Gender differences in communication patterns between physicians and patients during the medical visit have been widely observed. For example, a number of studies have shown that physicians give more attention to and prefer male patients and tend to give more explanations to and ask fewer questions of female patients. Patients demonstrate more partnership behaviors with female physicians and provide them with more information. Patients also interrupt female physicians more often and treat them more assertively.

Other studies suggest that patient–provider gender concordance influences patient satisfaction and that differences in satisfaction may be related to gender-based differences in communication-related preferences and expectations. While no clear pattern emerges from these studies, the results do suggest that gender-related values and expectations influence patients’ reactions to physicians’ behavior.

Studies of gender, communication patterns, and satisfaction have generally been restricted to local language-proficient populations and two-way (doctor–patient) consultations. However, clinical communication between patients and physicians who do not share a common first language is becoming increasingly commonplace as a result of global migration. Research suggests that communication patterns differ in consultations with patients who have limited local language proficiency whether or not these encounters are assisted by interpreters.

Background. Research suggests that doctor–patient communication patterns and patient satisfaction are influenced by gender. However, little is known about the effect of gender in consultations with foreign language–speaking patients and in interpreter-mediated consultations.

Methods. The objective of the study was to explore the effect of doctor–patient gender concordance on satisfaction of foreign language–speaking patients in consultations with and without a professional interpreter. Its design consists of a cross-sectional analysis of patients’ reports. A total of 363 consultations with foreign language–speaking patients were included in the analysis. We measured the mean scores of six items on the quality of communication (answer scale 0–10): the doctor’s response to the patient’s needs, the doctors’ explanations, the doctor’s respectfulness toward the patient, the quality of communication in general, the overall consultation process, and information provided regarding follow-up.

Results. When interpreters were used, mean scores were similar for doctor–patient concordant and discordant pairs. However, in the absence of interpreters, doctor–patient gender discordance was associated with lower overall ratings of the quality of communication (−0.46, p = 0.01).

Conclusions. Our results suggest that the presence of a professional interpreter may reduce gender-related communication barriers during medical encounters with foreign language–speaking patients.
and it is likely that the impact of factors such as gender on patient satisfaction may also differ.

The purpose of our study was to explore the impact of doctor–patient gender concordance on satisfaction of foreign language–speaking patients in consultations with and without professional interpreters.

Methods

The data presented in this paper come from a larger study, which has been reported on elsewhere. The study was conducted at the general medicine outpatient clinic of the Geneva University Hospitals which provides scheduled and unscheduled appointments to a socially and culturally diverse patient population. More than 50% of all patients attending the clinic are foreigners, and about half of these do not speak French (the local language) fluently. Many came as refugees to Switzerland to apply for asylum and represent diverse cultural, geographical, and political origins. The clinic has been using professional medical interpreters since 1997 and at the time of the study had access to a pool of about 60 qualified interpreters translating 43 languages.

The aim of the larger study was to assess the effectiveness of an intervention to improve communication skills of resident physicians working at this clinic. The training intervention consisted of four workshops held over a period of 2 months and formed part of the continuing education for physicians working in primary care settings. Its four components were (1) introduction on how to work with interpreters, (2) working in three-way communication settings involving patients, interpreters, and physicians, (3) managing emotional stress in interpreter-assisted interviewing, and (4) merits and drawbacks of interpreter-mediated consultations.

Two consecutive samples of patients and physicians (pre- and postintervention) completed visit-specific questionnaires to assess the quality of communication. The questionnaires were distributed by a research assistant immediately after the medical visit and were available in the 10 most common languages: Albanian, Arabic, English, French, German, Italian, Portuguese, Serbo-Croatian, Spanish, and Turkish.

The surveys were completed during 28 half-day periods at the outpatient clinic (preintervention: October 1999 to December 1999; postintervention: May 2000 to June 2000). The availability of interpreters was identical in both surveys, the booking of an interpreter being decided by the physicians. All patients (both francophone and foreign language speakers) who visited the clinic during the study period were eligible to participate. Exclusion criteria included immediate patient transfer to other services (eg, admission to hospital) or any serious patient condition precluding participation.

