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Are physicians' attitudes of respect accurately perceived by patients and associated with more positive communication behaviors?☆

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Abstract

Objective—To explore the domain of physician-reported respect for individual patients by investigating the following questions: How variable is physician-reported respect for patients? What patient characteristics are associated with greater physician-reported respect? Do patients accurately perceive levels of physician respect? Are there specific communication behaviors associated with physician-reported respect for patients?

Methods—We audiotaped 215 patient–physician encounters with 30 different physicians in primary care. After each encounter, the physician rated the level of respect that s/he had for that patient using the following item: “Compared to other patients, I have a great deal of respect for this patient” on a five-point scale between strongly agree and strongly disagree. Patients completed a post-visit questionnaire that included a parallel respect item: “This doctor has a great deal of respect for me.”

Audiotapes of the patient visits were analyzed using the Roter Interaction Analysis System (RIAS) to characterize communication behaviors. Outcome variables included four physician communication behaviors: information-giving, rapport-building, global affect, and verbal dominance. A linear mixed effects modeling approach that accounts for clustering of patients within physicians was used to compare varying levels of physician-reported respect for patients with physician communication behaviors and patient perceptions of being respected.

Results—Physician-reported respect varied across patients. Physicians strongly agreed that they had a great deal of respect for 73 patients (34%), agreed for 96 patients (45%) and were either neutral or disagreed for 46 patients (21%). Physicians reported higher levels of respect for older patients and for patients they knew well. The level of respect that physicians reported for

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individual patients was not significantly associated with that patient's gender, race, education, or health status; was not associated with the physician's gender, race, or number of years in practice; and was not associated with race concordance between patient and physician.

While 45% of patients overestimated physician respect, 38% reported respect precisely as rated by the physician, and 16% underestimated physician respect ($r = 0.18$, $p = 0.007$). Those who were the least respected by their physician were the least likely to perceive themselves as being highly respected; only 36% of the least respected patients compared to 59% and 61% of the highly and moderately respected patients perceived themselves to be highly respected ($p = 0.012$). Compared with the least-respected patients, physicians were more affectively positive with highly respected patients ($p = 0.034$) and provided more information to highly and moderately respected patients ($p = 0.018$).

Conclusion—Physicians' ratings of respect vary across patients and are primarily associated with familiarity rather than sociodemographic characteristics. Patients are able to perceive when they are respected by their physicians, although when they are not accurate, they tend to overestimate physician respect. Physicians who are more respectful towards particular patients provide more information and express more positive affect in visits with those patients.

Practice implications—Physician respectful attitudes may be important to target in improving communication with patients.

Keywords

Respect; Patient–physician communication; Attitudes; Professionalism

1. Introduction

While there is much written in the medical literature about the sorts of attitudes that physicians ought to have [1–3], there is little empirical data to assess whether physician attitudes are accurately perceived by patients or make a difference in patient care. There are at least two classes of physician attitudes which could plausibly influence healthcare quality: general attitudes towards patient care and attitudes towards particular patients. While a number of studies have addressed the former, many fewer have addressed the latter.

In terms of general attitudes towards patient care, for example, one study found that a measure of physician attitudes towards the psychosocial aspects of patient care, the Physician Belief Scale (PBS) [4], was related to visit communication with patients [5]. Among the 50 physicians studied, those with stronger psychosocial attitudes engaged in more explicitly emotional exchanges with their patients and used fewer closed-ended questions during their visits. These physicians were also judged to be more interested, dominant, and responsive by coders, suggesting greater animation and involvement in the interaction. Not only were physician attitudes related to physician communication, but patients of these physicians also used a distinct pattern of communication; they offered more psychosocial (and less biomedical) information to their physicians, were more emotionally expressive (i.e., expressed feelings, showed concern, and asked for reassurance) and were more engaged in the dialogue both verbally and non-verbally.

