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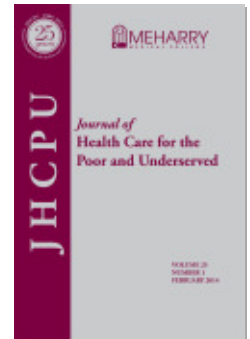
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Exploring Patient-Provider Interactions in a Native American Community

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Abstract: Identifying and addressing barriers and facilitators to good patient-provider clinical interactions may enhance participation in health-promoting behaviors. We used the critical incident technique to elicit descriptions of positive and negative patient-provider interactions from both patients and providers in a rural Native American community. Using the interview data, we developed a model that illustrates the factors affecting patient-provider interactions. Trust emerged as the central theme in the determination of whether an interaction is considered good or bad. Trust was influenced by four higher-level themes: visit context, visit expectations, history, and time. These higher-level themes also affected the perceived barriers and facilitators to the clinical interaction, which were categorized as either actions or feelings/interpretations. Addressing and reducing barriers to positive clinical interactions on multiple levels is necessary for improving patient trust in the health care system, particularly among members of minority groups.

Key words: Indians, Native Americans, North American, physician-patient relations, community-based participatory research, communication.

The goal of this study is to understand characteristics of patient-provider clinical interactions and to identify barriers and facilitators to a good clinical interaction in an Indian Health Service (IHS) hospital that serves rural Native Americans. Good clinical interactions were described by patients as clinical visits where the patients felt

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they were treated well, and by providers as interactions where the providers felt their objectives for the visit were accomplished. Prior surveys with women in this community revealed that a good relationship with a health care provider was associated with a more positive Pap test experience.¹ Both male and female community members cited negative interactions with providers as a barrier to obtaining health care (including screening tests) and stated that addressing patient-provider interactions was essential to increasing screening rates.

Examining the patient-provider clinical interaction can yield insight into factors that contribute to participation in prevention and early screening activities. American Indians are less likely than non-Hispanic Whites to obtain Pap tests, mammograms, and colorectal cancer screening tests.² Better interactions can lead patients to be more satisfied with the encounter and thus more likely to adhere to advice from their provider about preventive services and screening,³⁻⁵ which ultimately leads to improved health outcomes.⁶ In contrast, Sequist et al., using correlational data, found no association between patient experiences of care and engaging in preventive care.⁷ The lack of correlation might emerge from the multiple levels and complexity of the factors influencing the patient's adherence to preventive behaviors.

Our study builds on Roter and Hall's conceptual framework concerning patient-provider communication,⁸⁻¹⁰ which divides provider behavior into two categories. The first category includes instrumental or task behaviors, which are "technically based skills used in problem solving that comprise the base of the expertness for which the physician is consulted."⁹^[p.171] In the second category are affective or socioemotional behaviors, which are intrinsic behaviors, including small talk, joking, and nonverbal behaviors (such as tone of voice and smiling, and other behaviors that gain affective significance by their interpretation).⁹ We were also guided by Betancourt et al.'s framework which defines culturally competent health care systems as those that integrate an understanding of the patient's culture, cross-cultural relationships, and cultural differences into the modification of services so as to meet the particular cultural needs of the patient population by addressing multiple levels, not just the individual but also higher system-level influences.¹¹

We have an incomplete understanding of patient-provider interactions in clinics serving Native Americans. Researchers have examined culturally specific influences within medical encounters for Native Americans.¹²⁻¹³ These studies illustrate that physicians working in Native communities benefit from understanding communication differences as well as the community context including the history and culture of the community. The Native American population consists of many diverse tribes with variations in culture. Therefore, research is necessary to verify and expand existing models of patient care among Native American sub-populations. Improving our understanding of patient-provider interactions in specific populations allows us to identify specific barriers and enhancers at multiple levels, which can be used to inform interventions to improve interactions and ultimately alleviate health disparities.

This study was part of a larger community-based participatory research (CBPR) project titled Messengers for Health, which addresses cervical cancer, a condition with documented population disparities disfavoring those in the Northern Plains region.¹⁴ The project is located on the Crow reservation, a rural setting in south central Montana.

