

# Apsáalooke Women's Experiences With Pap Test Screening

Adina J. Smith, PhD, Suzanne Christopher, PhD, Victoria R. LaFromboise, MS, Bethany L. Letiecq, PhD, and Alma Knows His Gun McCormick

**Background:** Cervical cancer mortality rates are among the highest in the United States for Northern Plains Native American women compared with white and other Native American women. The aims of *Messengers for Health*, a community-based participatory research project based on the Apsáalooke (Crow Indian) Reservation, are to decrease cervical cancer screening barriers, improve knowledge regarding screening and prevention, and increase the proportion of women receiving Pap tests. This paper presents results from a survey assessing women's perceptions of the level of comfort and care received by health care providers in their most recent Pap test appointment.

**Methods:** A survey assessing patient communication and satisfaction with their health care providers was conducted with a random sample of 101 Apsáalooke women. Qualitative and quantitative methods were utilized to analyze the survey data.

**Results:** Women reported both positive and negative experiences with their provider regarding their Pap test appointments. They noted positive experiences when trust was established and when the provider offered information, reassured or encouraged them, was personable, was familiar or consistent, maintained confidentiality, and was a woman. The women reported negative experiences when the examination was too short, when they did not have a consistent or female provider, and when they did not feel comfortable with the provider's nonverbal communication.

**Conclusions:** Continued work with both providers and patients is necessary to decrease communication barriers and increase satisfaction with Pap test appointments.

## Introduction

Age-adjusted mortality rates for cervical cancer are significantly higher among Native American women (4.0 per 100,000) compared with US women of all races (2.9 per 100,000).<sup>1</sup> Among Native Americans in all US geographic locations, the Northern Plains tribes, to which the Apsáalookes (Crow Indians) belong, have one of the highest overall cervical cancer mortality rates. Of the women residing on or near the Crow Reservation who were 21 to 64 years of age and who had used the Crow-Northern Cheyenne Indian Health Service at least once in the last 3 years, 56.3% had a Pap test in 2001.<sup>2</sup>

Although the Pap test is an effective method for preventing cervical cancer, Native American women do not receive screening as recommended.<sup>3,4</sup> Screening obstacles for Native women identified by previous pro-

grams include lack of transportation, child care, telephones, and insurance; concerns about confidentiality; lack of understanding of cancer information; delays in appointment scheduling; and a negative history with medical care.<sup>4,7</sup> In addition, according to the US Commission on Civil Rights, Native Americans receive only 60% of annual per capita health expenditures compared with other US citizens with basic health care plans,<sup>8</sup> despite promises by the Federal Government to provide for Native Americans' health care needs. Indian Health Service (IHS), the primary American Indian/Alaska Native health care program, is "consistently funded at a dramatically lower level than other government health programs."<sup>9</sup> IHS personnel note that often by the end of the fiscal year, IHS funds are so scarce that funding goes toward emergency services, while cancer diagnostic or treatment needs may go unmet. It has been speculated that lack of access to these services contributes to high cancer mortality rates in Native American/Alaskan Native populations.<sup>10</sup>

## The Patient-Provider Relationship

Shi et al<sup>11</sup> found that the patient-provider relationship "is at the heart of effective medical care." Also, existing literature consistently has demonstrated that the

---

From the Department of Health & Human Development, Montana State University, Bozeman, Montana (AJS, SC, BLL, AKHGM), and the Education Development Center, Inc, Newton Massachusetts (VRL).

Submitted February 2, 2007; accepted August 27, 2007.

Address correspondence to Adina Smith, PhD, 218 Herrick Hall, Montana State University, Bozeman, MT 59717. E-mail: adinas@montana.edu

Abbreviations used in this paper: IHS = Indian Health Service.

patient-provider relationship has an important influence on several areas of medical care such as patient satisfaction, compliance with medical procedures and recommendations, and patient participation in his or her care.<sup>12,13</sup> Numerous aspects of a positive patient-provider relationship have been identified, including having a consistent provider, feeling that the provider is concerned about the patient, and developing good communication between the patient and the provider. Regarding provider consistency, Donohue<sup>14</sup> found that the number of medical visits with the same nurse practitioner was positively associated with increased trust, self-disclosure, and the perception of acceptable time dedicated to the visit. Patients with longer provider relationships described having a better relationship with their provider as well as expecting and receiving more resources compared with patients with shorter relationships. Other authors have also found that longer relationships with their medical providers have been associated with increased trust.<sup>15-17</sup> Shi et al<sup>11</sup> suggested that increased access to and a consistent relationship with a primary provider would benefit the health care experience of minority patients, particularly if the relationship is with a provider who demonstrates cultural competence and respect.

