Physician behavioral adaptability: A model to outstrip a "one size fits all" approach

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Abstract

Objective: Based on a literature review, we propose a model of physician behavioral adaptability (PBA) with the goal of inspiring new research. PBA means that the physician adapts his or her behavior according to patients' different preferences. The PBA model shows how physicians infer patients' preferences and adapt their interaction behavior from one patient to the other. We claim that patients will benefit from better outcomes if their physicians show behavioral adaptability rather than a "one size fits all" approach.

Method: This literature review is based on a literature search of the PsycINFO® and MEDLINE® databases.

Results: The literature review and first results stemming from the authors' research support the validity and viability of parts of the PBA model. There is evidence suggesting that physicians are able to show behavioral flexibility when interacting with their different patients, that a match between patients' preferences and physician behavior is related to better consultation outcomes, and that physician behavioral adaptability is related to better consultation outcomes.

Practice Implications: Training of physicians' behavioral flexibility and their ability to infer patients' preferences can facilitate physician behavioral adaptability and positive patient outcomes.

Keywords: physician-patient communication; patient-centeredness; physician behavioral adaptability; patient's preferences.

1 Introduction

Researchers in the field of physician-patient communication have invested considerable time and effort in the quest for best practices for physicians. Many agree that patient-centered communication is the best communication approach. Patient-centered communication entails the physician adopts the patient's perspective, addresses emotional aspects and shows empathy, as well as taking shared decisions and establishing a partnership in the physician-patient relationship [1,2]. Physicians who adopt such a patient-centered interaction style have patients with better subjective and objective medical consultation outcomes (e.g., satisfaction, trust, adherence, health improvement [3,4,5,6]). However, the findings are not unequivocal and some studies show contradictory or inconsistent results with respect to the benefit of patient-centered physician communication for patient outcomes [7,8,9]. Despite this not completely clear situation, best practice guidelines and communication trainings for physicians typically imply a patient-centered approach understood as a series of well-defined verbal and nonverbal behaviors for the physician to adopt, such as "eliciting and validating the patient's emotions", "avoiding interruptions", "forward lean to indicate attentiveness", or "maintaining eye contact" [10, p. 4].

Such best practice imperatives come with the disadvantage that they ignore a core aspect of the essence of patient-centeredness which is taking into account that each patient prefers a different interaction style. Patient-centeredness implies the notion of taking the perspective of each patient and - more importantly and often overlooked – of adapting the interaction behavior to each patient individually [11]. Indeed, not every patient benefits from a patient-centered physician communication style. Research shows that the relation between physicians' patient-centeredness and patients' outcomes depends on patients' characteristics. For instance, moderately anxious patients were less anxious when facing physician showing more patient-centeredness, but that more anxious patients' level of anxiety increased when

facing the same kind of physicians [12]. Similarly, compared to less anxious patients, more anxious patients showed more tolerance for physicians perceived as more angry [13] or dominating [14]. So there seems to be no "one size fits all" in physician-patient communication confirming Epstein and Street's claim that "One key defining element of effective patient-centered communication is the clinician's ability to monitor and *consciously* adapt communication to meet the patient's needs" [10, p. 7].

We thus posit that in order to be patient-centered, physicians should flexibly change their behavior from one patient to the other in order to meet each patient's particular preference in terms of physician interaction style. For instance, if a physician faces a patient who prefers a more paternalistic interaction style, he or she should be able to take the lead of the consultation with this particular patient and display more dominance behaviors like speaking more than the patient and setting the agenda, to mention just some examples. In another consultation, the same physician might face a patient who prefers more partnership in the physician-patient interaction and the physician should then be able to exhibit a more egalitarian interaction style such as making sure that the patient obtains equal amounts of speaking time and including the patient in the treatment decision-making process. We coin the term Physician Behavioral Adaptability (PBA) to label a physician's ability to flexibly change his or her verbal and nonverbal behavior when facing different patients and to adapt his or her behavior according to the patients' different preferences.