The Crow reservation is the 5th largest Native American reservation in the country. Approximately 70% of the 11,357 enrolled Crows live on the reservation.

Adhering to the principles of CBPR, community and university partners work together in all stages of the research project. Goals of Messengers for Health are to improve cervical cancer screening rates and support the Indian Health Service in providing high-quality health care to all members of the community. Project partners include the project coordinator, who is a member of the Crow Nation; the principal investigator and staff from Montana State University-Bozeman (MSU), including students who are members of the Crow Nation and other Native American tribes; members of the community advisory board (CAB); and individuals in leadership roles in the community. Community advisory board members include individuals who helped with planning the initial grant, cancer survivors, tribal elders and leaders, and those who worked with or were interested in women's health. Hereafter, these partners are referred to as *the team*.

Methods

Institutional review boards at Montana State University and the Indian Health Services Billings Area Office approved this research. The critical incident technique (CIT) guided the development of the interview guide. Critical incident technique was developed by Flanagan in 1954 and has been used widely as a qualitative assessment tool for collecting observational data and solving practical problems, especially in the evaluation of consumers' views and needs.¹⁵⁻²¹ Native Americans have participated in previous studies using CIT.²²⁻²⁶ Respondents in a CIT study are asked to provide positive and/or negative examples of an activity or phenomenon (i.e., critical incidents). The technique has been used more recently for problem-solving and determining patient expectations and satisfaction in health care settings.^{16-21,27}

To develop the interview guide, university partners compiled interview questions from previous studies that used CIT to examine patient care. The questions were presented to the CAB and specific questions and the interview method were co-designed by university and community partners. Questions of interest for this study were designed to elicit descriptions from both patients and providers of a good clinical interaction and a bad clinical interaction experienced in the past five years.

A CIT study collects information from individuals familiar with the activity under study here—patient-provider interactions between female tribal members and health care providers. Because the original purpose of the program was to improve Pap test adherence, only female patients and only providers who performed Pap tests were interviewed. Using snowball sampling, the study invited Messengers—lay health advisors who work with the Messengers for Health Project—to participate and asked them to invite other community women. Snowball sampling is widely used in qualitative research as it allow for access to hard-to-reach interviewees.²⁸ People in the community will be more likely to be interested in participating in the research if they are recruited by trusted contacts. Twenty-four Messengers and 11 invited guests were interviewed.

Following CAB study design recommendations, participants could choose to be interviewed alone, in pairs, or in groups of three, and could choose to be interviewed by a Crow community member, a Native American non-community member, or non-

Native non-community member. Two non-Native MSU researchers, three (two Native and one non-Native) MSU students, and the project coordinator (a Crow community member) conducted 21 interviews with 35 community women both individually and in small groups.

A non-Native university faculty member interviewed health care providers singly. One provider out of 17 declined the invitation. Fifteen of the 16 providers who were interviewed were non-Native, and one was a Crow tribal member.

After giving informed consent, patients and providers described two critical incidents or health care interactions, one positive and one negative, that had occurred within the previous five years.

Data analysis. Interviewers audiotaped all interviews; project assistants transcribed them *verbatim*, sometimes requesting written supplemental notes. Community advisory board members and MSU researchers co-conducted data analysis. Team members from MSU facilitated human subjects training with the CAB using a presentation/discussion format developed by researchers at University of North Carolina.

The first author trained CAB members on qualitative content analysis. Training included how to identify common themes, words, or concepts and sort them into categories.²⁹ Using hard copies of the interview transcripts, the CAB/MSU analysis team generated a list of codes, each member working independently. An extensive list of codes emerged from this process.

An attempt to use a deductive classification model proved incompatible with this setting. Initially, the PRECEDE/PROCEED model, which is used for planning and evaluating health promotion programs,³⁰ was employed to classify the codes according to the Predisposing, Reinforcing, and Enabling constructs of the model. Community members expressed two concerns: 1) they had difficulty applying the predetermined model to the interviews, and 2) they felt that breaking apart stories into themes and codes was not the best way to understand the interactions through a Crow cultural lens. In keeping with the principles of CBPR, the team revised the coding schema by going back to the initial codes and utilizing them in two ways: 1) as stories, which were more culturally acceptable, and 2) as codes that could be used to understand patient-provider interactions.

