, immediate and short-term knowledge retention, adherence to treatment, and self-management of the disease, including supervising and recognising symptoms, scheduling follow-up appointments, using medical devices, and following dietary or medication instructions (Ha Dinh et al., 2016; Mahajan et al., 2020; Mahramus et al., 2014; Mendoza, 2018; Oh et al., 2021; Slater et al., 2017; Tamura-Lis, 2013). The advantages offered by

TB relate to research suggesting that patients tend to forget information or memorise it incorrectly, thus being unaware of their lack of understanding and giving providers a false sense of the latter, which is more noticeable for patients with low literacy or from cultures within which is unthinkable to interrupt or question people in positions of authority or knowledge (Morony et al., 2017; Ha Dinh et al., 2016; Pietrzykowski and Smilowska, 2021; van der Giessen et al., 2021). For this reason, it becomes imperative that providers initiate the conversation and ask open-ended questions, as patients may be reluctant to do so (Slater et al., 2017). In language-discordant consultations, this will be ideally performed through or together with an interpreter.

# Introducing healthcare interpreting

Healthcare interpreting is an umbrella term covering activities to support bilingual health communication between patients, doctors and other health practitioners or administrative staff (Davitti, 2019). Despite its widespread usage and increasing demand, healthcare interpreting has not acquired professional status to date, and the professional duties and boundaries of healthcare interpreters, which sometimes merge with those of intercultural mediators, are yet to be defined (Álvaro Aranda and Lázaro Gutiérrez, 2022). It is so much so that some authors suggest merging both profiles into a single profession encompassing both interpretation and mediation tasks (Grupo CRIT, 2014).

Similarly, over the years research has demonstrated that the role of interpreters is not limited to strictly interpreting word for word, as they play a critical role given their unique position in the encounter, and thus should be welcomed and empowered as members of the care team that fully participate in interactions to ensure patient safety (AHRQ, 2020). This resonates with the Theory of Sense defended by Seleskovitch (1977), which stipulates that the speakers' intended meaning (or sense) must be preserved beyond the linguistic level, and this gives interpreters a great deal of latitude to convey meanings, rather than words. It also paves the way for interprofessional collaboration. For example, as part of the assistance team, healthcare interpreters in Spain follow the principles of beneficence and non-maleficence and are encouraged to contribute to attain health outcomes, which may include lowering the linguistic register, engaging in small talk, or explaining cultural aspects (Álvaro Aranda, 2020; Álvaro Aranda and Lázaro Gutiérrez, 2022). In a similar vein, Álvaro Aranda et al. (2021) state:

Healthcare interpreters must be considered as co-healthcare professionals and allies valuable to the healthcare team. It must be understood that healthcare interpreters are performing roles and functions in the consultation that doctors do not need to overlap, but rather benefit from to provide high quality care to patients. Doctors and patients need to learn to work together, sharing power and responsibilities, as they both strive to ensure the patients' well-being from different, yet complementary, points of view (no page).

Considering the above, Schreiber et al. (2019) pinpoint the need for clinicians to engage interpreters in interactions to ensure allophone patients have understood complex instructions and are competent to make health decisions. One way doctors can achieve this is using TB through an interpreter, which is the main focus of this study (Brega et al., 2015; Sappleton et al., 2022). However, and as mentioned in the introduction, few studies explore TB in interpreter-mediated medical interactions. Among this limited body of research, Drebold (2020) focused on group orientation workshops for refugees including social and healthcare settings in which TB was used to test information recall. When interpreters participated, session moderators did not find TB optimal, since discussions took too long, and attention shifted from the patients' understanding to the interpreters' (ibid.). Related to this, Matsumoto (2017) suggested that migrant patients may feel confused when clinicians use TB, as they could feel they are asked to repeat the information to the interpreter, not back to the provider. In Matsumoto's opinion, this could be avoided if the interpreter explains purpose and context: "The doctor is now asking you to describe how you would take the medications to make sure he/she has explained it properly to you" (ibid., p. 205).

