## Research letter

# The use of Google language tools as an interpretation aid in cross-cultural doctor—patient interaction: a pilot study

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## Background

Barriers in cross-cultural communications in healthcare can originate from the interpreter, the physician and the patient. Different methods have been suggested to improve communication and internationally there are known to be pros and cons for using interpreters.<sup>1–3</sup>

Web-based language tools, especially the Google language tools (GLT), are commonly used for translation of journal articles and other online material for academic purposes.

Over the last four years we have seen a number of patients from African countries, especially Burundi, who can speak French and their native Kirundi languages but not English. We, in India, generally have English as a second language and little proficiency in the French language. At times we do manage to get an interpreter, but more often than not, the doctorpatient communication tends to be tedious and unsatisfactory for both sides. We have therefore started using GLT at our centre so we can communicate with patients speaking a foreign language.

# Objective

We explored the possibility of using the freely available GLT for improving doctor–patient interaction.

#### Method

Twenty-two patients of non-Indian nationality were included in the study group. None of the patients were proficient in English or any other Indian language. The study group was composed entirely of patients from Burundi (n=11) who could read, write and understand French to a good level of proficiency. (Only patients who had actually studied the French language to the level equivalent to the 12th grade were included.) The control group consisted of 11 patients across a wide range of nationalities including Omani, Saudi-Arabian, Ethiopian and Burundian. The study group was initially seen by the doctor; after obtaining informed consent using an interpreter. In the consultation we only used the web-based interpretation tool though an interpreter was present. GLT enabled us to type our questions to the patient in English and translate them into French, the same is shown to the patient on the computer screen and the patient types in a reply in French, which we translate back into English (Figure 1).

Following the initial interaction the patients were asked to grade their satisfaction (with the doctor–patient interaction process) on a scale of one to ten.

Following the consultation any gaps in information provision or in the physician's instructions were identified using the interpreter. In the control group the consultation was carried out using a professional interpreter and satisfaction scores were scored as in the study group.



Figure 1 Translating from English to French and back using Google Language Tools

### Results

The mean of the scores of the test group was 8.55 (SD 0.820; SEM 0.247). For the control group the mean scores were 8.73 (SD 0.786, SEM 0.237). The difference between the two groups was not significant (students t-test p=0.6).

## Conclusion

This freely available tool has considerable potential to improve doctor-patient communication when language poses a significant barrier. We recognise that there are limitations to our method. However, our aim was only to highlight the potential benefits of online translation tools in clinical consultations. While the translations using GLT are often not quite completely accurate, ideas are definitely communicated much better between the doctor and the patient. The same problems of incomplete communication are often experienced even when an interpreter is present, as has been demonstrated in studies assessing inter-cultural doctor-patient communication. While the use of a professional interpreter would definitely be very convenient and ideal, the availability of such personnel is often limited.

#### **CONFLICTS OF INTEREST**

None.

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