Team members from MSU compared and contrasted the collective story that emerged from analytic team discussions to descriptions of patient-provider interactions in terms used in the literature. A conceptual model evolved based on emergent themes from discussions with the analytic team and by incorporating literature-based descriptions of patient-provider interactions.^{8-10,12,13,31-32} As a validity check, the CAB and providers reviewed the model in separate meetings. Minor modifications were made to the model based on comments at the meetings (the modified model is presented in Figure 1). Team members from MSU and the CAB also developed a second model using a culturally significant metaphor—the Crow tipi (see Figure 2).

Results

The two models are general to patient provider interactions rather than being specific to Pap test interactions. Themes and a story/model of feelings/interpretations and

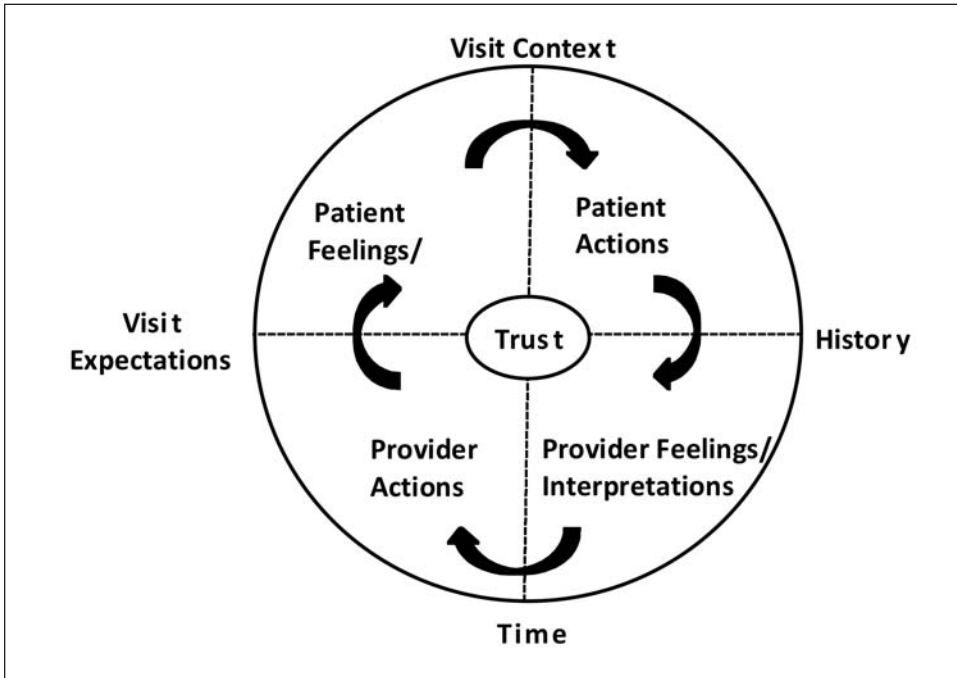


Figure 1. Model of patient-provider interaction.

actions for both providers and patients were similar to those put forth by Roter and Hall.^{8-10,31-32} This is shown in Figure 1 in the four interior categories of feelings/interpretations and actions and demonstrates the interrelationship (and reliance) between patient and provider. These categories emerged in both the provider and the patient interviews. There was a reciprocal relationship between actions and feelings of the provider and patient: the provider's actions were interpreted by the patient who then responded with actions, which were then interpreted by the provider, who responded again with actions. The cycle can begin at any of the four points.

Five higher-level themes—trust, visit context, visit expectations, history, and time—influenced feelings/interpretations and actions and were themselves interrelated (see Figure 1). Trust is the central point of the figure because it emerged from the interviews as the central theme that connects and depends on the four themes; it influences and is influenced by patient and provider feelings/interpretations and actions. The first four themes are shown outside of the circle. These five themes affected whether an interaction was deemed good or bad. In the Crow tipi model (see Figure 2), the four base poles represent the higher themes of visit context, visit expectations, history, and time. The place where the poles (themes) intertwine represents the theme of trust. As one CAB member explained, “With a good relationship with the provider, when you’re in a strong wind like when you are sick, it’s like you are anchored. The trust part of the tipi is the anchor of the interaction.” The sections that follow detail these themes and interrelationships.