The idea that PBA is an important factor of patient-centered care is not new, of course, and the inclusion of it in existing definitions and descriptions of patient-centeredness testifies to this. What is missing is more complex and comprehensive understanding of the mechanism of PBA and the empirical research that accompanies it. To date, there is only scarce research focusing on how physicians change and adapt their communication style from one patient to the other and how this affects patient outcomes. In the current paper, we develop a model of

Physician Behavioral Adaptability (PBA model) that is based on a literature review and on initial empirical data. The PBA model is useful for the understanding of the underlying mechanisms of behavioral adaptability and to guide future for research in this domain. We make the argument that PBA is an important factor of patient-centered communication that has so far been mostly overlooked.

1.1 Physician Behavioral Adaptability (PBA)

In order to show behavioral adaptability, the physician needs to correctly infer the patients' preferences and then attune his or her verbal and nonverbal communication to those preferences. We will look at this process in more detail in the PBA model (*Figure 1*): During the medical encounter, the physician draws inferences about the patient's preferences based on the verbal and nonverbal behavior and the appearance cues emitted by the patient when interacting with the physician. Whether those inferences are correct depends on the physician's interpersonal accuracy defined as the ability to correctly assess others' traits and states based on their behaviors and appearance [15]. If the physician sees the patient for the first time, this is all the information available to the physician for inferring the patient's preferences. If the physician knows the patient or has patient information stemming from a referral or a colleague, this knowledge influences the inferred patient preferences on top of the actual verbal, nonverbal, and appearance cues the patient exhibits during the medical visit.

Based on the inferences, the physician choses the behavior he or she wants to exhibit. To display behaviors that will correspond to the patient's preference, the physician has to be able and willing to show the communication behavior that fits those preferences. Given that different patients have different preferences, the physician needs to master an array of different communication behaviors; he or she needs to possess what we call *behavioral flexibility*.

The patient perceives the physician's behavior and compares it to his or her actual preferences. To the extent that the physician's behavior is in line with the patient's actual preferences, the physician shows adaptive behavior.

Note that patient preferences are also influenced by the perception of the physician's behavior. Indeed, many theories and models point to the mutual influence of interactional partners' behaviors (see for example the Communication Accommodation Theory [16] or the Ecological Model of Communication [17]). In the medical interaction, patient's behavior influences the physician and the physician's behavior influences the patient as well. The loop construction of our model acknowledges this mutual influence.

As shown in *Figure 1*, we posit that PBA will have positive outcomes for the patients. Expectancy Violation Theory (EVT [18]) theorizes that interaction outcomes are a consequence of expectations and preferences. Interestingly, the authors posit that expectations and preferences are two different concepts impacting on the outcomes at different stages of the assessment of the interaction. EVT posits that people naturally form expectations about their interaction partner's behaviors based on context, relationship, and communicator characteristics. If those expectations are met, the interaction is evaluated in a positive way. If the interaction partner's behaviors violate the expectations of a person but meet his or her preferences, the outcomes are evaluated as even more positive. If the expectations are violated and the preferences are not met, the outcomes are evaluated in a negative way [19]. We claim that PBA will lead to better consultation outcomes, because meeting patient's preferences will lead to positive interaction outcomes despite potential expectations violation.

2 Method

The main focus of this paper is to develop a model of physician behavioral adaptability that is based in relevant existing literature. To this end, the PsycINFO® and MEDLINE® databases were searched for published articles including the words "correspondence",

"congruence", "matching", "tailoring", or "adaptation" in combination with "patient and physician" in their titles or keywords. Among the 1611 articles found, we retained the empirical studies related to PBA. In the end, we choose to exclude the research related to correspondence between patients' and physicians' characteristics, beliefs, or behaviors. Indeed, correspondence studies are not strictly speaking studies of PBA, because they do not look at physician behavior in relation to patient preferences. Correspondence studies investigate how consultation outcomes are affected when patients and physicians share certain characteristics (e.g., gender, race), beliefs, or behaviors (see for example [20,21,22]).

