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How female and male physicians' communication is perceived differently

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ABSTRACT

Objective: This paper is based on a 2017 Baltimore International Conference on Communication in Healthcare (ICCH) plenary presentation by the first author and addresses how female and male physicians' communication is perceived and evaluated differently. Female physicians use patient-centered communication which is the interaction style clearly preferred by patients. Logically, patients should be much more satisfied with female than male physicians. However, research shows that this is not the case.

Methods: This article provides an overview on how female and male physician communication is evaluated and perceived differently by patients and discusses whether and how gender stereotypes can explain these differences in perception and evaluation.

Results: Male physicians obtain good patient outcomes when verbally expressing patient-centeredness while female physicians have patients who report better outcomes when they adapt their nonverbal communication to the different needs of their patients.

Conclusion: The analysis reveals that existing empirical findings cannot simply be explained by the adherence or not to gender stereotypes. Female physicians do not always get credit for showing gender role congruent behavior. All in all, female and male physicians do not obtain credit for the same behaviors.

Practice Implications: Physician communication training might put different accents for female and male physicians.

1. Introduction

When people hear the word "doctor", they are more likely to think about a male than a female physician [1]. This is the result of gender stereotypes which affect what we expect from others, how we perceive and evaluate them, and how we behave towards them [2]. In the present article, we discuss how gender stereotypes affect physicians. This paper is based on a 2017 Baltimore International Conference on Communication in Healthcare (ICCH) plenary presentation by the first author. We provide a review of existing empirical findings and demonstrate how female and male physicians are perceived differently, even if they show the same behavior. Theoretically, we ground our analyses on expectation confirmation theory [3], role congruity theory [2], and the lack of fit model [4].

It is important to understand the effects of gender stereotypes on physicians in more detail because they can affect consultation outcomes. In fact, there is a paradox to be tackled which is the following: Patients prefer patient-centered communication from their physicians [5]. Research shows clearly, that female physicians show more patient-centered communication [6]: They engage in more partnership building and empathy and they express more encouragement and have longer visits, to mention just a few aspects. Moreover, older patients hospitalized with a medical condition and treated by general internists had lower mortality and lower readmission rate when treated by a female physician [7]. This study looked at over 1.5 million hospitalizations. So clearly, being treated by a female physician should on average be advantageous for patients and patients should be much more satisfied after having seen a female instead of a male physician. Expectation confirmation theory posits that when our social interaction partners show the behavior we expect from them, we are more satisfied with the interaction [3]. However, patients are only a little bit more satisfied with female physicians compared to male physicians [8]. Why? It seems that patients measure their female and male physicians with different scales. They most likely

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have different expectations about how a female and a male physician should behave and these expectations are based on gender stereotypes.

1.1. When patients expect different behaviors from their female and male physicians

When investigating which physician behavior is related to more patient satisfaction and whether it is the same for female and male physicians, results show clear differences. We conducted a study [9] in which analogue patients watched 2-min videos of eight general practitioners (four male and four female) in their private practice interacting with one of their patients. Analogue patients indicated how satisfied they would have been with the physician after each video. The physician videos were coded on several nonverbal behaviors (e.g., speaking time, eye contact, interpersonal distance, self-touch, loudness of voice, smiling, gesturing, attractiveness, medical atmosphere of the consultation room). We focused on nonverbal behavior because in the physician-patient interaction research, there is a heavy focus on the verbal communication and a lack of attention to physician nonverbal behavior [10]. We then correlated these behaviors with the satisfaction ratings, separately for female and male physicians.

Results showed many significant correlations for each gender separately, but, most interestingly, there were significant differences in how several physician behaviors were related to patient satisfaction in female as compared to male physicians. Patients were more satisfied with female physicians who sat *closer* to their patients whereas patient satisfaction with male physicians was higher when they sat *farther away* from their patients. Patients were more satisfied with female physicians who spent *less* time reading the medical record during the consultation whereas patients were more satisfied with male physicians who spent *more* time reading the patient's medical record. Also, female physicians had more satisfied patients when showing *less* expansive body postures, using *softer* voice, *more* self-touch, and when they had consultation rooms that conveyed a *more* medical atmosphere. For male physicians, it was the opposite: Their patients were more satisfied when they showed *more* expansive body postures, spoke *louder*, self-touched *less* and had *less* medically looking consultation rooms.