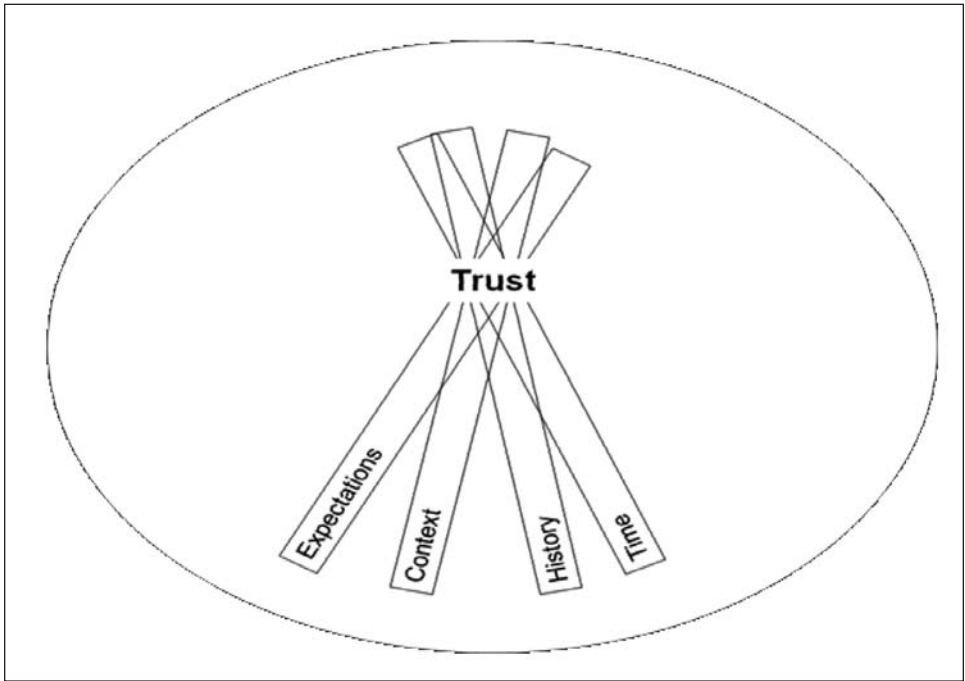


Figure 2. Model of patient-provider interaction using culturally significant symbol.

Trust. The interrelationship of trust with other themes and its influence on patient-provider interactions is salient in many interviews. Providers frequently mentioned that trust enhanced communication because when the patient trusted the provider, the patient was better able to reveal his or her medical concerns and rely on the provider to help resolve them. Providers mentioned the theme of trust in conjunction with history, because with positive history, trust was built. Trust was discussed as a contributor to comfort in the interaction, where comfort influenced the visit context positively. Finally, trust also affected the expectations that patients and providers had of each other. With trust, people's expectations were modified to reflect feasible actions.

In like manner, continuity can contribute to trust and requires time, as this provider explained:

But it does take some time I think to become comfortable with another person. That is why continuity I think is so important.

Other providers (including the speaker of the following) brought up time as it related to continuity of care, and also mentioned that time can be spent building trust within a single interaction:

I don't ever rush in and rush out with people. . . . I spend time, you know, sometimes they don't talk about what they are really there for until the very end of everything.

Then they will just sort of bring up something and it is time to sit down and do the real talking. But it takes a long time to trust people enough to talk to them about what is really going on, so if you are not willing to take time, then forget it.

This provider continued:

And then there is the big trust factor that comes into it. Part of the patient, I mean naturally any patient is wondering, "Do I have a good doctor here? Can I trust this person?" and that is already established by a long-term relationship. Then you can move along with the other issues.

The four higher-level themes of context, expectations, history, and time that influence feelings/interpretations and actions of patients and providers are presented next.

Visit context. This theme included the reasons for the visit and the situation at the hospital or clinic. This background can influence the interaction positively or negatively. Visit context was often cited in negative interactions when there was no prior relationship between the patient and the provider, such as emergency room or pharmacy visits. In contrast, items identified as visit context in positive interactions were often focused on prevention or management of a health issue.

