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Communication study

"Ne diyor?" (What does she say?): Informal interpreting in general practice

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ABSTRACT

Objective: The aim of this study was to offer a comparative analysis of informal interpreters during medical consultations with both good and poor mutual understanding between general practitioners (GPs) and patients.
Methods: Sixteen video-registered medical interviews of Turkish immigrant patients were analysed. Stretches of discourse of eight interviews with good mutual understanding between patient and doctor were compared to eight interviews with poor mutual understanding. The discourse analysis focused on: (1) miscommunication and its causes; (2) changes in the translation; (3) side-talk activities.
Results: In the cases of 'poor mutual understanding', the instances of miscommunication far exceeded those in the 'good mutual understanding' group. Style of self-presentation, content omissions and side-talk activities seemed to hinder good mutual understanding.
Conclusion: Alongside the evidence about problems with informal interpreting, sometimes the use of family interpreters can facilitate medical communication.
Practice implications: Recommendations are given in order to increase physicians' awareness of the complex process of interpreting, as well as to empower informal interpreters and patients to effectively deal with this communicative triad.

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1. Introduction

The ongoing process of worldwide migration implies that a substantial part of the patient population consulting a general practitioner (GP) has different cultural and linguistic backgrounds. For example, in the Netherlands about 20% of the population is foreign-born (mainly Suriname, Turkey and Morocco) [1]. Comparable percentages are given in other western countries for a variety of nationalities [2]. These multicultural contacts in medical encounters are often complicated by cultural and language barriers [2–6], which may influence patients' accessibility to and quality of care negatively [7–9]. An important portion of these immigrant patients have poor proficiency of the host country's language, which negatively influences mutual understanding between physician and patient [2,3,9].

Countries differ in the health care policies regarding interpreting. While patients have a formal right to an interpreter, and although countries differ in their policies, the use of an interpreter is poorly facilitated by the national government [10]. As a consequence, the majority of immigrants from Western countries bring an informal interpreter (mainly family members or acquaintances) to the physician, they talk without an interpreter being present, or medical staff relies on bilingual employees [9,11–14]. The reasons for using informal interpreters are mostly practical or organisational [15]. The literature on medical interpreting recommends the use of professional interpreters, because of fewer mistakes made as well as greater physician and patient satisfaction [5,9,16]. Although studies on communication in informal interpreting are scarce [17,18], there is a prevalent negative attitude regarding the use of informal interpreters in terms of it lacking professional standards and potentially resulting in greater miscommunication [5,16]. Other researchers stress that informal interpreters contribute importantly to attaining trust between patient and physician [19], or they point to the care taking role [20] or to the fact that young people who interpret for their relatives might be doing a very good job [21]. Linguistic literature states that there is actually little difference in discourse structures between informal and formal interpreters [22,23]: apart from the interpreter's status, payment and training, similar mental activities (such as listening, information input and output, translation, timing for taking turns) have to be presupposed for both interpreter groups [24]. Thanks to professional training, formal

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interpreters make fewer errors compared to ad hoc or informal interpreters [16], but patients do not always prefer professionals for interpreting, as a relationship of trust is at stake. Despite other conclusive research, it remains unclear under which conditions informal interpreters will do a good job [5,16].

The present study may contribute to fill this gap in knowledge. The aim is to offer a comparative analysis of informal interpreters during consultations with both good and poor mutual understanding between general practitioners (GPs) and patients. We also try to find explanations for poor mutual understanding, to the degree that linguistic barriers are at stake. What kind of miscommunications do occur? Under which conditions will the communication be successful?