Other attitude measures have also been used to explore physicians' psychosocial and patient-centered orientation to patient care. Krupat et al. developed the Patient–Practitioner Orientation Scale (PPOS) in a somewhat similar way to reflect the patient-centeredness of medical students and physicians [6]. In two studies using the PPOS found that physicians with patient-centered attitudes had patients with higher levels of trust and satisfaction [7],

and that students with patient-centered attitudes were rated more highly by standardized patients on their 'humanism' performance [8].

In contrast to studies of physician attitudes towards patient care, the range of attitudes that a physician might have towards particular patients has been less well studied. An exception is a group of studies addressing liking in the physician–patient relationship [9–12]. Findings from these studies suggest that both patients and physicians are similarly aware of how much each is liked by the other. While statistically significant, the correlation between the two is weak ($r = 0.21$, $p < 0.001$) indicating that both patients and physicians are more accurate than chance in their perceptions of how well they are liked, but that the predictions are not strong [11]. Nevertheless, patients who are better 'liked' by their physicians (as measured by physician self-report) are more satisfied with their care [9–12] and less likely to have thought about changing doctors for as long as 1 year [11].

Both the literature on medical professionalism [13–16] and the literature on cultural competence [17–19] hold that health professionals' attitudes of respect for patients are fundamental to understanding and thinking about how patients should be treated. Despite the importance of respect, there has been little theoretical work to ground the concept, and considerable ambiguity in its possible interpretation. It is not clear how the theoretical ideal of respect is translated by health professionals into concrete attitudes and behaviors. Presumably, people can have very different ideas about what it means to respect a person. In the discourse of medical ethics, respect is commonly manifested by the protection of patient autonomy (for example, by providing information to patients about their treatment and involving them in making decisions about their care). A second perspective, largely appearing in the psychoanalytic literature, proposes unconditional positive regard as the appropriate manifestation of respect, in that it recognizes, accepts, and values patients as persons. While both unconditional positive regard and protecting and honoring patients' autonomy can be considered observable expressions of respect, no studies have investigated the extent to which patients accurately perceive physician respect or how respect might be communicated in medical visits.

In the current study, we explore the domain of physician-reported respect for individual patients by investigating the following questions: How variable is physician-reported respect for patients? What patient characteristics are associated with greater physician-reported respect? Do patients accurately perceive levels of physician respect? Are there specific communication behaviors associated with physician-reported respect for patients?

2. Methods

2.1. Study design, subjects and setting

We conducted a cross-sectional study of 30 primary care physicians and 215 of their patients. Physicians were recruited from the rosters of group practices in the Baltimore and Washington, DC metropolitan area. All physicians who delivered primary care to patients at least 30 h per week were eligible to participate. A research assistant recruited patients consecutively from waiting rooms of the participating physicians' offices between January and November 2002. All patients who were 18 years of age or older and were seeing their physician on a recruitment day were eligible to participate.

2.2. Data collection

The study procedures were reviewed and approved by the IRB of the Johns Hopkins University School of Medicine. All patients and physicians gave informed consent and completed baseline surveys including demographic and attitudinal measures. At the start of each visit, research assistants set up a tape recorder in the physician's office, started the tape,

and left the office. Physicians and patients were told that they were free to turn the tape off at any time during the encounter. Immediately following each encounter, physicians and patients were surveyed to assess their attitudes towards each other and the visit.

2.3. Study variables

The independent variable in our analysis was the level of respect that the physician reported having for the patient. To measure this attitude, we developed a survey item which asked physicians to respond to the statement, “Compared to other patients, I have a great deal of respect for this patient” using the categories of ‘Strongly Agree,’ ‘Agree,’ ‘Neutral,’ ‘Disagree,’ and ‘Strongly Disagree.’