Given the definition of PBA, we will focus on presenting and discussing studies that have addressed how physician behavior that matches patient preferences is related to better consultation outcomes. We will also examine the literature on physicians' ability to change their behavior across patients (behavioral flexibility) and we will discuss first empirical evidence for the positive effect of PBA exhibited across different patients and indicate future directions of research in this field.

3 Results

3.1 Physician behavior matched to patient preferences

Some studies have addressed patient outcomes when the physician's behavior matches the patient's preferences in terms of physician interaction style. Concerning patients' preferences for information during the medical visit, Kiesler and Auerbach's literature review [23] shows that although patients were on average dissatisfied with the amount of information given by their physicians, the better the match between patients' preferences for information giving and physicians' actual information provision, the better the patients' outcomes (physiological measures or rating of patient's behavior like for example adjustment). Further studies corroborate these results [24,25]. Notably Cvengros and colleagues [26] confirmed that diabetic patients have better diabetic control when physician behavior matches their

preference for information sharing, shared decision-making, behavioral involvement, and self-management in health care. However, tailoring the information provision to the preferences of the patient is not always related to better patient outcomes. For instance, radiation oncologists adapting the amount of information they provided to what the patient indicated as his or her information preferences, did not affect patient outcomes[27].

Patients not only have preferences with respect to how much information they want, they also have preferences for certain physician interaction styles. To illustrate, physicians' participatory behaviors and caring behaviors have been shown to be linked to better satisfaction if they match the patients' preferences for such interaction behavior [26] and patients are more satisfied with their physicians when there is congruence between the actual communication style a physician adopts and the physician communication style desired by the patient [2,28]. These results suggest that patients have better consultation outcomes when physicians display behaviors adapted to their patients' preferences for certain physician communication styles.

The studies reviewed so far did not test the physicians' ability to change their behavior between two different patients with different preferences. In order to match their behaviors to the patients' different preferences, physicians need to be able to flexibly adopt different communication styles toward different patients.

3.2 Physician behavioral flexibility

An important factor of what we understand by PBA is that the physician changes his or her behavior when interacting with patients with different preferences (physician behavioral flexibility). Research shows that physicians typically are able to display different behaviors towards different patients. For instance, physicians display different interaction styles according to the gender of the patient they are facing. Physicians exhibit a more egalitarian interaction style and are more emotionally engaged toward female patient as compared as

toward male patients [29,30,31]. One could say that they adapt their communication style to the stereotypical beliefs about women and men. Although this is not behavioral adaptability, it shows behavioral flexibility of the physicians.

One interesting study [32] explored how physicians vary their patient-centered behavior according to the characteristics of the patients. The researchers used intra-class correlation scores (ICC) in order to measure the flexibility/rigidity of each physician's facilitating (e.g. encouragements, questions, or summary) and inhibiting behaviors (e.g. criticism, interruptions, or changing the subject). The ICCs ranged from 0.18 to 0.20 meaning that the physicians were not applying the same behaviors to every patient while at the same time showing a certain consistency across the different consultations [32].

This study illustrates that physicians are able to change their behavior according to their different patients. However, being able to vary one's behavior is necessary, but not sufficient for showing behavioral adaptability. Indeed, PBA implies that the variations of the behavior fit the patient preferences. Whether the individual differences in changing the interaction behavior according to the patient are really adaptive (i.e., corresponds to the preferences of the patient) and whether they are related to better patient outcomes has not yet been sufficiently tested.