According to Joos et al,<sup>18</sup> communication between health care providers and patients is essential to patients' understanding, decision making, compliance, and satisfaction. Conversely, communication barriers between minority patients and white majority health care providers may contribute to a lack of accuracy in providers' understanding of patients' clinical portraits.<sup>19,20</sup> Further, several studies have demonstrated that individuals who believe their provider engages with them or shows concern have increased satisfaction with their relationship with their provider and their health care in general.<sup>14,21,22</sup> In terms of satisfaction with time allotted by the provider for medical visits, one investigation that examined resources expected by women during appointments with their nurse practitioner found that having adequate time for the visit was a unifying theme for women.<sup>14</sup> Another study found that women appreciated more time spent with their physician.<sup>23</sup> These authors also found that patients demonstrated increased satisfaction when physicians spent more time talking with them.

For Native Americans, receiving culturally competent care is critical for patient satisfaction. When health care providers ignore culture or do not respond to patients in a culturally competent and respectful manner, Native American patients are at risk for not complying with medical procedures and treatment protocols or not returning for health care needs.<sup>24</sup> According to Sanchez et al,<sup>25</sup> "cultural ignorance can be profoundly detrimental to the interactions between the health care provider and the client. Serious communication

and behavioral problems often develop when Native Americans interact with health care providers who possess different behavior patterns, perspectives and expectations." Burhansstipanov<sup>26</sup> also noted that medical and cancer-related terminology is often not familiar to Native peoples. Likewise, Native American cultural communication patterns exist that may be overlooked by providers or may be unfamiliar to them. Thus, a shared understanding of communication patterns and cultural beliefs and behaviors is necessary in order to provide adequate care. Sanchez et al<sup>25</sup> reported that according to the Navajo Health Systems Agency, mutual respect between the health care professional and patient and the exchange of information have been at the crux of successful efforts to address quality of care.

Although cultural competence is a critical component of patient satisfaction, it is difficult for Native people to measure. It may include the need for a relationship with a consistent provider, shared positive communication and feelings of being cared for, concerned about, and understood, and having time to visit during an appointment. Cultural mismatching occurring between the provider's approach and the Native American patient's needs likely has a negative influence on women's satisfaction with their care during Pap tests, and it deters women from participating in Pap testing. There are more than 550 recognized tribes in the United States, and the individual tribes may have different needs for culturally competent care.

### **Messengers for Health: A Community-Based Participatory Approach**

Montana State University faculty and students and Apsáalooke community members formed a partnership to address cervical health disparities. The goals of the resulting project, Messengers for Health, are to decrease cervical cancer screening barriers, expand knowledge regarding screening and prevention, and increase the proportion of women receiving Pap tests. To reach these goals, "messengers" (ie, female community lay health advisors) spread the word throughout their communities about cervical cancer health and Pap examinations. Messengers were selected to work on the project because they are seen as trusted members of their communities who can effectively disseminate knowledge about cervical health to other women on the reservation. Additional information on Messengers for Health is available elsewhere.<sup>27-30</sup>

Messengers for Health utilizes a community-based participatory research (CBPR) approach in which community members and university faculty and students work in partnership in all phases of the project. A CBPR approach is often the most appropriate method for conducting research in Native American communities. In the past, Native Americans have been used as research participants but have not been included in

determining what is being researched and how the research process is executed.<sup>31,32</sup> The Apsáalooke community has similarly identified with the experience of being “researched on,” with the perceptions of not being involved in past research, and with the result of data gathered in the community not being used to benefit the community. Individuals are more inclined to participate in research if they are involved in determining research goals and methods.<sup>29,32,33</sup> Furthermore, this type of research has been identified as a key strategy in reducing existing health disparities.<sup>34</sup>

## Purpose of the Study

Because of the disproportionately high rates of cervical cancer among Native American women and the lack of cross-cultural knowledge about positive patient-provider relationships, the current study used survey methodology to examine Apsáalooke women’s perceptions from their most recent Pap test appointment regarding the level of comfort and care received by health care providers. In addition, this study examined relationships between certain demographic characteristics and women’s perception of their Pap test screening experience in order to better understand what factors may be most salient in establishing a trusting and culturally sensitive relationship between an Apsáalooke woman and her health care provider. Both qualitative and quantitative analytical methods were employed to analyze the survey data.