Our outcome variables were the patients’ perceptions of how much respect they thought their physician had for them, measured with an item parallel to the physician item (“My doctor has a great deal of respect for me,” strongly agree–strongly disagree) and four measures of physician communication: information-giving, rapport-building, verbal dominance, and global affect. These variables were retrieved through analysis of the audiotapes using the Roter Interaction Analysis System (RIAS). The RIAS is a widely used coding system with demonstrated reliability and validity in studies of patient–physician communication [20–23]. The RIAS assigns each complete thought expressed by the physician and patient into one of 37 mutually-exclusive and exhaustive categories. These categories can be combined to reflect the total amount of talk in broader categories. For example, in this study, we combined all sub-types of patient education and counseling statements made by the physician (biomedical, therapeutic, lifestyle, and psychosocial) into one broader ‘information-giving’ category. Similarly, we combined all sub-types of affective statements made by the physician (empathy, partnership, legitimation, reassurance, and humor) into one broader ‘rapport-building category.’ For both the information-giving and the rapport-building outcomes, the total score reflects the number of statements made by the physician in that category.

To calculate a verbal dominance ratio, we divided the total amount of physician statements by the total amount of patient statements, so that scores greater than 1 indicate that the physician contributed more statements, and scores less than 1 indicate that the patient contributed more statements to the overall discussion. In addition to the categorization of verbal communication, RIAS coders were asked to rate the global affect of the dialogue on each audiotape across several dimensions on a numeric scale of 1–6, on which 1 represents low or none and 6 was high. We created a composite variable to measure physician positive affect which was the sum of ratings of interest, friendliness, responsiveness, sympathy, and hurried/rushed (reverse coded). Inter-item reliability (Cronbach’s alpha) was 0.88 for the physician positive affect.

Two coders with experience using the RIAS performed all coding. Reliability was assessed by a 10% random sample of double-coded tapes drawn throughout the coding period. Inter-coder reliability averaged 0.90 over the physician communication categories, and coder agreement within one point on the patient and physician positive affect scores ranged from 88% to 100%.

2.4. Data analyses

Because so few physicians disagreed and no physician ‘strongly’ disagreed that they had respect for their patient, we combined the ‘disagree’ and ‘neutral’ (low level of respect) categories to compare against the ‘agree’ (medium level of respect) and ‘strongly agree’ (high level of respect) categories. We then used Chi-squared tests to determine the association between physicians’ level of respect for the patient and selected patient

demographic characteristics (age, sex, race/ethnicity, and education), characteristics of the relationship (how well the doctor knew the patient and whether or not there was race concordance between physician and patient), and characteristics of the physician (sex, race/ethnicity, and how long they had been in practice).

To examine whether patients were able to perceive accurately the level of respect that their physician reported for them, we created three parallel categories of patients who strongly agreed, agreed, or were neutral/disagreed that their physician had a great deal of respect for them. We then examined the correlation between patient and physician-reported respect, and used linear mixed effects models which account for clustering of patients within physicians to determine whether patients differed, based on the level of respect that their physician reported having for them, in their perception that their physician had a great deal of respect for them. These models assumed linear associations between the independent variable and the mean outcome responses, and employed random intercepts to reflect the potential clustering of patient-level outcomes within physicians.

To examine association between the levels of respect that physicians had for their patients and the physicians' communication behaviors, we again used linear mixed effects models to account for clustering of patients within physicians. For the verbal dominance ratio and the physician positive affect score, linear models with identity link were used so that associated regression coefficients could be interpreted in a manner similar to those from linear regression. Because the information-giving and rapport-building outcome variables were counts of statements and were not normally-distributed, we conducted mixed effects analyses after log-transforming these two outcome variables. Since the results for the original and the log-transformed outcomes were quite similar, we presented the results based on the original variables for these two outcomes for ease of interpretation.

3. Results

3.1. Characteristics of study sample

Characteristics of the study sample are presented in Table 1. Patients in the study were mostly female (65%), African-American (55%), younger than 65 (78%) and had a high school education or less (70%). The majority of physicians in the study were female (67%) and were either white (59%) or Asian (30%).