3.3 Empirical evidence for the positive effect of PBA

There is nevertheless initial evidence supporting the PBA model. We investigated 32 general practitioners who were videotaped during 2 consultations, each with a different patient [33]. Physicians' nonverbal dominance behaviors (e.g. speaking time or loudness of voice) were coded based on the videotaped consultations and patients indicated how much they prefer the physician to use a paternalistic communication style. Patients also filled in a questionnaire about consultation outcomes (patients' evaluation of satisfaction, trust in the physician and physician's competences). We then tested the relation between consultation

outcomes and the degree to which a physician showed dominance behaviors to a patient prefering more paternalism as compared to a patient prefering less paternalism. To do so, we computed behavioral adaptability scores for each behavior coded. Those scores were the difference between the percentage of dominance behavior presented when interacting with the patient prefering more paternalism minus the percentage of the same behavior presented when with the patient prefering less paternalism. Results show that the more dominance behavior the physicians displayed toward their patients preferring more paternalism as compared to their patient preferring less paternalism (thus the more the physician shows behavioral adaptability), the more positive the consultation outcomes were [33]. This constitutes first evidence that in fact, PBA can play an important role for patients.

4 Conclusions

The here proposed PBA model awaits further empirical testing. While we know that physicians differ in how variable they are in their communication styles across different patients, we do not know whether this variability consistently affects patient outcomes in a positive way as suggested by our model. Although we present initial support for such a link, much work needs to be done. As we mentioned earlier, physician adapting the amount of information provided to patients in an oncology setting was not related to better consultation outcomes [27]. The oncology setting is very different from the general practitioner setting. Maybe the life-threatening context of oncology make patients under- or overestimate the amount of information they would like which might explain why there was no link with patient satisfaction. The discrepant findings also raise another important question: Adaptive with respect to what? Depending on whether we investigate physician adaptability with respect to the amount (and/or complexity) of the information given or with respect to his or her nonverbal behavior (as in the study cited in the previous section) might make a difference.

Nonverbal behavior typically is less under conscious control than verbal behavior and maybe our model works better for nonverbal behavior adaptability.

Given that being able to accurately infer the patients' preferences is important for PBA (*Figure 1*), future research might want to include a measure of physician interpersonal accuracy along with behavioral adaptability. Interpersonal accuracy has been shown to positively affect patient outcomes [34,35]. So maybe these positive outcomes can be explained by the fact that the ability to correctly reading others enables the physician to adapt his or her behavior according to the different patients' preferences. In other words, it is possible that PBA is a mediator of the link between the physician's interpersonal accuracy and patient outcomes.

5 Practice implications

The focus on the flexible use of different communication styles and the necessity to correctly assess patient's preferences, both inherent elements of PBA, have concrete implications for physician training. To facilitate PBA, the medical curriculum might want to include communication flexibility rather than training of a strict set of behaviors to apply with every patient. In order to show behavioral adaptability, physicians should master a wide range of different interaction styles to apply according to the particular patient they are facing. They might benefit from the ability to adopt a more paternalistic role when facing a patient who prefers passivity and a more partnership-oriented communication style when consulting with a patient preferring egalitarianism. Even if each physician has his or her own style with which he or she feels most confident and comfortable [36,37], adding more behavioral options through training is possible [38] and would enable physicians to increase the number of communication tools at hand and to fine-tune them for the benefit of their patients.

Knowing when to use which style is another skill that physicians need to possess in order to use the widened communication toolkit effectively. It has been suggested that patient

preferences or personality should be assessed systematically before each consultation [23,39]. This can either be done by asking the patients and then hand the information to the physicians in order to help them match their behaviors to their patient's preferences or it can be assessed by the physician during the interaction with the patient. The latter is possible if the physician is interpersonally accurate. There is an increasing number of voices advocating physician training in interpersonal accuracy [34]. Research shows that interpersonal accuracy is effectively trainable [40] and we posit that this skill would enable physicians to infer automatically and accurately their patients' preferences which in turn would facilitate PBA and practical implementation of patient-centered care.

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Conflicts of interest

The authors declare no conflict of interest and have approved the final article.

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