## Methods

### *Establishing CBPR Community Partners*

Most CBPR projects involve working with community-based organizations (CBOs). Reservations typically have few formal CBOs. However, comparable organized bodies have decision-making and leadership capabilities in these tribal communities. On the Apsáalooke Reservation, these groups include the Crow Tribal Legislature, the Crow Executive Council and the Crow Tribal Health Board. In addition, tribal members also recognize many individuals as being in leadership positions. Examples are leaders of traditional groups or organizations (eg, sacred societies), those who have been given the right to lead traditional ceremonies (eg, sun dance, sweat lodge, Peyote meetings), leaders of tribal clans, individuals who do traditional healing, and elders. Hence, Native community partners involved in this project represent a variety of groups and individuals in a number of leadership positions. Partners for the project include the project coordinator, who is Apsáalooke, the principal investigator and staff from Montana State University (including students who are members of the Apsáalooke nation and other Native American tribes), members of the Messengers for Health advisory board, and individuals in leadership roles in the community. The advisory board includes individuals who helped with planning the Mes-

sengers for Health grant, cancer survivors, IHS workers, tribal elders and leaders, and women who worked on or were interested in women’s health.

### *Study Participants*

A list of all tribal women aged 18 years and older was obtained from the Apsáalooke tribal administration office. All women on this list were enrolled members in the Apsáalooke tribe. A computer-generated random sample of women was drawn from the list. Women were excluded from the sample if they lived away from the reservation or were mentally handicapped, ill, or elderly and incapacitated. Two women refused to participate in the survey and 5 did not participate for cultural reasons. These women said they were interested in being interviewed and that they would get back to the interviewer but they did not. In the Apsáalooke culture, contacting a person who has already indicated that he or she will be in contact is not acceptable.<sup>27</sup> Our community advisory board stated that these women should not be regarded as refusing to complete the survey. A total of 101 women from the randomly selected sample completed the survey.

### *Instrument Development*

Because we could not locate existing surveys on Native Americans’ or women’s health that addressed all of the topics that the advisory board wanted to address, and also because surveys used in other cervical cancer projects with Native Americans included data extraneous to the Messengers for Health study, the project coordinator and University project staff worked together to develop a new survey instrument specific to this study. Surveys created for other projects involving women’s health and health of Native Americans and Alaskan Indians were used as templates for this study’s survey development.<sup>35-39</sup> Some questions from existing surveys were retained in their original form and others were modified or replaced to increase question relevance for this project and for cultural relevance and sensitivity. All survey questions were reviewed, edited for appropriateness, and accepted by the project advisory board and project consultants. Additional information is available elsewhere regarding the development, implementation, and use of the survey.<sup>30</sup>

### *Measures*

The survey included several demographic characteristics that provided background information about participants. Characteristics included age, marital status, education level, employment status, income level, and number of adults and children in the home.

The survey also included questions about the participant’s Pap test history, location of most recent Pap test, and length of time since her last Pap test. Specific questions included, “Have you ever had a Pap test?”

“Where did you have your last Pap test?” and “How many months or years ago was your last Pap test?”

Four survey items examined participants’ perceptions of their most recent Pap test. Survey items included (1) “Did your doctor or nurse help you to feel comfortable during your last Pap test appointment?” (2) “Did you feel that your doctor or nurse was concerned about you during your last Pap test appointment?” (3) “Were you satisfied with the amount of time your doctor or nurse spent talking with you during your last Pap test appointment?” and (4) “Did you feel like you were able to ask the doctor or nurse any questions you had during your last Pap test appointment?” Response options for each of the four items were “yes,” “no,” and “don’t know.” During administration of the first two questions above, participants were also asked open-ended follow-up questions to further clarify their perceptions of their experiences. In addition to examining the four items individually, we also summed the items to create a total “experience” scale score ranging from 0 to 4. Tests of internal consistency yielded a Cronbach  $\alpha$  coefficient of .78, suggesting the scale was a reliable measure of women’s perception of their experiences with health care providers during a Pap test examination.

### **Interviewer Training and Survey Administration**

An Apsáalooke-specific training manual for interviewers was developed, and Apsáalooke women interviewers conducted face-to-face interviews. Interviewers were recruited by a professor of health at Little Big Horn College (LBHC), a tribal college on the reservation. The professor recruited students who were interested in entering health professions and were deemed by the professor to be trusted, mature individuals. They were from all areas of the reservation and ranged in age from late 20s to late 50s. Interviewer training took place over the course of 1 day at LBHC with a follow-up meeting 1 week later to discuss progress, questions, and concerns. The training covered the scope of the study, confidentiality and privacy protocols, cervical health and cervical cancer, roles and responsibilities of the interviewer, and interviewing procedures and techniques. Interviewers were trained to conduct interviews in a standardized manner. For example, they were taught to avoid varying the order of questions or the wording of the questions. The interviewers also practiced role-playing the interview. The project coordinator provided support and supervision to the interviewers. During interviews with participants, interviewers discussed how the information they provided was going to be used and that group data would be shared with community members. Additional information regarding the interview style, process, and interviewers is available elsewhere.<sup>27</sup>

This study received Institutional Review Board approval from Montana State University and the Billings

Area IHS Office. This manuscript was approved for publication by the Apsáalooke Tribe, Crow/Northern Cheyenne Service Unit of the IHS, and the Billings Area IHS Office.