3.2. Physician ratings of respect

Physicians strongly agreed that they had 'a great deal of respect' for 74 (37%) patients, agreed for 96 (45%) patients, were neutral for 42 (20%) patients, and disagreed for 4 (2%) patients (see Fig. 1). Table 2 presents the associations between patient characteristics and the level of respect that the physician reported having for the patient. Patients who were older and who were well known to their physician were more likely to be rated highly in terms of respect by their physician. There was no significant association between the physician's attitude of respect and patients' education, sex, race/ethnicity, or self-reported health status; the race/ethnicity or sex of physician seen; or concordance between physician and patient race.

3.3. Patient perception of physician respect

Most patients (55%) strongly agreed that their physician had a great deal of respect for them, while 38% agreed, 7% were neutral, and less than 1% disagreed. On the whole, patients' perceptions of physician respect were significantly, though weakly, correlated with physicians ratings of respect for the patient ($r = 0.18$, $p = 0.007$); 38% reported respect precisely as rated by the physician while 45% overestimated and 16% underestimated

physician respect (see Table 3). Those who were the least respected by their physician were also the least likely to perceive themselves as being highly respected; 59% and 61% of the highly and moderately respected patients perceived themselves to be highly respected compared to only 36% of the least respected patients ($p = 0.012$). After adjusting for patient age and clustering of patients within physicians, patients who were highly and moderately respected had greater odds (OR 3.02, 95% CI 1.42–6.41 and OR 3.18, 95% CI 1.60–3.65) of perceiving themselves to be highly respected than those who were the least respected.

3.4. Associations between physician respect and communication behaviors

Associations between levels of physician respect and communication behaviors are shown in Table 4. After adjusting for clustering of patients within physicians, there was an overall effect of physician respect on information-giving and global affect, such that physicians provided more information to highly- and moderately-respected patients (overall $p = 0.018$) and physicians had a more positive affect score when interacting with highly-respected patients (overall $p = 0.034$). Physicians did not offer significantly more or fewer rapport-building statements, nor were physicians more or less verbally dominant, based on the level of respect they reported having for the patient.

After additional adjustment for patient age, the results were essentially unchanged; there remained a significant overall effect of respect on information-giving and global affect. After further adjustment for how well the physician reported knowing the patient, there still was a significant effect of respect on information-giving, but the effect of respect on global affect was no longer significant.

4. Discussion and conclusion

4.1. Discussion

Our study found that physicians' ratings of respect for patients vary, that patients are generally aware of the degree to which their physicians respect them, and that the degree of respect that a physician feels towards a particular patient is significantly associated with the physician's communication behaviors in an encounter with that patient. These findings indicate that there are concrete, measurable ways that physician attitudes towards patients may be discernable. In particular, our study found that physicians provided patients with more information and had a more positive emotional affect during encounters with patients whom they respected. It is interesting to consider that the dominant mode of 'respecting' patients in the bioethics literature involves considering their autonomy. Respect for autonomy requires, at a minimum, that patients be informed about and given the opportunity to direct, their medical care [16]. Our results accord with this conception of respect for autonomy, in that physicians who possessed respectful attitudes towards a particular patient seem to express that respect, at least in part, by providing the patient with more information.

Our results also provide support for the hypothesis that respect for persons can be manifested through positive regard. In this study, we found that a physician's global affect was more positive towards patients that were highly respected. Although not measured, it is likely that the global affect ratings present a parallel channel to other non-verbal behaviors such as nodding, smiling, making eye contact, or leaning forward [24,25]. Despite having a more positive affective tone, physicians in our study did not offer a significantly greater number of rapport-building statements during visits with patients for whom they felt more respect. There did appear to be a trend towards increasing number of rapport-building statements made based on level of respect, and so the lack of significant association between respect and rapport-building statements may be a result of having insufficient power to detect differences. Rapport-building statements, which are somewhat less frequent than

information-giving statements, may be more powerful and therefore even small differences may result in practical significance.