Visit context was informed by history, time, and expectations associated with the visit. Participants mentioned that when there was no history or a negative history between the patient and provider, the interaction can start off negatively, and then have the affect reciprocated by patient and provider leading to an overall negative interaction. Conversely, if the visit context was pleasant or the provider acknowledged the stress of the situation, the patient might respond more positively which would then be reciprocated by the provider and would lead to a more positive interaction.

A patient mentioned the negative impact of the situation in the clinic before she even met up with the provider:

Just that you have to go all the way through from the clinic go get a pee test. And then go over there and then see the doctor. And then I was glad I didn't feel too bad because . . . it was over an hour and there was nobody in there, you know, it was just me.

Visit expectations. Expectations were frequently an important theme in group analysis; the term refers to the views that the patient and the provider hold about what the other should or should not be doing during the interaction. Expectations can be related to such things as job duties, patient or provider expected roles, attitudes, past experiences, and the cultures of both patients and providers. Expectations related to the culture of clinical medicine might be familiar to the provider, but might not be as familiar to the patient. This theme addresses levels of influence that existed before the provider or the patient entered the interaction. Providers understood the dilemma and often mentioned that not meeting a patient's expectations could result in a negative interaction. One provider noted:

Yes, usually when someone doesn't have the outcome they expect, or they received previous information that was inaccurate and it is your job to deal with that.

Providers also mentioned that they had expectations of their patients about certain task behaviors, including following advice and prescriptions. However, as one provider reflected, these expectations might be unrealistic for some patients:

Sometimes I make mistakes because I just don't know the person and I recommend things, that later on that there is not a chance in the world that they are ever going to do that, or I find that out in a visit or two.

Providers mentioned that they expected the patient to discuss the most important issues right away; however, often the patient had different expectations about the visit priorities and this apparent mismatch might challenge trust.

History. This included the history between the patient and provider, history between the patient and other providers, and stories the patient has heard about providers in general or that specific provider. It can also be examined in the broader sense of history with regard to the past relationship between the community and the institution or even the community and what the institution represents.

History informed the expectations and attitudes of the patient and provider as they entered an interaction. Patients and providers often noted that positive incidents were associated with a positive history between them. In addition, when the patient had a positive history with the provider, the established relationship helped alleviate concerns caused by negative histories with the institution or what the institution represents.

Patients also discussed how past experiences with providers influenced them and their experience of the interaction and future interactions. As this woman stated, she was afraid to go in to the doctor because of her past experiences:

And I know it is important to have an exam yearly, and I just had mine and it was normal and everything and I was happy. But like I said, it was a male doctor and he didn't, you know, consideration, he just kind of pushed things around and it kind of made me upset so I was afraid to go in after that for a long time. That was my bad experience.

In their critical incidents, both patients and providers mentioned a lack of continuity of care caused by the temporary nature of Indian Health Service assignments. There is high turnover at Indian Health Service and thus a perception on the part of patients that these providers come to Indian Health Service to "practice" or are not legitimate doctors. As two patients commented:

We need some qualified [providers], some doctors that really have some experiences, not to be, we are not to be tested on. I mean so they can get some experience before they move on. We need some real doctors here. We are real people. We are human beings and that is what we want to be treated as human beings.

Yeah she is right though that a lot of the good doctors leave. That one I was telling you, he was really good but he is leaving.

History influenced the interaction through stories patients had heard from trusted sources about the providers. These stories influenced the patient's perceptions in the

interaction. For example, one woman avoided the clinic when a certain provider was there.

But some of the doctors are I don't really care to see. Especially like that Dr. ***. I've heard a lot of stuff about him, and every time he is over there in Lodge Grass I don't want to go in there because he almost, my daughter in-law almost lost her baby because of him.

A final side of history that patients and providers alluded to in describing their critical incidents involved factors related to the historical legacy that Native people live with, including the history of the institution of Indian Health Service as a governmental agency. One provider stated:

Even though it's, most of the time it doesn't have anything to do with me personally, I have to be there. I represent the government, and the government owes the Native Americans everything. And therefore, they feel that they are not being, they didn't get what they wanted or weren't treated right. You have to be there you get the brunt of it. And deal with frustration.