Patients and providers were asked to rate six aspects of communication during the consultation using a 10-point Likert scale: the doctor’s response to the patient’s needs (not clear at all–very clear), the doctors’ explanations (not clear at all–very clear), the doctor’s respectfulness toward the patient (no respect–total respect), the quality of communication in general (poor–excellent), the overall consultation process (poor–excellent), and information provided regarding follow-up (poor–excellent).

To assess the relationship between gender concordance and patient satisfaction in interpreter-mediated consultations, we analyzed only consultations with foreign language–speaking patients (N = 363, of the total 1,016 included in the larger study). The patients’ language skills were assessed by the doctors. When the patient’s mother tongue was a foreign language and his/her French was poor, then he/she was classified as foreign language speaking. Because the intervention did not address gender issues in clinical communication, and therefore, we did not anticipate any pre-/postdifferences, we decided to pool the data from the pre- and postintervention surveys (38 and 62%, respectively). The sample was categorized into four groups: (1) doctor–patient gender concordance with an interpreter, (2) doctor–patient gender nonconcordance with an interpreter, (3) doctor–patient gender concordance without an interpreter, and (4) doctor–patient gender nonconcordance without an interpreter.

A mean quality score based on the six items was computed whenever four or more items had been completed. Quality scores were compared across the four groups using nonparametric tests because of the skewed distributions.

Multiple linear regression was used to determine the effect of gender concordance by including the covariates DISCORDANCE (doctor–patient gender discordance vs concordance), INTERPRETER (use of interpreter vs no use), and an interaction term DISCORDANCE × INTERPRETER. Interaction terms are used to infer how the effect of one independent variable on the dependent variable depends on the magnitude of another independent variable. Here, we wanted to know whether the effect of gender discordance (independent variable) on patient’s ratings of communication quality (dependent variable) depends on interpreter use (another independent variable). Or, to put it differently: how much does gender discordance in
Gender Concordance in Consultations With Interpreters

combination with the absence/presence of an interpreter affect communication quality? This “effect of gender discordance” was then adjusted for patient characteristics including age, sex, and refugee status. Finally, because each physician saw a large number of patients, the lack of independence was accounted for by using the generalized estimating equation linear models, where each physician defined a cluster. Data analyses were run using SPSS 13.0 and Stata 8.2 statistical software.

Findings

Encounter Characteristics

There were four groups of encounters: 162 doctor–patient gender-concordant encounters with an interpreter, 76 doctor–patient gender-nonconcordant encounters with an interpreter, 71 doctor–patient gender-concordant encounters without an interpreter, and 54 doctor–patient gender-nonconcordant encounters without an interpreter (Table 1).

The sample of foreign language–speaking patients consisted of 218 women and 145 men (60 and 40%, respectively). Their mean age was 38.6 years (SD 13.4). Seventy-eight percent were asylum seekers. Their mother tongues included Albanian (142), Serbo-Croatian/Bosnian (77), Somali (26), Spanish (21), English (13), Arabic (13), and Farsi (9); other mother tongues accounted for 16% of the languages.

Physicians included 15 female and 13 male general internists, of whom 24 were junior residents and 4 were senior residents. Mean age was 36 years (SD 6.1). Data on the interpreters’ gender were not collected for the larger study; however, at the time of the study, approximately 90% of the official hospital interpreters were female.

Satisfaction With Communication

Patients’ ratings of communication were generally high. Nonetheless, significant differences were found among the four groups with regard to the following items: doctor’s response to patient’s needs, doctor’s respectfulness toward the patient, quality of communication in general, and information provided regarding follow-up (Table 1). Ratings tended to be highest in encounters with interpreters regardless of doctor–patient gender concordance and lowest in gender discordant encounters without an interpreter.