1.1. Approaches to interpreting

Interpreters may differ in the ways they interpret and the roles they take [25–27]. Bot distinguishes two approaches on interpreting, the *translator-machine* model and the liberal *interactive* model as two poles of one continuum [26]. In the first model the interpreter is present as a non-person who gives equivalent translations, while in the interactive model the interpreter takes an interactive stance towards the interpreter-mediated medical encounter, leading to an accumulation of tasks (e.g. providing equivalent translations, contributing to the structure of the medical encounter, functioning as a cultural broker, etc.). It appears that interpreters cannot always act like a translation-machine model—in fact, they tend to participate as a third interlocutor during the interaction. Wadensjö also states that the interpreter does not function as a translation machine, but rather participates in the interaction process on his own account [27]. She discerns three roles that the interpreter can take on within the interaction: reporter, recapitulator and responder. In the first role of *reporter*, the interpreter translates the utterance of the primary speaker literally, which resembles the role in the translation-machine model. The *recapitulator* changes the original utterance but its content remains the same. The last role, the *responder*, can be found when the interpreter reacts directly to an utterance of the primary speaker; no translation takes place at all, the interpreter responds as an interlocutor in the discourse. In this situation, one of the primary speakers is excluded from the communication. Because no translations are being made, a dyadic communication takes place, also called 'side-talk activity' [27], which may cause a feeling of exclusion experienced by the physician or the patient [28].

Physicians expect interpreters to be not only translators, but to serve as cultural brokers and intercultural mediators (formal interpreters) or caregivers (informal interpreters) as well [23,28–30]. Informal interpreters very often also have useful additional knowledge of the patient and his/her symptoms. According to the physicians, they can be helpful towards establishing a good contact with the whole family. The disadvantage of informal interpreters might be that they also may have their own agenda during the medical encounter, i.e. being present as a third person [20].

Apart from the way in which interpreters try to facilitate the communication by taking on a specific role, it is of interest to question how understanding is successfully reached in interaction and how miscommunication may occur.

1.2. Miscommunication and causes

Communication problems may arise in intercultural medical encounters, as well as in three-party talk, where an interpreter is involved [16,28,31–34]. Roberts et al. describe that most immigrant patient–doctor interaction problems in London GP surgeries have to do with patient talk [34]. Patients with cultural backgrounds different than doctors' may have other ways of structuring information and managing the encounter. A relevant distinction is that between language differences (such as pronunciation, intonation, grammar and vocabulary) and cultural differences between patient and doctor which become manifest in patient talk. The cultural differences refer to the style of self-presentation. Immigrant patients may show a low self-display by not saying much during the interaction, or may structure the information in another way than doctors do (e.g. by first explaining the context and at the end of the consultation indicating the main reason for the visit). There also seems to be more topic overload with these patients—more topics were introduced, sometimes even though the former topic was not yet closed. Additionally, interaction was marked by a lot of overlap and interrupting [34]. Misunderstandings may also occur from patients' lack of institutional knowledge, which might not be necessarily caused by their cultural background [35].

As communication with immigrants and patients with poor language proficiency is more problematic than with indigenous patients, the question arises of how an interpreter facilitates the mutual understanding between doctor and patient. In the present study the focus lies on the quality of informal interpreting in medical encounters. The issues that will be covered relate to communication problems and their causes. The aspects of medical communication will be related to the level of externally assessed mutual understanding between GP and patient (see Section 2.2.1). It is expected that informal interpreters will act not so much as a machine translator, but far more will take an interactive role of recapitulator or responder. It is also expected that more miscommunication might occur in the group with poor mutual understanding between physician and patient.

2. Methods

2.1. Subjects and procedure

Analyses were based on 16 transcripts of videos derived from an intervention project in Rotterdam [3,36]. Nearly 1000 patients participated in this project. All GPs working in multiethnic Rotterdam neighborhoods, and at least 25% ethnic minority patients in their practices (a total of 178), received a mailed invitation to participate in the study; those interested were sent additional, extensive information, and 38 agreed to participate. These GPs asked 2407 patients permission to participate by informed consent; 1005 (42%) agreed. The response rate was 51% for Dutch patients and 34% for patients from an ethnic minority. The final study group of 986 patients consisted of 429 (44%) patients from an ethnic minority and 557 (56%) Dutch patients. For practical and financial reasons, video registration of doctor–patient communication was realized for 25% of the patient group, randomly chosen. Patients were interviewed at home in their preferred language 3–8 days after the consultation. Each GP completed a questionnaire about the consultation. GPs and patients were asked to give their own opinions and an estimate of the other person's judgment about identical consultation aspects. In 50 of these encounters, the patient was accompanied by an informal interpreter. For purposes of the present study, three-party data of the largest immigrant group available was selected, i.e. the Turkish group. This allowed for a more or less homogenous group, from the viewpoint of interpreter needs. Further, to optimise the comparison a selection was made based on the lowest and highest quartiles of level of mutual understanding between GP and patient (see Section 2.2.1), which resulted in $2 \times 8 = 16$ medical interviews. The interpreters were partners, family members or friends of the patient.