One community woman referred to the negative history between IHS and Crow patients by saying, at IHS, "we are guinea pigs." This comment arises from the history of outside practitioners coming onto the reservation and treating Native Americans without respect.³³⁻³⁶ These outside entities often represented a U.S. government agency and were seen as simply using Native people for their own agenda. Remarks by participants expressed a feeling that some community members have that they are not provided adequate care by IHS. It is an historic fact that Native people have endured a history of genocide at the hands of the United States government.³⁵⁻³⁷ The Indian Health Service hospital at Crow is funded and operated by the United States government and Messengers for Health project staff have encountered multiple references by community women linking the IHS and IHS providers with the negative history between U.S. government and Native Americans.

Time. Both patients and providers mentioned time, which was conceptualized as waiting time, time within the interaction, and time spent getting to know the other. The most frequently expressed conceptualization of time was waiting time, which was associated with negative interactions, particularly with wait time for the pharmacy. Many patients expressed their frustration with waiting times in the waiting rooms, in the exam rooms, and while making appointments. As one woman explained:

Why is there always such a great waiting period? Like I said, you wait forever to see the doctor and then it's even a longer wait for the pharmacy and when I come to a clinic we always tease about it. I say by the time the doctor sees us we are dead or we are cured because it takes so long. We plan on spending the day there because it takes so long. Take your lunch.

Long wait times frustrate many patients even before they enter the interaction. Thus, patients viewed their experiences of long wait times as part of the typical visit context

that affected interactions negatively. As mentioned above, patients and providers both thought of time as it related to building trust.

Providers were also aware of time as a structural barrier at the institution, but several providers mentioned that spending a little extra time can help improve the interaction and lead to satisfaction for both patient and provider. As one explained:

My best encounters have to do with my making time and that is sometimes a luxury and we do have at IHS, even though we do get continued pressure on sort of productivity using a sort of private practice model, but unfortunately a private practice model doesn't work too well here um, but if you take a little extra time and use good patient education, which is a problem everywhere, not just IHS, and it is amazing people say, "Oh gosh, no one ever explained it to me that way," and I've used the paper on exam tables to draw things out and I will rip it off and say, "Here take this home," and part of this is what I pride myself in.

The five themes described above represent broader themes that are often higher-level influences on the clinical interaction. The higher-level themes given above shape the behaviors and feelings within the clinical interaction. Next, we will present the themes within the clinical interaction that are similar to the categories in Roter and Hall's work.^{8-10,31-32}

Provider actions. Provider actions focused on the provider's job duties as understood by the patient in the patient-provider encounter. The expected job duties might or might not be matched between patient and provider. Expected actions of the provider include giving information giving and managing treatment. Items in this category covered the range of asking the patient questions, eliciting symptoms, ordering tests, and prescribing medication. For example, when describing interactions, community women often mentioned that the provider was thorough and did all the tests and procedures that the patient expected. One patient noted:

He goes over everything. I mean he checks my blood and he makes sure that, you know, everything is on there and he checks, you know, makes sure I am getting the right prescriptions and, you know, makes sure I have refills and that there are refills on there.

One community woman described a positive interaction with her provider as she explained that a good interaction for her included receiving advice and educational information:

Like how telling me how my nutrition is, and how to keep intact with it, and she tells me . . . what I should do to help prevent it from happening by doing more walking, and she um . . . she just lets me know that's what the important thing what I need to know about my health.

Examples of negative interactions stemmed from expected job duties that were carried out poorly or not at all, as patient interviewees made clear:

He didn't even tell me. He just put that in there [speculum] and opened it wide and it pinched me on the side and I said, "Ow that hurts" and then he just said, "You'll get used to it," and he didn't know that he pinched me on my skin.

The only thing that I can think of is for my pregnancy. I had some difficulties, I don't know, [...] I mean they [Providers] were like not telling me the results and I had to get a C-section because of it.

Patient feelings/interpretations. Coders identified the patients' feelings and interpretations of the provider's actions as another category. Patients interpreted an interaction as positive or negative depending on whether the provider followed through with behaviors expected and associated with their understanding of the provider's duties.