### **Data Analysis**

We analyzed quantitative data using SPSS (Statistical Package for the Social Sciences; SPSS Inc, Chicago, Illinois). All entered data were coded, cleaned, and verified for accuracy. Descriptive analyses were run for all study variables. To further explore relationships between certain demographic characteristics (including age, marital status, education, employment status, income level, and number of adults and children in the home) and the participants’ Pap test experience, we ran Pearson Product Moment Correlation Coefficients. Some variables were dummy-coded for these analyses. Marital status was recoded as “married” or “living in marriage-like relationship” = 1 and all others = 0. Education level was recoded such that those women earning more than a high school diploma/GED = 1 and all others = 0. Income level was recoded as “not poor” (being above poverty level) = 2, “near poor” (being close to but above poverty level) = 1, and “poor” (meeting poverty criteria as determined by 2005 federal poverty guidelines: household income  $\times$  number of family members in household) = 0.

Qualitative data were entered into NVivo qualitative software (QSR International Pty Ltd, Cambridge, Massachusetts) for analysis. By triangulating the data using both qualitative and quantitative methods, we aimed to gain a perspective of women’s perceptions of their experiences during a Pap test.<sup>40</sup> We conducted qualitative analysis based on methods described by Patton<sup>41-43</sup> and Bogdan and Biklen.<sup>44</sup> We conducted a cross-case analysis in which we analyzed data across the case, or individual. Themes and patterns were then identified in the data.<sup>45</sup> Two coders analyzed each statement and at all times one or both of the coders were Native American. Coding was conducted inductively, meaning that themes were decided during analysis rather than prior to analysis.<sup>41</sup> Coders independently coded all text and then convened to discuss the results of their separate coding. They reviewed responses and discussed how and why responses were coded as they were. Discussion continued until consensus was reached on the code for each response. Data were recoded based on the consensus.

## **Results**

### **Demographic Characteristics and Pap Test History**

Demographic and Pap test history data are presented in Table 1. The majority of women were enrolled members of the Crow tribe, were married or living in a marriage-like relationship, and had graduated from high school and/or had some college or technical school

education. Most women in this study reported income levels as poor or near the poverty level (near poor). Ninety-seven participants (96%) reported having had a Pap test. When asked where they received their most recent Pap test, 85.6% of the women received their Pap test at an IHS Crow Service Unit facility, 9.3% at non-IHS clinics near the Apsáalooke reservation, and 5.1% at non-IHS clinics out of state. When asked how long ago

they had their last Pap test, 62% responded that they had the test within the last year, 21.6% had the test 1 to 2 years ago, and the remainder had the test more than 2 years ago.

**Table 1. — Demographic Characteristics and Pap Test History of the Sample (N = 101)**

	Mean (SD) or N (%)
Age (yrs)	37.72 (13.23) (range: 18–81)
Marital Status	
Married/marriage-like relationship	58 (57.4%)
Never married	19 (18.8%)
Formerly married	21 (20.8%)
Single	1 (1.0%)
Other	1 (1.0%)
Don't know	1 (1.0%)
Education Level	
8th grade	5 (4.9%)
9th – 11th grade	15 (14.9%)
High school graduate	27 (26.7%)
Some college/technical school	43 (42.6%)
Technical school graduate	3 (3.0%)
College graduate	5 (4.9%)
Post-college/professional degree	3 (3.0%)
Employment Status	
Employed, full-time	47 (46.5%)
Employed, part-time	11 (10.9%)
Not employed	43 (42.6%)
Income Level*	
Poor	54 (53.5%)
Near poor	18 (17.8%)
Not poor	24 (23.8%)
Refused	5 (4.9%)
Number of Adults in Household	2.50 (0.95) (range: 1–6)
Number of Children in Household	2.30 (1.44) (range: 0–6)
Pap Test History	
Ever had a Pap test? (Yes)	97 (96.0%)
How many months/years since last Pap?	
Within past year	60 (62.0%)
1–2 years ago	21 (21.6%)
3–4 years ago	7 (7.2%)
More than 4 years ago	8 (8.2%)
Other	1 (1.0%)
Location of Pap test	
IHS Crow Service Unit	83 (85.6%)
Non-IHS clinic near reservation	9 (9.3%)
Out of state/non-IHS clinic	5 (5.1%)

\* Poor = meets poverty criteria as determined by 2005 federal poverty guidelines (household income x number of family members in household). Near poor = close to but above poverty level. Not poor = above poverty level.

