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Communication Study

Physician gender, physician patient-centered behavior, and patient satisfaction: A study in three practice settings within a hospital

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ABSTRACT

Objective: To compare male and female physicians on patient-centeredness and patients' satisfaction in three practice settings within a hospital; to test whether satisfaction is more strongly predicted by patient-centeredness in male than female physicians.
Methods: Encounters between physicians ($N = 71$) and patients ($N = 497$) in a hospital were videotaped and patients' satisfaction was measured. Patient-centeredness was measured by trained coders.
Results: In the outpatient setting, female physicians were somewhat more patient-centered than male physicians; patient satisfaction did not differ. In the inpatient and emergency room settings, female physicians were notably more patient-centered than male physicians; satisfaction paralleled these differences. Nevertheless, there was some, though mixed, evidence that patient-centeredness predicted satisfaction more strongly in male than female physicians, suggesting that patients valued patient-centered behavior more in male than female physicians.
Conclusion: Even though satisfaction mirrored the different behavior styles of male and female physicians in the inpatient and emergency room settings, in all settings male physicians got somewhat more credit for being patient-centered than female physicians did.
Practice implications: If female physicians do not consistently receive credit for high patient-centeredness in the eyes of patients, this could lead female physicians to reduce their patient-centered behavior.

1. Introduction

Female physicians are, on average, more patient-centered than their male counterparts. Female physicians and/or female medical students spend longer with patients, behave more positively verbally and nonverbally, talk more about psychosocial and emotional issues, use more partnership statements, offer more nonverbal encouragement to talk, have more skill in interpersonal perception, listen better, have greater self-reported and perceived empathy, offer more expressions of respect or praise, and put a greater focus on prevention [1–11]. Female physicians have more humanistic and patient-centered attitudes about patient care [12], and patients generally desire a patient-centered style [13–15].

Yet, female physicians do not receive much more—usually, no more—satisfaction from patients [16]. This lack of a difference suggests a bias when considered against the research showing that female physicians better fulfill the goals of patient-centered medicine.

Most of the research relating physicians' gender to their behavior and to patient satisfaction has been conducted in primary care [1,16]. Our first goal was to compare the patient-centered behaviors of male and female physicians in three settings in one general teaching hospital—outpatient, inpatient, and emergency room.

The second goal was to compare patients' satisfaction between male and female physicians within each practice setting. In the only study we know of from an emergency room, female physicians received significantly higher satisfaction ratings from patients than male physicians did, but only among female patients [17]. That study could not ascertain whether this effect was due to the lens through which patients viewed physicians or to behavioral differences between male and female physicians. The present study allowed an investigation of this question.

The third goal was to test a hypothesis about gender bias in patients' satisfaction that has been suggested in previous research.

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The meta-analysis finding only a negligible tendency for patients to be more satisfied with female than male physicians [16] suggests such a bias because it does not fit logically with female physicians' behavior patterns, the fact that patients generally want patient-centeredness, and the fact that they report more satisfaction when the physician is more patient-centered [18]. However, since most studies have a preponderance of male physicians, the latter result may obscure a different pattern for female physicians.

Indeed, two studies have found that the correlation of either competence or satisfaction with objectively measured patient-centeredness was stronger for male than female providers. Among medical students interacting with a standardized patient [19], for female medical students there was no correlation between patient-centeredness as scored by trained coders [20] and analog patients' competence ratings, whereas there was a positive correlation for male medical students. In a laboratory experiment using scripted high and low patient-centered behavior enacted by actor-physicians [21], patient-centeredness strongly predicted analog patients' satisfaction with male physicians, but it predicted satisfaction with female physicians either not at all or more weakly.

These results clearly suggest a bias in patients' evaluations. This could result from the overlap between the behaviors and skills considered patient-centered and the behavior and skills of women in general, which are well studied, ubiquitous, and reflected in strong societal stereotypes. According to research in nonclinical populations women are, and are stereotyped to be, more empathic, more warm and personable, more interested in relationships, more status leveling, more comfortable with emotional self-disclosure, and more skilled in nonverbal communication than men [22–29]. All of these expected and real female traits have their counterpart in the collection of attributes called patient-centeredness [30].