Women describing positive interactions often mentioned acknowledgement of having a relationship with the provider outside of the office:

She's always real nice to me and stuff, and she talks to me real good when I am in with my mom always, and she is real nice all the time, remembers me even outside of the clinic. She always talks to me and says, "Hi," and she always remembers me too, and that kind of stands out in my mind.

Multiple community women mentioned the importance of having a provider who was concerned about them. Several stated that respect and concern were important characteristics of a good patient-provider interaction. For example, this community woman explained that when she felt valued, she received better care from her provider:

I felt so important, but when and then she said that "you'll be all right" and that was really all I needed to hear. She said, "You'll be all right." This is all you need to do is eat this and do this and that and get all your pills and come in to get shots, and she just treat me real nice that time. I think it just came out of fear or something, but I just came right out and I said, "Oh, I need somebody like you right now."

Actions and feelings were interrelated. In negative examples, women discussed not being respected or not feeling concern from their doctor. As one woman put it:

Because he's dumb, we're not good enough for him to take care of or something, they act like you are stupid or something.

Patients who felt that the provider was invested in their health care viewed the interaction more positively because they believed that the provider was doing a good job taking care of them, in other words, was better at task behaviors. Providers also had their own list of patient action that they expect.

Patient actions. *Patient action* refers to what was expected of the patient by the provider in the encounter. The range of items in this category included being knowledgeable about their condition, asking questions, being involved in their own health care, giving an accurate report of symptoms, and following up on the provider's recommendations.

Providers often mentioned that a good interaction was one in which the patient's actions indicated that they were interested in their condition, as one provider explained:

I think I like it when people come in, and they are open to discussion. They're pretty knowledgeable about their condition, and they are prepared with questions, so that it is more of an interactive discussion, and we can both head out with a positive direction, rather than my being a prescriber and telling them what I think they need to do. I think that works a lot better, and the patient likes it.

Conversely, providers viewed as negative those interactions when the patient was not following through on the provider's view of the patient role, for example being uncommunicative:

Occasionally the patients will just . . . you will try to ask them for information and they will just say, "Ah well, it's in the chart." They will just refer you down to the file you are holding and that pretty much tells me they are not really interested in interacting.

Just as patients had an understanding of the provider's role, providers had a conception of the patient's role and said that they appreciated an involved patient open to a two-way interaction.

Provider feelings/interpretations. The fourth category that emerged in the examination of the critical incidents focused on the feelings and interpretations of the patient's actions. Providers interpreted a patient's body language and/or facial expression to determine the patient's interest in the encounter. One provider described an interaction with a patient and how the provider interpreted the patient's attitude.

Oh you can tell by their facial expression, their body language that they understand what you are saying, also by their facial expression that they don't get it, and then you just have to work harder.

Providers also interpreted whether the patient was comfortable or uncomfortable, content or upset with the situation or the provider. These interpretations might or might not be correct; they could strain the interaction:

Come in the room and the patient is anxious, angry, nervous, tense, and they don't want to really talk with you. The patient again many times sitting on the edge of the chair, their coat is on they are looking at the wall, clock, they are ready to leave, they are ready to go.

One provider explained his method to try to turn such a situation into a good interaction:

I know when they are not comfortable a lot of time. If they are not real comfortable, I can tell or they are feeling angry because they have to be here, they don't want to be, because someone told them they should come. I don't mind talking about that, you know: "You don't look like you really want to be here at all," so we kind of talk about that and in kind of a kidding way we kind of work things around.

Providers also mentioned the idea that the patient interpreted and reciprocated the provider's actions, as this provider explained:

There's just numbers of people that are courteous and of course, if you're not courteous toward them they're not going to be courteous toward you . . . Sometimes the door shuts in your face, sometimes the door stays open.

When the patients conveyed affect that the provider interpreted as the patient not being a partner in their health care, the patient was perceived as uninterested in cooperating with the provider. This led to a negative perception by the provider and resulted in the provider responding in ways the patient interpreted negatively. This might lead to poorer care for the patient and worse health outcomes. In contrast, when the patient was interpreted by the provider as being courteous and interested in their health care the provider felt that the patient was involved and invested in her health and might have been more likely to respond positively.