For their part, Hommes et al. (2018) suggested that providers usually overlooked using TB with deaf and hard of hearing patients to ensure understanding when interpreters were involved. Similarly, but in an antenatal setting, Riggs et al. (2021) found that midwifery staff rarely used TB with patients, mostly because there was no additional time allocated for interpreter-mediated encounters. Another thing to highlight is that participants in Riggs et al. (2021) reported differing opinions. Whilst the midwife believed that information was understood by patients using TB, the interpreter indicated that patients just repeated back

what they heard without comprehending medical terms (e.g., colostrum). More importantly, the provider misinterpreted the patients' laugh as a sign of amusement, but the interpreter explained that smiling and laughter are culture-bound elements involving nervousness and embarrassment. This implies that TB can lead to misunderstandings in cross-cultural settings and the interpreter's presence is, thus, essential.

#### Methodological approach

The aim of this exploratory and descriptive study is to gain an understanding of TB usage in language-discordant, interpreter-mediated healthcare interactions. To do so, we isolated examples of TB in a multilingual dataset of interactions involving a healthcare interpreter, which were registered in 2017 in a Madrilenian (Spain) public hospital that accommodates an onsite team of healthcare interpreters (Álvaro Aranda, 2020). Drawing on the literature review, selection of TB usage was based on detecting prompts aiming to evaluate the patients' knowledge after providing (health) education, by asking them to explain in their own words what they had understood (Mahramus et al., 2014; Slater et al., 2017).

# Method of analysis

As explained earlier, communicative events including TB were selected as single units of analysis (or cases). Following Lázaro Gutiérrez's (2018) analysis of medical consultations involving foreign victims of gender-based violence, we combined the principles of case study research and conversation analysis to construct our methodological framework. On the one hand, case study research allows exploring, explaining, and describing specific issues or phenomena within their real-life environment and with their contexts (Stake, 1995; Yin, 2009). This research strategy places emphasis on the understanding of a social event, rather than on theory testing or controlling variables (Meyer, 2016). On the other hand, conversation analysis involves "examination of language in interaction (...) and how social action is brought about through the close organisation of talk" (Antaki, 2011: p. 1-2). It studies both informal and formal interactions and examines the configuration of conduct across settings of understanding and production (Pomerantz and Fehr, 2011).

### Data collection and ethical considerations

The study was carried out with an authorisation of the University of Alcalá (Madrid, Spain) and the board of the participating team of interpreters. Data were drawn from direct observation through a structured protocol sheet and fieldnotes (Flick, 2009). This allowed us to manually write down pertinent excerpts, which provided the basis for data analysis, as interactions could not be recorded due to privacy issues and institutional constraints. In addition, the researcher obtained oral informed consent from all participants (i.e., patients, interpreters, hospital staff) before joining the interactions, which was conveniently registered. More precisely, participants received background information about the study and were informed about guaranteed confidentiality and their right to withdraw without providing any reason at any time. When faced with communication barriers, we made use of interpreters to obtain consent from allophone patients.

#### **Participants**

Five healthcare interpreters consented to participate in the study. They were assigned a unique identification code to guarantee anonymity (e.g., Interpreter 1) and completed a registration form, which included education, years of professional experience and demographic information (see Table 1). Four participants had no work experience. They were still completing their internships as part of the curriculum of the MA in Intercultural Communication, Public Service Interpreting and Translation at the University of Alcalá, Spain. This programme contains a module focusing on healthcare interpreting and translation, which combines theoretical lectures and practical exercises to examine intercultural mediation, interpreting strategies, ethical dilemmas, codes of ethics and terminology, amongst other aspects (Álvaro Aranda et al., 2021). Interpreter 1, however, had four years of working experience in the field and had received on-the-job training in healthcare interpreting and intercultural mediation, Spanish administrative procedures in national and local healthcare institutions, ethical principles, specialised terminology, and diseases regularly treated at the hospital where the study was conducted.