Our study did not find an association between respect and the verbal dominance of the physician, measured by how much the physician spoke relative to how much the patient spoke. Although we hypothesized that physicians might be more likely to share power, and therefore be less verbally dominant, during encounters with patients for whom they felt respect, physicians were no more or less verbally dominant in exchanges with those patients. On the other hand, although physicians gave more information during encounters with patients for whom they reported respect, they did not dominate the discussion to a greater extent.

One of the difficulties in studying the effect of physicians' attitudes on their behavior with patients is that it is difficult to distinguish the effect of the patient's behavior on both the development of the attitude within the physician and on the physician's subsequent behavior. For example, do physicians respect patients more if the patients ask a lot of questions? If so, does the physician then respond to those questions by offering more information? Similarly, do physicians have more respect for patients who have a more positive emotional tone, and could "emotional contagion" explain the more positive emotional tone on the part of the physician? It is difficult to assess causality with this sort of cross-sectional study.

Further research would be useful to expand on the findings of this study. For example, it would be interesting to know which communication behaviors are associated with the patient's perception of being respected. Are these the same communication behaviors that are associated with the physicians' reported level of respect? If so, do these communications explain the association between patient-and physician-reported respect, or is respect communicated in other ways as well? Another interesting question is whether communication differs (Is it more positive?) in encounters where the patient and physician agree on the level of respect, compared to those encounters where the perspectives disagree. Finally, it would be interesting to know whether physicians' report of 'knowing the patient' better is associated with greater respect, independent of how long they had actually known each other or how many prior encounters they have had.

A few limitations to our measurement of respect are worth noting. First, physicians may not report attitudes towards patients accurately due to social desirability bias. We tried to address this by anchoring the question with "compared to other patients." However, the physicians' responses (mostly positive) suggest social desirability bias may be operating, since physicians report that most patients are regarded more positively than others. Nevertheless, we believe that social desirability bias would likely underestimate the strength of the observed association between feelings of respect and communication behaviors, since, if anything, physicians would report having more respect that they genuinely had.

Second, there are no previously-validated measures of physician respect for patients, and we assessed respect using only one item. Respect is an ambiguous concept, *conceptually* different than – but perhaps *practically* similar to – liking or generic positive regard, and it is difficult to know exactly what physicians were thinking when they responded to the question. Further theoretical work and research is needed to determine the particular attitudinal dimensions of respect from the provider's perspective, and to develop a more robust measure of the concept. It is quite possible that the item used in our study captured some generic positive regard, rather than a theoretically pure definition of respect.

Finally, for logistical reasons, in order to assess the level of physician respect, we asked physicians to indicate their attitude *after* the encounter with the patient rather than before the

encounter. We felt that this was optimal because the physician would be most in tune with how they felt about the patient immediately after seeing the patient, rather than relying on their memory of that person before the encounter.

4.2. Conclusion

Patients are generally aware of how much their physician respects them. Physicians who have respect for particular patients provide more information and have a more positive affect in visits with those patients. Based on level of respect, physicians did not offer significantly greater or fewer rapport-building statements, nor were physicians more or less verbally dominant. Physicians' reporting that they knew their patient 'very well' explained part of the difference in their affect with those patients, but did not explain differences in the provision of more information to patients whom the physician respected.

4.3. Practice implications

Our study suggests that physicians ought to pay attention to the attitudes that they have towards patients, and to remain aware of how their feelings might impact their behavior and thus be perceived by patients. In the absence of data linking attitudes to behaviors and patient perception, it might be tempting for physicians to think that their behaviors are not influenced by how they view or feel about patients. Our results suggest that ignoring this association may negatively impact patients. For example, attitudes may affect the amount of information that physicians provide to patients which may, in turn, have an effect on patient self-care and adherence to therapy.