Because of this overlap, high patient-centered behavior in female physicians may be discounted as a marker for being a good physician, because such behavior is viewed simply as expected, even exemplary, female behavior but not necessarily a manifestation of high quality medical performance. Such behavior may be appreciated, while not adding to the patient's appraisal of the physician as a fine professional. On the other hand, high patient-centeredness by a male physician is not part of the male stereotype and cannot be assimilated to a male schema. Instead, it is assimilated to a "good doctor schema" and the male physician gets a disproportionate boost in the patient's eyes. Thus, patients may have a bias when evaluating the professional performance of physicians, with the result that a significant aspect of female physicians' performance is not recognized as professionally relevant. This kind of subtle bias has also been seen in other organizational settings, where job-relevant "female" behaviors by women are not credited as contributing to high job performance when they should be [31–33].

Both of the studies described above showing stronger correlations between patient-centeredness and evaluations of male clinicians [19,21] were artificial in various ways. The first study was on medical students interacting with a standardized patient in a videotaped clinical examination, and the competence ratings were made by undergraduate analog patients. The second study used videos in which male and female actors played physicians and the satisfaction data were again collected from undergraduate analog patients. Although the analog patient method has received validational support [34], research must be conducted with practicing physicians and real patients.

In light of the foregoing research, we would predict greater patient-centeredness in female than male physicians, though the comparison of such differences may vary across the different settings. We also would expect that satisfaction with female physicians would not be appreciably different from satisfaction with male physicians, at least in the outpatient setting where most existing research has been done. Finally, in keeping with the experimental research relating patient-centeredness to satisfaction, we would expect this correlation to be stronger for male than female physicians.

2. Methods

2.1. Participants and procedure

The data stem from a randomized controlled trial [35,36]. It consisted of 497 videotaped physician–patient interactions in the outpatient, inpatient, and emergency room settings of a general teaching hospital in Lørenskog, Norway, with 71 non-psychiatrist physicians who each saw between 1 and 8 patients. Twenty-one physicians were observed in more than one setting. The participation rate of the physicians was 69% (71 of 103 invited). After the interaction, patients filled in a questionnaire evaluating their interaction with the physician. All videos were included, as there was no significant difference in change of behavior between female and male physicians following the intervention [35].

Physicians were informed that they were due for observation shortly before filming and could not adjust their patient lists. Patients were recruited consecutively. Of 553 eligible patients, 519 (94%) consented [37]. Technical difficulties with videotapes left 497 encounters for analyses. Literate children completed questionnaires themselves, assisted by their parents when needed.

2.2. Encounters

Table 1 provides descriptive information on the physicians and patients, as well as visit characteristics.

2.3. Measures

2.3.1. Roter Interaction Coding System

Two hundred seven of the videotapes were rated by trained and reliable coders using the Global Ratings from the Roter Interaction Coding System (RIAS), a widely used descriptive system for provider–patient interaction [38]. After watching the interaction, coders made global ratings of the physician on the following scales: interested, friendly, engaged, sympathetic, dominant, anxious, and angry. The first five are relevant to the patient-centered concept (dominant in an inverse relation) and are analyzed in the present article. Anxious is not relevant to patient-centeredness, while the rating of anger, though relevant to patient-centeredness (in an inverse relation), had too limited variance to be useful. Examination of the correlations among the five patient-centered ratings

Table 1
Physician and patient characteristics.

	Physicians ($N = 71$)	Patients ($N = 497$)
Age, mean (*SD*)	40.3 (8.6)	46.3 (24.6)
Sex	Females 30 (42%), males 41 (58%)	Females 256 (52%), males 241 (48%)
Specialty	Internal medicine 25 (35%) Surgical disciplines 18 (26%) Anesthesiology 5 (7%) Neurology 8 (11%) Pediatrics 8 (11%) Gynecology 7 (10%)	
Position	Residents 33 (47%) Consultants 38 (53%)	
Setting[a]	56 26 13	Outpatient 375 (76%) Inpatient 81 (16%) Emergency room 41 (8%)

[a] Twenty-one physicians were observed in more than one setting.