	Gend er	Age	National ity	Employ ment status	Working language	Training in healthcare interpreting	Professional experience in healthcare interpreting
Inter prete r 1	Fema le	28	Spanish	Staff interpret er	Spanish <>Fren ch/Engli sh/Arab ic	On-the-job training (1 month)	4 years
Inter prete r 2	Fema le	23	Spanish	Intern	Spanish <>Fren ch	MA (2 months)	-
Inter prete r 3	Fema le	22	Spanish	Intern	Spanish <>Fren ch	MA (2 months)	-
Inter prete r 4	Fema le	23	Spanish	Intern	Spanish <>Fren ch	MA (2 months)	-
Inter prete r 5	Male	22	Spanish	Intern	Spanish <>Fren ch	MA (2 months)	-

Table 1. Profile of healthcare interpreters (n=5)

As detailed elsewhere (Álvaro Aranda, 2021), interpreters of the sample interacted with different hospital staff (including doctors, nurses, administrative personnel, ward clerks, janitors, x-ray, and ultrasound technicians) and allophone patients facing communication needs. Patients were usually male, Sub-Saharan economic migrants (92.65 %) aged between 15-30 years (58.82 %) who targeted Spain either as their first stop or as their destination in Europe. Most patients were mother tongue speakers of African languages, but French served as a lingua franca in most events, as this language enjoys official status in the patients' countries of origin due to past colonization.

# Analysis

Following the selection criteria earlier described, we identified a total of 12 interactions in which TB is present. A preliminary observation that can be drawn from our dataset is that communicative events are classified into two groups: a first group of interactions involving patient, interpreter, and healthcare providers (e.g., medical consultation) and a second group involving just patient and interpreter (e.g., walking patients to the exit). Figure 1 shows specific information. In any case, it is essential to highlight that TB is always initiated by interpreters (12 events, 100%).

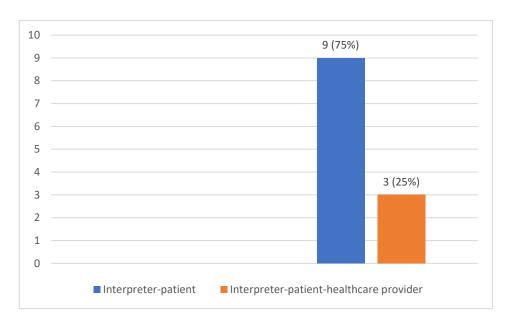


Figure 1. TB usage per type of participants

In our dataset, we can observe two different scenarios in which TB is used: mid-consultation (5 events, 41.7%) and post-consultation (7 events, 58.3%). TB is always employed as a communication tool (3 events, 100%) whilst the medical consultation is taking place in interpreter-patient-healthcare provider

interactions. Contrarily, encounters involving just patient and interpreter occur both mid- (2 events, 22.2%) and post-consultation (7 events, 77.8%). Dyadic encounters between patient and interpreter are observed when the doctor leaves the consultation room momentarily before the session comes to an end (i.e., mid-consultation) or, alternatively, when interpreters accompany patients to schedule follow-up appointments, walk them to the exit, or answer their questions, despite the medical consultation being finished and the healthcare provider not being present anymore (i.e., post-consultation).

Furthermore, topics evaluated by TB include general descriptions and/or worsening symptoms of the patient's condition (6 cases, 50%), instructions to perform additional testing, such as stool collection (3 cases, 25%), and, finally, revising patient's schedules to ensure they know the dates and locations of their future medical appointments (3 cases, 25%).

# Presentation of cases

This section examines two illustrative cases from our dataset: I. an Urology consultation and II. a Tropical Medicine Consultation. They were selected because they are thought to represent a wider number of cases that can be extrapolated, replicated, and validated in other settings and organizational contexts (Seawright and Gerring, 2008). Following the principles of case-study research, we proceed to describe each case in-depth and interpret the observed interactions, without attempting to generalise our insights. Thus, we do not intend to produce scientific generalisations, but we aim for naturalistic generalisation and transferability, that is, to offer findings that can be applied to other cases (Gomm et al., 2000).

Concerning data presentation, patients communicate in French, healthcare providers are native speakers of Spanish, and healthcare interpreters switch between both languages as interactions unfold. To facilitate understanding and research dissemination, excerpts are translated into English by the author, who holds a PhD in Modern Languages and Translation. Body language and actions appear in italics between brackets and (Interpretation to "language") refers to close renditions (Wadensjö, 1998).

#### Case 1: Tropical Medicine consultation

Case 1 is a Tropical Medicine consultation involving patient, doctor, and interpreter. Although more interpreters are present as spectators, we will focus solely on Interpreter 1, as she is the only one that resorts to TB. The doctor is an Argentinian woman specialised in Tropical Medicine, whilst the patient is a Guinean male infected with Hepatitis B and tuberculosis who attends a follow-up visit to evaluate his adherence to tuberculosis treatment and, subsequently, prescribe a new one.