Reprinted with permission from Smith A, Christopher S, McCormick AK. Development and implementation of a culturally sensitive cervical health survey: a community-based participatory approach. *Women Health*. 2004;40:67-86. 2004 © The Haworth Press, Inc, Binghamton, NY. Article copies available from The Haworth Document Delivery Service: 1-800-HAWORTH. E-mail: docdelivery@haworthpress.com. <http://www.HaworthPress.com>.

### Perceptions of Pap Test Screening Experience

**Comfort With Pap Test Appointment:** Ninety-seven women responded to the question “Did your doctor or nurse help you to feel comfortable during your last Pap test appointment?” Of these, 83 women (85.6%) responded yes, 11 (11.3%) responded no, and 3 (3.1%) responded that they didn’t know. Several women commented on reasons they responded no to this question. One woman said, “It was a male doctor. I preferred a woman doctor.” Another woman stated, “I did not feel comfortable; the interaction, the eye contact, and tone of voice would help to make a woman feel more comfortable.”

Women who stated that their physician or nurse helped them to feel comfortable were asked an open-ended question about what made them feel more comfortable. Four themes with multiple responses and four themes with single responses emerged from the data (Table 2).

(1) *Personable and informative staff* — This theme describes a health care provider who was personable and provided information. One woman stated the following response, which other women echoed: “[She] talked through whole thing [the Pap test]. Very friendly and informative.”

(2) *Female provider* — Women consistently responded that their comfort was due to having a woman provider perform the Pap test or be in the room during the Pap test. Examples of these responses are: “[The provider] asked me if I wanted a female nurse to be

**Table 2. — Pap Test Screening Experience (n = 97)**

Experience	Mean (SD) or N (%)
Did your doctor or nurse help you to feel comfortable during your last Pap test appointment?	
Yes	83 (85.6%)
No	11 (11.3%)
Don't know	3 (3.1%)
Did you feel that your doctor or nurse was concerned about you during your last Pap test appointment?	
Yes	67 (69.1%)
No	25 (25.8%)
Don't know	5 (5.1%)
Were you satisfied with the amount of time your doctor or nurse spent talking with you during your last Pap test appointment?	
Yes	87 (89.7%)
No	10 (10.3%)
Did you feel like you were able to ask the doctor or nurse any questions you had during your last Pap test appointment?	
Yes	86 (88.7%)
No	11 (11.3%)
Total Experience Scale Score	3.33 (1.12)

present during [the examination],” and “I had a woman doctor which made me feel comfortable and relaxed.”

(3) *Reassurance* — Women described providers who reassured them by telling them to relax or helping them to relax during the Pap test. One woman simply stated: “[The provider] helped me to relax.”

(4) *Familiarity with provider* — Provider consistency and familiarity helped women feel more comfortable. Interview participants stated the following: “Always the same person” and “I already felt comfortable with him because he is the doctor I see for other health issues.”

Several themes had one response. These included “being familiar with the Pap test procedure” and “having a quick examination.” In direct contrast with respondents who indicated that familiarity with the provider helped them feel more comfortable, one woman responded that not knowing the provider helped her to feel more comfortable. One participant responded that being put to sleep for the Pap test made her feel more comfortable. We were unable to clarify this response.

**Provider Showed Concern:** There were 97 responses to the question, “Did you feel that your doctor or nurse was concerned about you during your last Pap test appointment?” of which 67 women (69.1%) responded yes, 25 women (25.8%) responded no, and 5 women (5.1%) responded that they didn’t know. Several women who responded no to this question provided reasons. One woman stated that it was “something he had to do, it was his job.” Another woman said, “No, it was very quick” (which is also what one woman said the provider did to help her feel comfortable), and a third woman acknowledged there was a “long waiting period in the examination room and nobody informed me there was a delay.”

Women who responded that their physician or nurse was concerned about them during their last Pap test appointment were then asked, “How did the doctor or nurse show that they were concerned about you?” Women described the providers’ and other health care personnel’s behaviors that indicated concern. Analyses revealed 5 themes, as discussed below.

(1) *Medical and procedural information* — Women perceived their medical provider as concerned about them when their providers gave information and explained medical procedures. Women had similar responses such as, “The doctor thoroughly explained why this test is important to find cancer early and treat it,” “[They] explained everything that they were doing,” and “He talked to me and let me know the test would not hurt; maybe would be a little uncomfortable.”

(2) *Annual Pap test* — Providers were perceived as showing concern when they encouraged yearly Pap tests. At the time of the preintervention survey, annual Pap tests were recommended. One woman stated, “Encouraged me to have myself checked on an annual basis.”

(3) *Personable staff* — Caring behavior by staff demonstrated interest in the woman. Many women responded similarly, as follows: “Took their time, asked if I had questions,” “Asked questions about [my] health and well-being,” and “Facial expression, concerned tone of voice.”