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Transcripts were made in Dutch, and the Turkish fragments were written in Turkish as well as translated into Dutch. This was conducted by a second-generation Turkish research assistant. All observations were coded from video and transcript by one researcher, who was blinded for level of mutual understanding of the medical conversations. Because of the exploratory character of the study, observations from different angles are made by triangulation (see below).

2.2. Measures

In order to answer the research questions, data was gathered on level of mutual understanding between doctor and patient, externally assessed, and on four main communication subjects: *types of miscommunication, causes, changes of the translation, and side-talk activity*, as described so far in relevant observational studies [17,27,28,31,34]. This enabled making a comparison between the two levels of mutual understanding, in terms of communication processes as they unfold in the actual discourse [36].

2.2.1. External assessment of mutual understanding

The effectiveness of the communication in terms of mutual understanding was measured by the Mutual Understanding Scale, which was developed and validated by a multiethnic and multidisciplinary expert panel using nominal group technique [32]. The level of mutual understanding was calculated by comparing the answers of doctors and patients on roughly five components of the consultation: main symptom, cause of the illness, diagnosis, examination and prescribed therapy. Mutual understanding was present if both doctor and patient gave similar answers as assessed by two judges independently for the open questions, or by computer for the yes/no answers. The judges (one researcher with a Turkish background, the other with a Dutch background) were blinded for patient and physician characteristics. Agreement about the topics between physician and patient in the five consultation components was not necessary, but they had to be informed about their mutual opinions for a good mutual understanding score. In 70% of the cases there was independent agreement. All remaining cases (30%) were discussed until consensus was reached. This procedure resulted in an overall score for level of mutual understanding for each consultation on a scale between −1 (very low) and +1 (very high). For purposes of this study, consultations with scores in the lowest (between −1.0 and −0.40) and highest (between +0.55 and +1.0) quartiles were selected. This resulted in eight consultations with poor mutual understanding (*low MU group*) and eight consultations with good mutual understanding (*high MU group*).

2.2.2. Assessment of communication

The coding of communication included the following topics: miscommunication and causes, changes in translation, and side-talk activity. The observation of *miscommunication* included the following categories [31]:

a. immediate recognition of the problem, with or without comment (e.g. using the word "chwach" for the word "church");
b. latter recognition of the problem, with or without comment (see Fragment 1);
c. no recognition of the problem, only recognized by an external observer (see Fragment 2).

To determine the possible *causes* of these communication problems, the categorisation of Roberts et al. was used [34]:

a. Wrong *pronunciation* of words and sentences can lead to misunderstanding between participants.
b. Problems occur because of the unexpected usage of *intonation*, rhythm and melody in the official language.
c. Flawed use of *grammar* rules, *vocabulary*, time markers and sentence construction can lead to misunderstanding between participants.
d. Features of the *style of self-presentation* are a low self-profile, information-structuring style, topic overload and overlapping speech. The ways in which the speaker presents himself through his language use may lead to misunderstanding between participants. These ways are often culturally determined.

The observation of *changes in translation* were derived from Aranguri et al. [17]:

a. *Content revisions:* the interpreter changes the content of the translation by altering important information.
b. *Content omissions:* the interpreter leaves out important information while translating.
c. *Content reductions:* the interpreter reduces the content of the utterance of the primary speaker. In this category the interpreter synthesises the utterances of the speaker, mostly following a long utterance of the primary speaker. These three categories are not mutually exclusive, e.g. revision implies omission [17]. However, these changes in translation give a rough indication of the quality of the translation—revisions and omissions may be serious flaws in the translation, while content reductions seem more or less acceptable.