The patient is concerned about the possibility of transmitting Hepatitis B to his children and asks the doctor several times for a cure. The doctor, however, repeats that there is no cure available, since providers rely on vaccinations during childhood for prevention, but reinforces that his partner can get vaccinated before having unprotected sexual intercourse. When the patient nods, the doctor proceeds to prescribe the new treatment and informs him that they need to monitor his liver function routinely to ensure it does not deteriorate. Since the patient does not seem satisfied with the doctor's previous explanations and continues repeating the same questions, the provider leaves the consultation room momentarily in search of a more experienced colleague that can assist her. The following interaction occurs:

#### Excerpt 1

(...)

Interpreter 1: Écoute, il y a deux types de personnes : celles qui surmontent la maladie et celles qui ne le font pas. Mais dans les deux cas, la maladie est là. Dans ton cas, ton corps contrôle la maladie et tu n'as pas besoin des médicaments, mais elle est là et c'est pour ça que tu peux la transmettre. Quand tu veux avoir des enfants, tu fais venir ta femme ici pour la vacciner pour que la maladie ne soit pas transmise à tes enfants. Si nous sommes vaccinés, nous sommes protégés. Si nous ne sommes pas vaccinés, nous ne sommes pas protégés, et nous pouvons transmettre la maladie. Alors... tu es malade? (Look, there are two types of people: those who overcome the disease and those who do not. But in both cases, the disease is there. In your case, your body controls the disease and you don't need to take medicine, but it's there and that's why you can transmit it. When you want to have children, you bring your wife here to vaccinate her so that the disease is not transmitted to your children. If we are vaccinated, we are protected.

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If we are not vaccinated, we are not protected, and we can transmit the disease. So... are you sick?)
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Patient: Oui (Yes)

Interpreter 1: Non, si tu étais malade, tu aurais ces symptômes : fièvre, fatigue, nausées... Donc, es-tu malade ? (No, if you were ill, you would have these symptoms: fever, fatigue, nausea... So, are you sick?)

Patient: Non (No).

Interpreter 1: Bien sûr. Es-tu malade ? (Of course. Are you ill?)

Patient: Non (No)

Interpreter 1: As-tu un virus transmissible? (Do you have a transmissible virus?)

Patient: Oui (Yes)

[The doctor returns with a colleague]

*(…)* 

As we can see in Excerpt 1, TB occurs mid-consultation whilst the provider is not present. More precisely, the interpreter seizes the opportunity to provide health information to the migrant patient in a more understandable manner. In so doing, she summarises the points covered by the doctor during the consultation and presents them in a way accessible to the patient, thus transmitting sense instead of an exact word-for-word rendering (Seleskovitch, 1977). Whilst the doctor is absent, Interpreter 1 checks the patient's level of understanding through TB before the clinician arrives accompanied by a senior doctor. In this case, TB aims to help the patient comprehend his health problem and how to act accordingly (Tamura-Lis, 2013).

However, the interpreter fails to create a distended environment, as she asks closed yes/no questions, instead of giving the patient the chance to demonstrate his knowledge and explain in his own words what he has understood (Mahramus et al., 2014). It could be argued that this is a more straightforward, save-timing strategy to assess the patient's understanding, but it should not be overlooked that he may feel intimidated or judged (Weiss, 2007), which could give the interpreter the false impression that he has indeed understood and internalised health information (Morony et al., 2017; Ha Dinh et al., 2016; Pietrzykowski and Smilowska, 2021; van der Giessen et al., 2021). Although Interpreter 1 informs the providers of the conversation that has occurred in their absence when they return, TB only works to a certain extent in Excerpt 1, since at this point there

is no certainty that the patient has no additional doubts about his condition and treatment.