(4) *Follow-up* — Women felt that the provider showed concern by continuing with follow-up after the examination. One woman commented, “They followed up with me regarding the results.”

(5) *Privacy* — One woman felt the provider showed concern by respecting her privacy. She stated, “It was a private examination.”

**Satisfaction With Time Spent:** When the participants were asked, “Were you satisfied with the amount of time your provider spent talking with you during your last Pap test appointment?” 87 women (89.7%) responded that they were satisfied with the amount of time their provider spent talking with them; the remaining 10.3% were not satisfied.

**Obtaining Answers to Questions:** Of the 97 women who responded to the question, “Did you feel like you were able to ask your provider any questions you had during your last Pap test appointment?” 88.7% (86 women) answered that they felt comfortable asking their provider any questions they had. One woman commented, “Yes, I always ask the doctor questions.” Other women who said no stated, “It was something that was really uncomfortable for me,” and “No, the exam went quickly.”

### **Relationship Between Demographic Characteristics and Pap Test Experience**

We ran correlation coefficients to examine relationships between certain demographic and Pap test history variables and the total Pap test experience scale scores. Demographic and Pap test history variables were as follows: age; marital status (1 = married, 0 = not married); education level (1 = more than high school, 0 = all others); employment status (1 = employed, 0 = not employed); income level (2 = not poor, 1 = near poor, 0 = poor, as defined earlier); number of adults and children in the home; location of last Pap test conducted (1 = IHS, 0 = all others); and time elapsed since last Pap test.

Results revealed few significant relationships between variables; however, marital status ( $r = -.20$ ,  $P < .05$ ) and number of children in the home ( $r = -.23$ ,  $P < .05$ ) were significantly related to total experience scores. Married women reported feeling less comfortable and less satisfied than their nonmarried counterparts during their last Pap test. Additionally, women with more children in their home reported perceiving their Pap test screening experience as more negative than those women with fewer children in the home.

## Discussion

The survey assessed Apsáalooke women's perceptions of comfort, concern, amount of time spent, and ability to ask questions during a Pap test. The majority of women believed that their provider helped them to feel comfortable during their last Pap test visit. When asked how providers helped them to feel comfortable, women spoke of the degree to which the provider and other staff were personable and provided reassurance. Trust that the provider would maintain confidentiality also contributed to feelings of comfort in the examination. Community members have shared a fear of personal health information being spread through the community without their consent, and breaches of confidentiality have been discussed as a serious issue in health care with Native Americans.<sup>46</sup> Having a female provider resulted in some women feeling more comfortable, which aligns with modesty being a traditional cultural value for the Crow Indians. The importance of consistency in the patient-provider relationship also affected the comfort of the Apsáalooke women during their Pap test, and this dynamic is increasingly salient in health care literature.<sup>14-17</sup> Women in the community reported that a high rate of turnover among providers was a barrier to receiving care at an IHS facility, where most of the women interviewed receive their medical care. Most participants also believed that their provider was concerned about them during their last Pap test. These women felt that the providers showed concern by giving them medical and procedural information, encouraging Pap tests, being personable, and providing follow-up regarding Pap test results. However, one quarter of the women who completed our survey did not feel that their provider was concerned about them during their Pap test appointment. Feeling concerned about by providers is an important aspect of positive patient-provider relationships,<sup>14,21,22</sup> and community members involved with Messengers for Health expressed a worry that not feeling that a provider is concerned may prevent women from seeking needed health care.

Most participants in our survey indicated satisfaction with the amount of time their provider spent talking with them. Amount of time providers spend with patients has been shown to be important in patient satisfaction.<sup>14,23</sup> Community women commented that time spent with the provider during their Pap test appointments is critical in terms of feeling important and respected rather than dismissed.

The majority of women interviewed reported that they were able to ask the provider any questions they had during their visit. A future follow-up question would be to find out how versed women are regarding questions to ask. Results from other questions in our survey indicated that many women were not educated about cervical cancer, and Apsáalooke women might benefit from health care education provided at their

level of understanding by their health care providers or others. Our program utilizes respected community women, called Messengers, to spread cervical health information to other community women in a culturally sensitive manner. If both the physicians and the Messengers deliver and disseminate comparable messages about good cervical health behaviors, an increase in women's knowledge is likely.

A limitation to this research is the lack of detailed information on follow-up questions. We believe this is the result of two factors. The first factor is that this survey was predominantly a close-ended survey and interviewers were not trained to extensively probe open-ended questions. The second factor relates to the numerous studies and interviews on Apsáalooke tribal members performed by multiple researchers over the years. Community members acknowledge that historically, research has neither benefited nor negatively impacted the community. To address this anticipated issue, women interviewed were assured that our research results would provide direct benefit to their community. However, community members have heard this before and thus may have limited the amount of information provided.