Discussion

This study illuminates the major barriers and facilitators to positive patient-provider interactions and provides a conceptual model for understanding the characteristics of patient-provider interactions in a rural hospital serving Native Americans. Increased understanding of the clinical encounter can improve cultural competence and thereby improve health outcomes. The patient-provider relationship involves both actions and interpretations of actions, which are not always concordant between patients and providers.³⁸ Differences in interpretations of the interaction may increase the likelihood for miscommunication and the perception of a negative interaction; and the reverse is true as well.

As we have demonstrated, the five higher-level themes are deeply intertwined; they depend on and influence one another through their mutual influence on the interaction. The mutual construction and maintenance of trust between patient and provider is the main facilitator of a positive interaction. Several previous studies have determined that trust in the physician and health care system is an important factor when people decide whether to engage in preventive services. These studies have found higher levels of mistrust in the health care system among Blacks and Native Americans compared with Whites.³⁹⁻⁴²

The particular community that participated in this study has its own unique history and health care institution, which might not be generalizable to other populations. However, one of the purposes of this study was to develop an understanding of patient-provider interactions in this community in order to develop community-specific interventions to improve interactions. Critical incidents were based on self-report; other studies of patient-provider communication have examined videotapes or audiotapes of the interaction to verify behavior. In our study, we obtained more information from participants as they explained their feelings, which might not have been available from a videotape of the interaction.

Implications. The model we developed drew on previous patient-provider communication research by separating codes into actions and feelings.^{8-10,31} Many of Roter and Hall's studies use trained patients who present standardized patient cases to providers and audiotapes of interactions for analysis.^{8,10} Our study used recall of interactions, which

allowed for examination of actual medical cases and allowed participants to explain their feelings and interpretations to the interviewer. This allowed for insight into the five key themes that emerged in our analysis that were not as prevalent in Roter and Hall's work,⁸⁻¹⁰ but were similar to the themes discussed by Towle et al.¹²

We expand on previous examinations of patient-provider interactions by including higher levels of influence on the clinical encounter. In addition to clinical barriers, which are similar to Roter and Hall's categories of task and socioemotional behaviors⁸⁻¹⁰ (actions and feelings) Betancourt et al.¹¹ emphasized the need to address two additional higher-level influences—organizational and structural barriers—in order to improve care.

Organizational barriers. These barriers include the health care system and its delivery. Lack of diversity in the health care workforce is one organizational barrier^{11,43} experienced by patients in this setting as most medical encounters for the Crow population involve a provider from a different culture, race, and social class. Non-Indian professionals may not understand the needs of the patient population they serve. Visit expectations can be affected by this misunderstanding. Those who develop the systems of care and delivery in the clinic are likely oriented towards Western medical culture and may have unrealistic expectations of their Native patients. Further, the organization of the clinic visit (visit context) may not take into account the needs of the patients being served. In addition, time constraints in the doctor's office might be perceived as disrespectful to traditional Native elders who prefer to take time to tell their story to the doctor.⁴⁴

Structural barriers. A second higher-level influence in Betancourt et al.'s framework comprises structural barriers, which arise when health care systems are "complex, underfunded, bureaucratic, or archaic in design."¹¹^[p.296] Time is a structural barrier mentioned in this study including bureaucratic intake processes and long waiting times. Indian Health Service is severely underfunded, affecting wait times and the efficiency of the health care system.⁴⁵ History as a structural barrier includes the high turnover of practitioners at Indian Health Service which affects the ability of patients to establish themselves with a regular provider who would provide history for the encounter and over time, build trust between patient and provider.

Application. Barriers at the clinical level can be addressed by improving the communication between patient and provider through increased mutual understanding. Our program used the results of this study in three main applications. First, Messengers for Health developed a DVD and accompanying teaching materials for providers to help them understand better the Crow culture and the implications of cultural practices in delivering medical care. Second, Messengers for Health developed a video for community members on how to have good clinical visits with Indian Health Service providers. Third, Messengers for Health developed a mentoring program that pairs together a Crow community member and a provider. The purpose of the program is to increase the provider's understanding of the expectations that Crow people bring into the clinical encounter and *vice versa*. We believe increased understanding will improve communication, leading to enhanced trust and better health outcomes. In addition, if the providers feel more attachment to the community, they might be more likely to stay, thus addressing the structural barrier of high turnover at Indian Health Service.

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