The medical consultation continues, and the senior doctor provides health information to the patient, trying to clarify his doubts about his diagnosis and treatment whilst the other clinician observes. Notwithstanding this, the patient is still confused, and Interpreter 1 raises her hand to halt the conversation and intervene:

#### Excerpt 2

Interpreter 1: Él está entendiendo lo contrario. Cree que el tratamiento es para proteger su hígado de la hepatitis B (He is understanding the opposite. He believes that the treatment is to protect his liver from hepatitis B)

Senior doctor: No, la pastilla es para controlar la tuberculosis, que puede afectar al hígado, por eso le haremos análisis. La hepatitis B es otra cosa (No, the pill is to control tuberculosis, which can affect the liver, that's why we'll run some tests. Hepatitis B is something else)

(Interpretation to French)

Interpreter 1: Tu as deux choses : l'hépatite et la tuberculose. Le traitement que tu prends est pour la tuberculose, qui n'a rien à voir avec l'hépatite. Alors, (name of patient), à quoi sert les médicaments ? (You have two things: hepatitis and tuberculosis. The treatment you are taking is for tuberculosis, which has nothing to do with hepatitis. So, (name of patient), what is the medicine for?)

Patient: Pour la tuberculose (For tuberculosis)

Interpreter 1: Pour quoi tu vendra ici ? Pour voir quoi ? (What are you coming here for? To see what?)

Patient: Le foi (The liver)

[The interpreter nods and looks at the doctors]

Interpreter 1: Creo que ya está (OK, I think that's it).

Senior doctor: Vale, pues vamos fuera y le damos los volantes de las citas y demás (OK, so let's go outside so we can give him his referral notes and stuff)

(...)

As shown in Excerpt 2, the doctor's informative and prescriptive intentionality is not reaching the patient, which implies that the desired response is failing to be transmitted. Thus, Interpreter 1 announces that the patient does not understand his disease conditions and plan of care. This leads the senior doctor to provide an additional explanation, which the interpreter appropriately renders into French. However, she decides to assume a much more central role and poses several questions to evaluate the patient's comprehension. Once she is satisfied with the answers, she turns to the doctors and indicates that he has allegedly interiorised the health education and instructions provided. Instead of double-checking this herself, the senior doctor trusts the interpreter's criteria and moves on to subsequent stages of the consultation. In line with AHRQ's guidelines (2020) and authors such as Álvaro Aranda et. al. (2021), Interpreter 1 is welcomed as a member of the care team that contributes to attain health safety and outcomes by means of TB.

# Case 2: Urology consultation

Case 2 includes TB usage in a Urology consultation involving patient, provider, and Interpreter 1. Interpreter 4, who shadows her more experienced colleague, is also present, but she remains silent throughout the interaction. Concerning the remaining participants, the patient is a nineteen-year-old Guinean male patient with a varicocele that attends a follow-up medical visit to get the results of an ultrasound scan and a spermiogram, whilst the urologist is male native speaker of Spanish with an acceptable command of French. Nevertheless, the interpreter facilitates communication to ensure there are no misunderstandings or cultural nuances that may hinder the session.

Before communicating the results, the clinician elicits the patient's pain history and inquiries about any differences in the size of his varicocele. Throughout the consultation, the clinician uses technical language (e.g., infertility, sperm). The interpreter, who has worked with the patient before and is aware of his low level of health literacy, frequently asks the patient if he understands the medical terms employed by the clinician. When he admits he does not, the interpreter informs the doctor so he can lower the register. Excerpt 3 takes place in this context:

Excerpt 3

 $(\ldots)$ 

Doctor: Vale, dile que el seminograma está bien (OK, tell him that the seminogram is normal).

Interpreter 1: Le médecin dit: "Dis-lui que le spermogramme est bon". (The doctor says: OK, tell him that the seminogram is normal)

[The patient nods]

Doctor: Bueno, como parece que el seminograma está bien de momento no va a hacer falta operar el seminograma. (Well, as it seems that the seminogram is normal there's no need to operate the seminogram for now)

Interpreter 1: Perdona, ¿has dicho operar el seminograma? (Excuse me, did you say operate the seminogram?)

Doctor: El varicocele (The varicocele).