Results from this survey were presented to IHS providers at a medical staff meeting and to Apsáalooke community members at open community meetings. These results, along with a host of other factors, led to the decision by project partners that Messengers for Health will expand its aims to support the IHS in delivering high-quality health care to the community. Initially, the Messengers for Health intervention consisted of community women disseminating information about cancer screening and cervical cancer prevention to other women in their social network. By adding intervention components that work with health care providers and the IHS system, the project will target multiple levels or use a social ecological framework, which has been encouraged recently in the public health literature.<sup>47-49</sup>

One aspect of program development in this next phase will be to conduct follow-up interviews to clarify responses in this survey and to gather detailed and specific information on interactions between health care providers and community women. Both groups will be interviewed to learn both sides of the story of the patient-provider relationship, and this information will be directly used in program expansion.

## Conclusions

Our survey suggests that the majority of women we questioned were satisfied with comfort, concern, amount of time spent, and ability to ask questions during a Pap test. While these questions addressing some aspects of the provider-patient relationship are an important first step in understanding the health care

experiences of women in one community, we realize the information we gained is only one piece of a large, complex confluence of social, economic, and political factors that contribute to health care and disease disparities experienced by Native Americans. By attempting to understand the experiences of patients in the often misunderstood patient-provider relationship, potential building blocks can be assembled toward the goal of reducing the health gap between diverse segments of our population.

## Disclosures

*This work was supported by the American Cancer Society (Margaret Ann Wise Grant TURSG-01-193-01-PBP).*

*No significant relationship exists between the authors and the companies/organizations whose products or services may be referenced in this article.*

*The editor of Cancer Control, John Horton, MB, ChB, FACP, has nothing to disclose.*