The presence of *side-talk* activity [27] gives and indication about the interpreter's degree of control during the interaction because he can initiate, maintain or stop the activity. Side talk may refer to the interpreter–patient dyad as well as to the interpreter–physician dyad. The elements of the transcripts in which at least two turns of the interpreter as well as the patient or physician followed subsequently without interference of the physician or patient were counted as side-talk activity. In the case of interpreter–physician side talk, the interpreter offers additional knowledge about the patient to the physician, that is not initiated by the patient but by the interpreter. It concerns intimate knowledge about the situation of the patient that is being transferred by the informal interpreter, which distinguishes him from a formal interpreter [28]. This extra information also partly constitutes the role-taking of the informal interpreter, who is not only translator but also takes on the role of caregiver and 'responder' He/she is the direct source of the information, without verbal interference of the patient [37].

2.3. Analyses

Applying triangulation by discourse analysis enables performance of simple statistics and offering a qualitative description of the differences between the two groups (the low MU versus high MU). In that sense, the analysis explains causes for poor mutual understanding. The main findings will be illustrated by fragments of transcripts and commented in detail.

3. Results

3.1. Miscommunication and causes

Miscommunication occurred nearly five times more in the low MU group than the high MU group (83% versus 17%) (Table 1). In three cases, the problems were not recognised by the participants (and therefore were not solved). All examples of miscommunications in the high MU group were recognised by the participants.

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Table 1
Number of communication problems in 16 encounters.

Communication problems	Low MU ($n=8$)	High MU ($n=8$)
1. Immediate recognition of the problem, with or without comment	6	1
2. Latter recognition of the problem, with or without comment	6	2
3. No recognition of the problem	3	–
Total	15 (83%)	3 (17%)*

MU = mutual understanding between doctor and patient.
* $t=2.592$, $p<.05$.

Box 1. [consultation number 111001] 'Patient with earache'; the translation of Turkish is written in italics.

97	GP:	have you ever had an ear lavage?
98	Interpreter:	simdi sey varm? intablanma? disariya dogru pislik?
99		*now is there thing? an infection? dirt to the*
100		*outside?*
101	Patient:	bazi icinde var pislik, bazi kasint
102		*there is some dirty inside(the ear) that itch*
103	Interpreter:	yok yani.. sey olarak su gibi cikan pislik
104		*no mean.. just like thing dirty that it goes out*
105		*like water*

A substantial number of the miscommunications was caused by style of self-presentation (Table 2), where the interpreter showed a low self-profile, e.g. by having difficulties in structuring the information given by the patient. Other causes were the inability to pronounce words or form words or sentences in the Dutch language correctly.

Fragment 1 shows an example of a communication problem that came up, which was later recognised and eventually solved. The cause of the communication problem lies in the lack of Dutch vocabulary of the interpreter, who is the son of the patient.

The GP's question about ear lavage is translated as 'an infection' (line 99), which is the onset of the miscommunication between patient and doctor. Later on, the communication problem was recognised and eventually solved (not shown). As the patient says that he had received an ear lavage once, the physician then makes the problem visible and discusses with the interpreter what went wrong before in the translation process.

Fragment 2 contains an example of unrecognised miscommunication, which may have serious consequences. A young boy (age 11) is accompanied by his mother, who does not speak Dutch. The boy is the patient as well as the interpreter for his mother. He has a contagious infection on his head, and the GP asks if there are more children in his environment who have it (line 4,6,8–9). The boy mentions his sister Fatima (line 12,17). In line 17 he says that 'it has already stopped', however his mother interrupts in Turkish that it has not stopped yet (line 21). The boy does not translate, and the GP does not ask further. In this consultation, the mother is excluded from the conversation by her son as well as by the GP; she asks her son repeatedly 'what does she (= female GP) say?' ('ne diyor?' in Turkish), but her claims remain unanswered. In terms of Goffman [38], the mother is regarded as a non-person by both the other participants. She conveys important information (that Fatima is still infected) which does not reach the GP. This miscommunication showed up only for the researcher, after the Turkish spoken part of the conversation was translated.

Box 2. [210717] Turkish speaking mother with her 11-year-old son (=patient), who has an infection; the translation of Turkish is written in italics.