(Interpretation to French)

Interpreter 1: (Name of patient), avez-vous compris ? Répétez-le, répétez ce que vous avez compris (Name of patient, do you understand? Repeat it, repeat what you have understood)

Patient: Oui, comme la douleur n'est pas grave, je ne me fais pas opérer (Yes, as the pain is not serious, I don't need to have surgery)

Interpreter 1: Le he preguntado si lo ha entendido y dice que como el dolor no es grave no hace falta que se opere (I asked him if he has understood and he says that he doesn't need to have surgery because the pain is not serious)

Doctor: No, no, ese no es el criterio. Quiero decir que como los resultados del análisis están bien no hace falta que se opere (No, no, that's not the criteria. What I want to say is that there's no need for him to have surgery because the results of the analysis are normal)

*(…)* 

Excerpt 3 is a perfect example of doctor-interpreter interprofessional collaboration to accommodate the patient's communicative needs and health literacy level. Contrary to Excerpt 1, in which the interpreter poses yes/no questions, TB is delivered by means of a more open statement: "Repeat it, repeat what you have understood." In line with the AHRQ's high-risk scenarios (2020), Interpreter 1 gives the patient a chance to demonstrate his understanding when surgical care is discussed. This is done before proceeding to the next topic of the consultation, thus using "chunk and check" (Brega et al., 2015). Since the patient's answer reveals a lack of understanding, the doctor clarifies the surgery

eligibility criteria, thus modifying previous teaching (Yen and Leasure, 2019; Vianin, 2021). In this case, TB serves as an effective strategy successfully implemented to gauge the patient's understanding and act accordingly.

Subsequent phases of the consultation include a description of worsening symptoms, pain management medication and future follow-up visits. Once the session is terminated, Interpreter 1 accompanies the patient to schedule his next appointment. Excerpt 4 is extracted from this stage:

Excerpt 4

Interpreter 1: Tu as tout compris, (name of patient), tu as des questions? (Did you understand everything (name of patient), do you have any questions?)

Patient: No, no (Non, non)

Interpreter 1: Vale (OK) (To the doctor) Muchas gracias, hasta luego (Thank you very much, see you)

Doctor: Hasta luego (See you)

[The interpreter and the patient walk to the administration desk]

Interpreter 1: Le prochain rendez-vous sera ici dans deux ans. Qu'est-ce que le médecin t'a dit que tu dois utiliser quand ça fait mal ? (The next appointment will be here in two years. What did he doctor tell you that you must use when it hurts?)

Patient: Des slips (Briefs)

Interpreter 1: Oui (Yes)

Patient: Mais... Qu'est ce qui se passe? Je ne peux pas prendre des médicaments ? (But... What happens? I can't take any medication?)

Interpreter 1: Si, tu peux (Yes, you can)

Patient: Lequel? (Which one?)

Interpreter 1: Je t'ai demandé si tu avais des questions et tu as dit non. Tu ne peux pas quitter la salle de consultation avec des questions, tout doit toujours être clair. On va y retourner (I asked you if you had questions and you said no. You can't leave the consultation room with questions, everything must always be clear. We're going back)

Excerpt 4 readily illustrates culturally-based health attitudes preventing patients to interrupt the doctor or admit they lack understanding (Morony et al., 2017; Ha Dinh et al., 2016; Pietrzykowski and Smilowska, 2021; van der Giessen et al., 2021). Interestingly, Interpreter 1 gives the patient the chance to ask questions

but, following Weiss (2007) and Zdanuczyk (2022), he refuses to do so because he either feels fear, embarrassment, or intimidation in the presence of the doctor. Both urologist and interpreter thus fail to create a shame-free environment within which the patient is comfortable enough to ask questions without being encouraged to (Yen and Leasure, 2019; Slater et al., 2017; Mendoza, 2018). Nevertheless, Interpreter 1 uses TB again once she is alone with the patient. On this occasion, she enquires about specific topics, and, in the absence of the clinician, the patient poses a question concerning his medication. Interpreter 1 refuses to reply and, instead, returns to the consultation room to ask the doctor so he can solve the patient's doubts.

#### Discussion

The central goal of this paper is to broaden the knowledge of TB usage in interpreter-mediated, healthcare consultations. We combine the principles of case-study research and conversation analysis to examine a dataset of multilingual, multicultural events that occurred in a hospital in Madrid, Spain.

In line with the literature findings, patients in our dataset have a low level of health literacy (Caplin and Saunders, 2015; Tamura-Lis, 2013). This does not solely apply to general knowledge about their condition (6 cases, 50%), but also regarding how to perform additional testing (3 cases, 25%) and navigate administrative procedures in the host health institution (3 cases, 25%). Thus, our proposal for scenarios in which TB is employed serves to illustrate the complexity of healthcare delivery in migrant care.