Except for the medical atmosphere in the consultation room, the behaviors linked to more satisfaction in female physicians convey more interpersonal orientation which corresponds to the gender stereotypical behaviors expected from women in general [11,12]. These results are in line with role congruity theory [2] stating that when the expectations about a female physician correspond to the behavior shown by that physician, people evaluate her more positively, thus report more satisfaction.

The result concerning the medically looking consultation room is interesting because it points towards female physicians needing to assert their medical competence via signals in the environment (e.g., medical examination gear in plain view, sterile atmosphere) whereas male physicians gain in satisfaction when they convey a more approachable and less medical atmosphere (e.g., plants or personal belongings such as pictures or furniture that has no medical function). If patients expect from a physician to be medically competent and if the stereotype says that women are less competent than men in general [13], female physicians need to fill this lack of fit by displaying information about their medical competence (e.g., medical gear in display, office reduced to the medical equipment with a lack of personal paraphernalia) to be evaluated positively by their patients. For female physicians, this is in line with the lack of fit model [4] stating that if there is a lack of fit between the attributes of a job and the attributes of the job holder, the job holder will be evaluated negatively as a consequence. Only when the attributes of the job and the job holder are aligned, will the evaluation be positive.

Other research in the physician-patient interaction domain confirms that when physicians adhere to a gender stereotype congruent behavior, they are evaluated more positively. Female physicians were perceived in a more positive way when they offered an affective apology for a mistake (e.g., acknowledging that what happened must be upsetting to the patient) whereas male physicians were perceived in a more positive way when they offered a cognitive apology (e.g., talking about the steps that have been put in place to avoid the mistake in the future) [14]. Also, gender stereotype incongruent apologies were related to intentions to take legal actions because the incongruent apologies were perceived in a more negative way, because of lack of fit.

1.2. When female physicians are under scrutiny

Some research suggests that women are held to gender stereotypical standards more so than men. For instance, asking analogue patients to infer dominance from the above-mentioned videotaped interactions of female and male physicians [9] showed that female physicians were perceived as particularly dominant when they showed verbal and nonverbal behavior typically connoted with dominance (e.g., loud voice, more expansive posture) [15]. When male physicians showed these behaviors, they were less likely to be perceived as dominant. Women doctors might be under more scrutiny by their patients and maybe particularly so when they show behavior that is not appreciated by patients, such as dominance [16].

Another study on physicians' expressed uncertainty yielded results in line with this reasoning. Physicians expressing uncertainty is considered an element of patient-centered communication [17] but empirical evidence shows either a negative effect on patient satisfaction [18] or no effect [19]. To the extent that gender stereotypes let us see women as less competent, expressing uncertainty should hurt them more than it should hurt men. We set out to test this assumption in a study [20] in which patients of general practitioners reported their satisfaction after the consultation. The physician was filmed during the consultation and we then coded expressed uncertainty based on the videotapes. Results showed that although there was no difference in expressed uncertainty between female and male physicians, male patients were less satisfied with female physicians who expressed uncertainty. If indeed lower medical performance is expected from female physicians and they express uncertainty, this confirms the stereotype. Because the stereotype is negative, the evaluation is negative as well. For male physicians, expressing uncertainty did not affect patient satisfaction. So here again, female physicians seem to be more scrutinized by their patients. What happens if we turn to clearly positive behavior, do female physicians get the same scrutiny and thus credit for their gender stereotype congruent behavior?