The effect of gender concordance, taking into account presence and absence of an interpreter, was significant for two items (doctor’s respect and doctor’s explanation), as well as for the overall quality score. These effects, based on the interaction term DISCORDANCE × INTERPRETER, remained

Table 1 Differences in the quality of communication associated with gender concordance (N= 363 medical encounters with foreign language–speaking patients)

<table>
<thead>
<tr>
<th></th>
<th>Encounters with interpreters</th>
<th>Encounters without interpreters</th>
<th>Effect of doctor–patient gender discordance</th>
<th>p^†</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gender concordance (n = 162)</td>
<td>Gender discordance (n = 76)</td>
<td>Gender concordance (n = 71)</td>
<td>Gender discordance (n = 54)</td>
</tr>
<tr>
<td>Mean (SD)^§</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>Doctor’s answers to the patient’s needs</td>
<td>8.9 (0.8)</td>
<td>8.9 (0.8)</td>
<td>8.7 (1.3)</td>
<td>8.4 (1.3)</td>
</tr>
<tr>
<td>Doctor’s explanations</td>
<td>8.9 (0.9)</td>
<td>8.9 (0.7)</td>
<td>8.8 (1.1)</td>
<td>8.6 (1.3)</td>
</tr>
<tr>
<td>Doctor’s respect toward the patient</td>
<td>9.0 (0.6)</td>
<td>9.0 (0.7)</td>
<td>9.0 (0.7)</td>
<td>8.6 (1.4)</td>
</tr>
<tr>
<td>Communication between patient and doctor</td>
<td>8.9 (0.7)</td>
<td>8.7 (0.8)</td>
<td>8.5 (1.3)</td>
<td>8.0 (1.8)</td>
</tr>
<tr>
<td>Process of the consultation in general</td>
<td>8.8 (1.1)</td>
<td>8.9 (0.8)</td>
<td>8.8 (1.0)</td>
<td>8.2 (1.7)</td>
</tr>
<tr>
<td>Doctor’s explanations regarding the follow-up afterward</td>
<td>8.8 (0.9)</td>
<td>8.9 (0.8)</td>
<td>8.6 (1.2)</td>
<td>8.3 (1.7)</td>
</tr>
<tr>
<td>Overall satisfaction score</td>
<td>8.9 (0.6)</td>
<td>8.9 (0.6)</td>
<td>8.7 (0.8)</td>
<td>8.3 (1.3)</td>
</tr>
</tbody>
</table>

^Kruskal–Wallis test of difference between the four groups.
^Changes in doctor–patient gender concordance encounters, subtracting differences of encounters with interpreters, adjusted for patient’s age, sex, refugee status, and clustering on doctors, estimated by generalized estimating equation linear model.
^Significant level of the coefficient in the regression model.
§Mean scores on the 10-point Likert scale of quality of communication items and standard deviations.
| Mean score based on the six items. |

significantly when adjusted for patient characteristics (age, sex, refugee status) and clustering on doctors (Table 1).

Summarizing, the presence of an interpreter appears to improve patients’ satisfaction with communication in gender discordant patient–provider encounters but not in gender-concordant encounters (−0.46, p = 0.01).

Discussion

Gender issues in clinical communication have been well described in the literature, but research has focused on two-way consultations (involving only the patient and provider). The contributions of professional interpretation to quality of care and patient satisfaction with foreign language–speaking patients have also been firmly established, but these studies have not yet considered the role of gender. Only one study to date has examined the effect of gender on patient satisfaction in a patient population that included foreign language–speaking patients, but the association between interpreter presence and doctor–patient gender concordance was not considered.

Our exploratory study suggests that the presence of a professional interpreter may reduce gender-related communication barriers in consultations with foreign language–speaking patients. We can only speculate as to the mechanism, but it may be that trained interpreters act as cultural mediators, recognizing and helping to avoid any potential gender-based communication barriers that might normally arise in such cross-cultural encounters.

These results must be considered with caution. Our study is limited by a small sample size and by the fact that patient satisfaction with communication was generally so high that it caused a ceiling effect, which may have limited our ability to detect significant differences in satisfaction scores. In addition, the fact that our study sample was heavily biased toward asylum seekers from the Balkans precludes any generalizations about migrant or foreign language–speaking patients in general. Furthermore, we were unable to explore the potentially important effect of interpreter gender on patients’ perceptions of clinical communication. Nonetheless, our study highlights the need for more research on the role of gender in clinical communication with foreign language–speaking patients. In particular, a greater understanding is needed of the effect of doctor–patient and interpreter–patient gender, age, and ethnic concordance on clinical communication and patient satisfaction.

Declaration of Interests

The authors state that they have no conflicts of interest.

References