Additional implications are suggested by our finding that physicians reported higher levels of respect for patients whom they also believed they knew very well. If, as this finding suggests, respect develops over time, then patients who are in continuous relationships with their health care providers may be given more information and engage in encounters characterized by a significantly more positive affective tone from their doctor. This provides another reason why continuity of care is an important goal in health care.

Physician respectful attitudes may be important to target in improving communication with patients. Physicians ought to work at fostering their own attitudes of respectfulness, as well as paying more explicit attention to the development of positive attitudes among physicians-in-training. Strategies to accomplish this should be the focus of future investigation.

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Fig. 1.
Physician ratings of respect.

Table 1

Characteristics of study sample

Patient characteristics	N	%
Age (years)		
<65	164	78
≥65	47	22
Sex		
Male	75	35
Female	140	65
Education		
HS grad or less	150	70
Beyond HS	65	30
Race		
African-American	113	55
White	92	45
Health status		
Very good/excellent	56	26
Good	83	39
Fair/poor	76	35
Physician knows patient...		
Very well	90	42
Somewhat	84	39
Not at all	41	19
Race concordance		
Yes	84	43
No	111	57

Table 2

Patient characteristics associated with physician respect

	Level of physician respect			<i>p</i> -Value
	Low (%)	Medium (%)	High (%)	
Age (years)				
18–64	25	45	30	0.040
>65	9	49	43	
Education				
High school or less	18	47	35	0.170
At least some college	29	38	32	
Race				
African-American	19	46	35	0.626
White	24	45	32	
Sex				
Male	23	48	29	0.577
Female	21	43	36	
Health status				
Very good/excellent	27	45	29	0.778
Good	19	46	35	
Fair/poor	20	43	37	
Sex of doctor seen				
Male	26	47	27	0.291
Female	19	43	37	
Race/ethnicity of doctor seen				
African-American	5	47	47	0.128
Asian	38	33	28	
White	21	48	31	
Race concordance				
Yes	17	50	33	0.242
No	25	40	35	
Physician knows patient...				
Very well	7	43	50	<0.001
Somewhat	19	54	27	
Not at all	59	29	12	

Table 3

Association between physicians' reports and patients' perceptions of respect^a

	Physician Reported Level of Respect			
	High	Medium	Low	Total
High	43	59	17	119
Medium	27	32	22	81
Low	3	5	7	15
Total	73	96	46	215

^aNumbers represent the number of encounters for which physicians and patients reported each level of respect. Shaded areas represent those patients who were accurate in their perception of physician respect.

Table 4

Associations between physician respect and communication behaviors

	Level of respect	Adjusted for clustering of patients within physicians	Adjusted for clustering of patients within physicians and patient age	Adjusted for clustering of patients within physicians, patient age and how well doctor knows patient
Information-giving (<i>mean number statements per encounter</i>)	Neutral/disagree	66	65	63
	Agree	80*	78*	79*
	Strongly agree	82	81*	82*
	Overall <i>p</i> -value	0.018	0.020	0.018
Rapport-building (<i>mean number of statements per encounter</i>)	Neutral/disagree	48	52	51
	Agree	52	53	53
	Strongly agree	57	57	57
	Overall <i>p</i> -value	0.299	0.524	0.556
Verbal dominance ratio (<i>physician statements/ patient statements</i>)	Neutral/disagree	1.44	1.43	1.38
	Agree	1.37	1.37	1.38
	Strongly agree	1.43	1.43	1.47
	Overall <i>p</i> -value	0.751	0.774	0.712
Overall affect score	Neutral/disagree	11.9	11.9	12.1
	Agree	12.2	12.2	12.2
	Strongly agree	13.4*	13.4*	13.2
	Overall <i>p</i> -value	0.034	0.037	0.181

* $p < 0.05$ compared to those who responded 'neutral' or 'disagree'.