Furthermore, our findings indicate that TB is decisive for patient understanding and compliance of treatment, which resonates with previous literature on the topic (e.g., Mahramus et al., 2014; Mendoza, 2018). In our dataset in general, and in the two cases presented in particular, interpreters always initiate TB usage (Excerpts 1, 2, 3, 4), even in the absence of the physician (9 cases, 75%), both mid- (2 events, 22.2%) and post-consultation (7 events, 77.8%). This engages with research promoting interpreters as members of the care team that participate actively to ensure patient safety, patient autonomy, and positive health outcomes (AHRQ, 2020; Schreiber et al., 2019; Álvaro Aranda et al.,

2021), but contradicts protocols suggesting clinicians to initiate TB and ask open-ended questions themselves (Slater et al., 2017).

Providers thus overlook using TB when interpreters are involved, an observation also present in other studies (see Hommes et al., 2018; Riggs et al., 2021). As migrant patients usually avoid asking questions due to fear, intimidation, or embarrassment (Weiss, 2007), it is essential to promote clinician-interpreter interprofessional collaboration. However, TB in interpreter-patient-doctor encounters is solely observed in 3 events (25%). This leads us to believe that, when it comes to TB, doctors and interpreters of the sample are not familiar with collaborative practices.

For the reasons detailed above, it is important to underline that successful usage of TB requires a multifaceted, coordinated approach that should be taught in interprofessional training modules and/or ongoing education. In our dataset, doctors avoid using TB with migrant patients and interpreters often resort to "yes/no questions" (Excerpt 1), instead of more open statements as suggested in the literature (AHRQ, 2020; Weiss, 2007). In this sense, Excerpt 3 could be taken as a point of departure to develop more sophisticated training proposals. More precisely, the interpreter invites the patient to teach back the health education received and informs the doctor of his response. This gives the clinician a chance to act and provide additional explanations and corrections in a culturally appropriate fashion, always aided by the interpreter.

Our findings can be understood as a plea for interprofessional collaboration and education. Health systems worldwide face daily pressures responding to increasingly dynamic patient demographics and are tasked with implementing culturally responsive practices in the delivery of care for patients with a migrant background. In such context, understanding the workings of specific environments of interpretation and the underlying techniques available (e.g., the TB method) is essential to cover the aims of medical communication. Rather than being disconnected from each other, universities and other education institutions should offer a meeting ground for trainees from different, yet interconnected, disciplines (in this case, students enrolled in Medicine and Interpreting and/or Translation programmes).

This would be interesting to implement in universities offering both programmes by introducing subjects combining theoretical principles from both fields of knowledge (e.g., how to verify patients' understanding through teachback, health literacy, cultural differences and varying perceptions of health and self-management of illness, guidelines for working with healthcare interpreters,

etc.) and several practical activities in the shape of roleplays. These could be structured around specific challenges in migrant healthcare delivery to test both Medicine and Translation/Interpreting trainees (e.g., a patient who does not understand how to measure his glucose levels). Ideally, students would practice in small groups and, eventually, in front of the class to facilitate collective, interdisciplinary reflection, which would be supervised by educators with expertise and professional experience in Medicine and/or Interpreting/Translation.

#### Conclusions

Recent definitions of health literacy underline the role of organizations in providing accessible health information equitably to all individuals (ODPH, 2022). In our multicultural, multilingual societies, this undeniably includes the provision of language services and culturally responsive communicative strategies for patients with low educational levels, which include TB. In fact, TB usage has the potential to improve healthcare delivery for migrant patients with low literacy levels and, thus, contribute to the attainment of socially inclusive, equalitarian societies. Due to the limited size of our sample (TB is used in only 12 events), results presented here cannot be generalised, but they could be tested and replicated in different organizational contexts by other researchers interested in TB, which is the aim of naturalistic generalisation or transferability (Gomm et al., 2000). Potential lines for future research include the replication of the study in different institutions to increment our dataset. In turn, new data will serve to develop role play scenarios based on real situations and a wider range of topics, and this will allow designing interprofessional education options (and thus, collaborative practices) between future healthcare interpreters and clinicians.

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