1.3. When female physicians do not get credit

If patients harbor different expectations in terms of how a physician should behave depending on the gender of the physician, then the exact same behavior of a physician should elicit different reactions in patients, depending on whether the physician is a woman or a man. Research shows indeed that when female and male physicians show the same behavior, they are not evaluated in the same way, possibly because patients harbor different expectations about how a female and a male physician ought to behave. In a study [21] in which analogue patients watched either a female or a male physician, played by actors, communicating in either a more or a less patient-centered way, the analogue patients evaluated the

physician on several aspects (e.g., satisfaction, trust, caring) which were aggregated into a positive patient outcome measure. The physician communication was scripted and thus the same for the female and the male physician. The patient-centered video featured a physician who was emotionally responsive by expressing empathy and concern and putting an effort into partnership building (e.g., asking for patient opinion and open-ended questions, providing psychosocial information and counseling). Research shows that patients prefer the patient-centered communication [5] and should therefore report more positive outcomes for the patient-centered videos. Results show, however, that this was the case only for male physicians. When faced with a female physician, analogue patients did not report better outcomes with a high patient-centered communication style than with a low patient-centered one. It seems that male physicians are given more credit for using the "good" communication style but not female physicians. For female physicians, the patient-centered communication seems to be expected, thus normal and does, as a consequence, not deserve extra credit. Similar results were found in other studies, showing a positive correlation between patient satisfaction and physician patient-centered communication style for male physicians more so than for female physicians [22]. In the same vein, male medical students showing more patient-centered communication were perceived as more competent than less patient-centered male students but no such relation emerged for female medical students [23]. Because a more patient-centered communication style is a sign of relationship-orientation which is stereotypically associated more with women, female physicians showing this communication are simply behaving in a female fashion. As Roter and Hall [24, p. 274] put it: "Consequently, a patient-centered male doctor is seen as a good doctor, while a patient-centered female doctor is seen merely as a good woman". Here, the lack of fit model [4] does not explain the results. Male physicians who behave in an unexpected way - who show lack of fit because patient-centered communication would be expected less from a male than a female physician – are evaluated more positively. And, female physicians who do what is expected from them are not more positively evaluated. It seems that female physicians are scrutinized more for negative behavior and then more negatively evaluated whereas for positive behavior, they do not get equal scrutiny and thus miss out on the credit.

But do patients actually perceive that female physicians show patient-centered care or do patients not even perceive that female physicians show patient-centered communication? Maybe, because patient-centered communication is expected from female physicians, it does not stick out as such and patients do not even perceive it as patient-centered; it is just "normal" communication. There is evidence that indeed the latter could be the case. In a study [25] looking at how patient sexism affected the link between perceived patient-centeredness and patient satisfaction with female and male physicians, we found that male patients who are high in hostile sexism were the ones who were less satisfied when a female physician showed patient-centered behavior. No effects emerged for female patients and for male physicians. This points to the possibility that female physicians' patient-centered behavior is not perceived as such (at least not by hostile sexist male patients).

1.4. When physicians adapt their behavior to different expectations of their patients

One aspect of patient-centered care is to be able to change one's communication style and to adapt it to different patients [26,27]. Patients differ in their expectations about how a physician should communicate with them [28]. Patient-centered communication implies the use of different communication styles for patients with different expectations or needs. For physicians, in order to be able to assess each individual patient's needs or expectations, they need interpersonal accuracy. Interpersonal accuracy is defined as the skill to correctly infer others' states and traits [29]. Once the physicians have accurately detected what each of their patients expects, they need to be able to adapt their behavior to each patient and thus need an array of different behaviors at their disposal to draw from. There is evidence suggesting that female physicians might adapt more towards their patients than male physicians: Female Japanese physicians changed their behavior according to the gender of their patient whereas male physicians did not [30]. Expectation Confirmation Theory [3] would predict that patient satisfaction increases when the physician's actual communication style matches the expected style. Interpersonal accuracy is thus an antecedent for behavioral adaptability and its consequences would be better patient outcomes.