01	GP:	that is an infection on your head
02	Mother:	**ne diyor?** *what does she say?*
03	Interpreter (=patient)	((talks Turkish, not understandable))
04	GP:	do you know if there are more people at school who have it?
05	Patient:	eh no
06	GP:	you haven't heard from others?
07	Patient:	I haven't heard
08	GP:	no, because it's in the air a bit, and it is contagious, it can
09		be transferred from one to the other
10	Patient:	O I see, my sister also has it a bit
11	GP:	what?
12	Patient:	my sister
13	GP:	your sister also has?
14	Patient:	yes
15	GP:	Oh
16	Mother:	Fatima
17	Patient:	my sister, it has already stopped
18	GP:	Fatima?
19	Patient:	it stopped already
20	GP:	she also had a bit
21	Mother:	buraya geldi(xx)gecmedi, daha onunkide gecmedi (xx)
22		*has come here (xx) it hasn't stopped, her's is also still*
23		*there(xx)* ((GP works on pc))
24	GP:	hm. . .let's have a look, hm and which is your school?
		[[GP explains to patient, 12 lines]]
36	Patient:	yes
37	GP:	okay, so I'll give you something for that
38	Mother:	**ne diyor?** (*what does she say?*)
39	GP:	can you take in pills, do you think?
40	Patient:	yes

3.2. Changes in translation

Content omissions, leaving out important information, happened most frequently (48%). These changes in translation occurred twice as often in the low MU group than the high MU group (65% versus 35%) (Table 3).

Fragment 3 shows an example of a content omission. During this encounter a married couple visits the GP and their adult

Table 2
Causes of communication problems.

Causes	Low MU	High MU	Total
Pronunciation	4	–	4 (24%)
Intonation	–	–	–
Grammar and vocabulary	4	1	5 (29%)
Style of self-presentation	7	2	9 (47%)

MU = mutual understanding between doctor and patient.

Table 3
Changes in translation.

Changes	Low MU	High MU	Total
1.Content revisions	11	8	19 (32%)
2.Content omissions	21	8	29 (48%)
3.Content reductions	7	5	12 (20%)
Total	39 (65%)	21 (35%)*	60 (100%)

MU = mutual understanding between doctor and patient.
* n.s. (because of large standard deviation).

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Box 3. [consultation number 310714] Husband is patient; he is accompanied by his wife and adult daughter, who translates. The translation of Turkish is written in italics.

876	Patient:	surdan soyleydi (xxxx) ben birseye bastiydim
877		*from here it was so (xx) I stood on something*
878		((patient points to foot))
879	Interpreter	and then over here
880	Patient's wife:	bastim deme sus bir kontrol etsin
881		*don't say I stood on something. Quiet, let her*
882		*check*
883	GP:	yes ... well it isn't purple now, fortunately
884	Interpreter:	no not that
885	GP:	no

daughter functions as an interpreter. The patient (husband) is trying to explain his symptoms: he has a painful, purple foot. His wife also joins the discussion. Earlier in the encounter the patient tells the story that he stood on something, which may have caused the painful foot.

In line 876 the patient points out where the foot was purple and says that he stood on something. The interpreter translates the part 'and then over here' (line 879), but leaves out the part where the patient 'stood on something'. The patient's wife (v) comments on the request of the patient in line 880–882. She directs him not to mention the incident and to wait for the GP to look at the foot. Both the wife and the interpreter may think that this request has nothing to do with the symptom. However, this seems important for the patient, because prior to this fragment he also mentioned this request. The doctor did not receive this information during the encounter either.

In sum, more linguistic problems occur in the low MU group because the interpreters' language proficiency appears to be insufficient, or because of selectivity. Changes in translation, especially omissions, may lead to a decrease in mutual understanding between doctor and patient during the discourse. The majority of the communication problems was related to style of self-presentation.

3.3. Side talk

In the low MU group, side talk happened nearly four times more than in the high MU group (52 versus 14). In the low MU group the interpreter did provide background information to the GP more often (Table 4).

One may speculate that the interpreter complicates the communication with this topic overload. Background information provided by an informal interpreter does not always seem to be effective. Instances of side-talk activity between interpreter and patient happened twice as often in the low MU group than in the high MU group. This kind of side talk resulted in exclusion of the physician from the interaction. The frequent occurrence of side talk seems to complicate the interaction between doctor and patient. The interpreter explains and talks more to the patient, to make the physician's contribution more understandable, but in fact this has an adverse effect, evidenced in a lower level of mutual understanding.