Interpersonal accuracy has shown to be important in the context of the physician patient interaction [31]. It is related to constructs important in that realm such as empathy, prosocial behavior and it is related to better patient satisfaction, appointment-keeping adherence, and learning of physician-conveyed information. Interpersonal accuracy is best measured with so-called performance tests in which images or short videos are presented and the test-taker needs to infer the emotion, motivation, personality, or type of social relationship of the people in the video. These inferences are then compared to a gold standard and scored for correctness [32]. There are two tests available for assessing interpersonal accuracy in the domain of physician-patient interaction, the TAPPA [33] and the PECT [34].

In a study [35] investigating general practitioners and for each practitioner four of his or her patients, the links between physician interpersonal accuracy, physician behavioral adaptability, and patient outcomes were studied. Physicians took an interpersonal accuracy test (an emotion recognition test) and their verbal and nonverbal behavior towards the four patients was coded. Each patient's preference for a patient-centered communication was assessed prior to the consultation. The researchers defined the behaviors indicative of patient-centeredness and obtained a behavioral adaptability measure defined as the extent to which a physician showed verbal and nonverbal patient-centered behavior towards a patient in line with what the patient indicated as his or her preferred degree of patient-centered behavior from the physician. As an example, a behaviorally adaptive physician would be one who when confronted with a patient wanting a high level of patient-centeredness, would make much eye contact, smile, lean forward, talk about the patient's emotions, or ask open questions. At the same time, this same physician would show less of these behaviors when face-to-face with a patient who wanted a low level of patient-centeredness. Behavioral adaptability was thus assessed as a correlation between how much patient-centeredness each patient prefers and how much patient-centeredness a given physician showed towards each patient (in terms of a composite of verbal and nonverbal cues of patient-centeredness). Patients reported their satisfaction with and trust in the physician after the consultation.

Results showed that although there was no difference in behavioral adaptability for female and male physicians, for female physicians, interpersonal accuracy was related to more behavioral adaptability on the verbal and nonverbal level. Moreover, female physicians who showed nonverbal behavioral adaptability had patients who reported better consultation outcomes and this result held above and beyond what patient-centered verbal and nonverbal communication could explain. The results only emerged for nonverbal behavioral adaptability, maybe because the verbal channel is more "scripted" and offers therefore less opportunity to adapt. Nonverbal behavior of the physician is studied much less

than verbal behavior but this research underscores the importance of the nonverbal aspect [10], especially for female physicians.

Why patients were not more satisfied with male physician who adapted their behavior is unclear and there is other research that found that male and female physicians who adapt their behavior (with respect to dominance) had more satisfied patients [27]. For female physicians, being able to correctly assess others is related to them showing adaptive behavioral change across different patients, resulting in more satisfied patients. It is unclear whether patients would expect more behavioral adaptability from their female as compared to their male physicians and whether behavioral adaptability would thus be a stereotype about women. This research shows that sometimes female physicians do get credit for "good" physician behavior. It seems that this credit is not for a specific behavior but for the ability of being able to adapt to different social interaction partners.

2. Conclusions and practice implications

2.1. Conclusions

Neither expectation states theory [3], nor role congruity theory [2] nor the lack of fit model [4] can explain all of the results reported here. Sometimes when female physicians show positive behavior that is in line with the gender stereotype (e.g., sitting closer to the patient, less looking at the patient chart), their patients report more positive outcomes. Accordingly, when female physicians show rather negative behavior that either corresponds to the gender stereotype (e.g., expressed uncertainty) or that does not correspond to the gender stereotype (e.g., dominance behavior), their patients are less satisfied. So, the nature of the behavior seems to play a role because patients are not just more satisfied with female physicians who adhere to the gender stereotype. It might be more the valence of the behavior that drives the effect: Female physicians get credit for positive behavior and they take the blame for negative behavior. However, that is not a consistent pattern either. There are results suggesting that, sometimes, female physicians do not have more satisfied patients even if they behave in a positive way and in adherence with the gender stereotype (e.g., show patient-centered communication). What seems to earn female physicians satisfied patients is when the women doctors adapt their behaviors towards the needs and expectations of the patients, at least on the nonverbal level.

For male physicians, the picture is equally unclear. Overall, it seems that their behavior is much less related to patient outcomes [38]. Nevertheless, they seem to have particularly satisfied patients when they surpass the expectations of their patients (e.g., show patient-centered behavior). In sum, female and male physicians sometimes do not get credit for "good" physician behavior and female and male physicians might have to do different things to have patients who are satisfied with the consultation. This means that physician training might also have to develop different competencies. For female physicians, it might be beneficial to train behavioral adaptability, meaning to develop their skills in correctly assessing their patients – which is a skill that is trainable [39] - and then to acquire a repertoire of corresponding nonverbal behaviors. To date, we do not know whether behavioral adaptability is trainable. For male physicians, it might be an advantage to train verbal patient-centered communication.

In the studies described, expectations of the patients were inferred and gender affected the outcome measure in a relatively indirect way, maybe even implicitly [36]. When patients are asked more explicitly what they expect from female and male physicians, they have a very positive view of the female physician [37]. Patients rated the female physician as having better technical skills, better able to explain and talk about emotional aspects and patients expressed having more faith in the female than the male physician and intended to comply more with the female physicians' treatment recommendations. These attitudes are, however, not reflected in more implicit assessments of patient outcomes as was the case in the presented studies. The theories explaining gender stereotypes and their effects might fit more explicit assessments and perceptions. For more implicit measures and particularly behaviorally based measures (verbal and nonverbal behavior in real social interactions), the theories might need to be refined.

Female physicians are not evaluated more negatively than male physicians, but the behaviors used to assess female and male doctors differ, meaning that the same behavior does not mean the same thing for patients when it comes from a female or a male physician. This goes to show that perceivers use different information processing strategies when assessing female and male physicians. These are sometimes in line with existing gender stereotypes and sometimes not.

More importantly, this review suggests that when physicians want to increase patient satisfaction, female and male physicians will have to do very different things. Future research might want to test this directly, meaning assess baseline satisfaction of patients for specific doctors, train the female and male doctors differently (e.g., male doctors in verbal patient-centeredness and female doctors in nonverbal behavioral adaptability) and see whether patient satisfaction increases.

It is possible that the results reported here might differ for different specializations. In a study by Hall and Gulbrandsen [22], there were gender differences with respect to patient-centeredness and with respect patient satisfaction depending on whether it was inpatient, outpatient, or emergency treatment. There currently are not enough studies in different specializations available to make meaningful comparisons. Moreover, characteristics of the patient might also play a role, such as age and gender. It is, however, astonishing that in many of the here cited studies, only the physician gender effects were significant and not the patient gender effects.

2.2. Practice implications

The conclusion of the studies reported in this article begs the question of whether physician training should be tailored to the gender-stereotypical expectations that patients harbor towards their physicians. The answer is clearly no because as we have seen, sometimes patient outcomes are better when the expectations are met and sometimes the outcomes are better when the expectations are not met. Nevertheless, it seems that if female physicians can avoid behaviors that are perceived by patients as negative (regardless of whether they are in line with the gender stereotype or not), they might be better off in terms of how the patients perceive them. Male physicians seem to be freer to show such negative behavior without it having such an impact on patient outcomes. Also, female physicians might focus more on their nonverbal behavior in the medical interaction. When they adhere to the gender stereotype in terms of nonverbal behavior or when they adapt their nonverbal behavior to their different patients, their patients report better outcomes. What should be done then? Training of patient-centered communication remains important especially the vrebal content of patient-centere communication is important for male physicians whereas the aspect of adapting one's behavior to each patient is important for female physicians. Moreover, training might focus more on nonverbal behavior and that might be particularly beneficial for female physicians.

More generally, these findings also bear questions regarding remuneration and advancement of female physicians' carriers. To the extent that patient satisfaction ratings are elements taken into account for evaluating female physicians, the fact that female

doctors often do not get credit for showing patient-centered behavior might translate into less appreciation in their professional careers. Gatekeepers in the healthcare system thus need to be made aware of the differences in how female and male physicians are perceived and evaluated to prevent such far-reaching consequences.

Conflict of interest

None of the authors has a conflict of interest.

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