Table 4
Side talk.

Side talk	Encounters with low MU	Encounters with high MU
Interpreter → GP	35	6
Interpreter → patient	17	8
Total	52	14*

MU = mutual understanding between doctor and patient.
* One-sided t-test, $t = 1.569$, $p < 0.10$.

4. Discussion and conclusion

4.1. Discussion

According to expectations, there were more instances of miscommunication in the low MU group than in the high MU group. Causes for this miscommunication were mainly due to interpreters' low-profile presentation, recognised in hesitating behaviour and problems structuring the information. Omissions of content occurred most frequently in the translation process, which is in line with Aranguri's findings [17]. Furthermore, the interpreter's frequent conveyance of background information to the physician as well as side talk between interpreter and patient make it difficult for the patient or the physician to follow the interaction as well as for the interpreter to coordinate it. Informal interpreters form the essential link in the intercultural constellation of the medical encounter, and they try to control and coordinate the medical conversation. They are thus active participants performing multiple roles; these findings confirm present theories of interpreting [25–28], which claim that interpreters are not just translation machines but have an active role in the interaction. We have seen that these roles cover more than translating alone, as they include aspects of being an advocate of the patient, and in that role contributing to a trustful relationship between patient and physician [19]. However, informal interpreters differ from each other in their role performance, which may lead to facilitation or hindering of the medical encounter [19,27,28]. Hindrance indicators are the interpreter taking the role of 'responder' while giving background information (volunteering, adding facts and information), and frequent side talk between interpreter and patient. These issues have been identified by physicians as difficulties when confronted with a patient and an informal interpreter [28]. They wonder what patient and family interpreter are discussing together, especially if they receive brief bits of information after a long stretch of side talk. When family interpreters become the direct source of information, it should be considered that this is not always be very effective [28,37], especially in the case of precarious issues (e.g. relational problems, sexual or genital problems).

Some methodological remarks need to be made. Because of the exploratory character of the study, it was not intended to generalise regarding quality of informal interpreting. The small research sample provided more understanding of relevant interactional mechanisms in the process of interpreting. By applying triangulation – the observation techniques used here more or less pointed in the same direction in terms of differences between low and high MU groups – the study reaches accountable reliability. By conducting a comparative analysis, this study offered more insight into informal interpreters' interactional behaviour during consultations with both good and poor mutual understanding, and explained causes for the differences. We did not focus here on cultural factors (e.g. in terms of values, norms) or medical communication factors in general.

Only Turkish interpreters participated in this study. To what degree are the findings applicable to other migrant patient groups? As relevant patient variables (education, Dutch language proficiency, and cultural views) resemble those of other migrant groups, there is no reason to believe that the results would not be valid for other migrant groups as well. It would be interesting to conduct research where different migrant groups are compared which each other. It is recommended to repeat similar research with larger groups and with patients of different origins, and to make comparisons between informal and formal interpreters.

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4.2. Conclusion

This comparative study shows that sometimes the use of informal interpreters can facilitate medical consultations. It also evidences the flaws in communication. Although the use of informal interpreters is a tricky problem, it is not always "wrong" or "unproductive". It nonetheless has to be evaluated in the light of a range of different viewpoints and interests which transcend the mere process of translation [8,19]. These results might contribute to fueling the debate on pros and cons of formal and informal interpreters.

4.3. Practice implications

In the case of informal interpreters, physicians would be well-advised to check the interpreter's level of language proficiency and to discuss the expectations of both doctor and patient. They should also give small pieces of information at a time, avoid side talk and discuss this situation with the interpreter in order to prevent it. These kinds of recommendations can be used in training physicians in order to increasing awareness of the complexities of the communicative triad.

Also interpreters and patients need to recognise that they should not make their contributions to the discourse too long. A good preparation between patient and interpreter would be helpful. If both participants agree on the complaints to be discussed, and if expectations about interpreters' role-taking are clear, the interaction will become more transparent for all participants. Less side talk will limit exclusion of either physician or patient, which may contribute to a better mutual understanding. These recommendations might be used in empowerment trainings for informal interpreters as well as patients.

Conflict of interest

None of the authors have actual or potential conflicting interests.

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