## References

- Espey D, Paisano RE, Cobb N. Regional patterns and trends in cancer mortality among American Indians and Alaska Natives, 1990-2001. *Cancer*. 2005;103:1045-1053.
- Billings Area Indian Health Service Office. Pap smear trend data 2007.
- Dignan M, Michielutte R, Blinson K, et al. Effectiveness of health education to increase screening for cervical cancer among eastern-band Cherokee Indian women in North Carolina. *J Natl Cancer Inst*. 1996;88:1670-1676.
- Strickland CJ, Chrisman NJ, Yallup M, et al. Walking the journey of womanhood: Yakama Indian women and Papanicolaou (Pap) test screening. *Public Health Nurs*. 1996;13:141-150.
- Burhansstipanov L. Urban native American health issues. *Cancer*. 2000;88(5 suppl):1207-1213.
- Frisch LL, Allen GD, Padonu G, et al. Social influences on Pap smear screening frequency. *Alaska Med*. 2000;42:41-47.
- Lawrence J. The Indian Health Service and the sterilization of Native American women. *Am Indian Q*. 2000;24:400-419.
- US Commission on Civil Rights. Broken Promises: Evaluating the Native American Health Care System. Washington, DC: US Commission on Civil Rights; 2004. <http://www.usccr.gov/pubs/nahealth/nabroken.pdf>. Accessed January 10, 2008.
- Westmoreland TM, Watson KR. Redeeming hollow promises: the case for mandatory spending on health care for American Indians and Alaska Natives. *Am J Public Health*. 2006;96:600-605. Epub 2006 Feb 28.
- Burhansstipanov L, Hollow W. Native American cultural aspects of oncology nursing care. *Semin Oncol Nurs*. 2001;17:206-219.
- Shi L, Forrest CB, Von Schrader S, et al. Vulnerability and the patient-practitioner relationship: the roles of gatekeeping and primary care performance. *Am J Public Health*. 2003;93:138-144.
- Beach MC, Sugarman J, Johnson RL, et al. Do patients treated with dignity report higher satisfaction, adherence, and receipt of preventive care? *Ann Fam Med*. 2005;3:331-338.
- Stepanikova I, Mollborn S, Cook KS, et al. Patients' race, ethnicity, language, and trust in a physician. *J Health Soc Behav*. 2006;47:390-405.
- Donohue RK. Nurse practitioner-client interaction as resource exchange in a women's health clinic: an exploratory study. *J Clin Nurs*. 2003;12:717-725.
- Balkrishnan R, Dugan E, Camacho FT, et al. Trust and satisfaction with physicians, insurers, and the medical profession. *Med Care*. 2003;41:1058-1064.
- Kao AC, Green DC, Davis NA, et al. Patients' trust in their physicians: effects of choice, continuity, and payment method. *J Gen Intern Med*. 1998;13:681-686.
- Thom DH, Campbell B. Patient-physician trust: an exploratory study. *J Fam Pract*. 1997;44:169-176.
- Joos SK, Hickam DH, Gordon GH, et al. Effects of a physician communication intervention on patient care outcomes. *J Gen Intern Med*. 1996;11:147-155.
- Cooper-Patrick L, Gallo JJ, Gonzales JJ, et al. Race, gender, and partnership in the patient-physician relationship. *JAMA*. 1999;282:583-589.
- Saha S, Arbelaez JJ, Cooper LA. Patient-physician relationships and racial disparities in the quality of health care. *Am J Public Health*. 2003;93:1713-1719.
- Carrasquillo O, Ferry DH, Edwards J, et al. Eligibility for government insurance if immigrant provisions of welfare reform are repealed. *Am J Public Health*. 2003;93:1680-1682.
- Doescher MP, Saver BG, Franks P, et al. Racial and ethnic disparities in perceptions of physician style and trust. *Arch Fam Med*. 2000;9:1156-1163.
- Hankins GD, Shaw SB, Cruess DF, et al. Patient satisfaction with collaborative practice. *Obstet Gynecol*. 1996;88:1011-1015.
- Spector RE. *Cultural Diversity in Health & Illness*. 6th ed. Upper Saddle River, NJ: Pearson Prentice Hall; 2004.
- Sanchez TR, Plawecki JA, Plawecki HM. The delivery of culturally sensitive health care to Native Americans. *J Holist Nurs*. 1996;14:295-307.
- Burhansstipanov L. Cancer research among Native American peoples. Proceedings of the Third National Conference on Cancer Nursing Research. Atlanta, GA. American Cancer Society Pub. No. 94-25M-No. 3072. 1994.
- Christopher S, McCormick AK, Smith A, et al. Development of an interviewer training manual for a cervix health project on the Apsáalooke reservation. *Health Promot Pract*. 2005;6:414-422.
- Christopher S, Burhansstipanov L, McCormick AK. Using a CBPR approach to develop an interviewer training manual with members of the Apsáalooke Nation. In: Israel BA, Eng E, Schultz AJ, et al, eds. *Methods in Community-Based Participatory Research for Health*. San Francisco, CA: Jossey-Bass; 2005:128-145.
- Christopher S. Recommendations for conducting successful research with Native Americans. *J Cancer Educ*. 2005;20(1 suppl):47-51.
- Smith A, Christopher S, McCormick AK. Development and implementation of a culturally sensitive cervical health survey: a community-based participatory approach. *Women Health*. 2004;40:67-86.
- Davis SM, Reid R. Practicing participatory research in American Indian communities. *Am J Clin Nutr*. 1999;69(4 suppl):755S-759S.
- Sobeck JL, Chapleski EE, Fisher C. Conducting research with American Indians: a case study of motives, methods, and results. *J Ethnic Cult Divers Soc Work*. 2003;12:69-84.
- Crazy Bull C. Advice for the non-Native researcher. *Tribal College J Am Indian Higher Educ*. 1997;9:24.
- Horner RD, Salazar W, Geiger HJ, et al. Changing healthcare professionals' behaviors to eliminate disparities in healthcare: What do we know? How might we proceed? *Am J Manag Care*. 2004;10:SP12-SP19.
- Banner RO, DeCembra H, Enos R, et al. A breast and cervical cancer project in a Native Hawaiian community: Wai'anae cancer research project. *Prev Med*. 1995;24:447-453.
- Banner RO, Gotay CC, Enos R, et al. *Effects of a Culturally-Tailored Intervention to Increase Breast and Cervical Cancer Screening in Native Hawaiians*. Bethesda, MD: National Institutes of Health, National Cancer Institute; 1999:45-55.
- Bell RA, Dignan M, Michielutte R, et al. Cervical cancer education for Native American women in North Carolina: the North Carolina Native American Prevention Project. In: Glover CS, Hodge FS, eds. *Native Outreach: A Report to American Indian, Alaska Native and Native Hawaiian Communities: Executive Summary*. Bethesda, MD: National Institutes of Health and National Cancer Institute; NIH Pub No 98-4341. 1999:33-44.
- Lanier AP, Kelly J, Berner J. The Alaska Native women's health project to reduce cervical cancer. In: Glover CS, Hodge FS, eds. *Native Outreach: A Report to the American Indian, Alaska Native, and Native Hawaiian Communities: Executive Summary*. Bethesda, MD: National Cancer Institute; NIH Pub No 98-4341. 1999:23-32.
- Matsunaga DS, Enos R, Gotay CC, et al. Participatory research in a Native Hawaiian community: the Wai'anae cancer research project. *Cancer*. 1996;78(7 suppl):1582-1586.
- Berg BL. *Qualitative Research Methods for the Social Sciences*. Boston, MA: Allyn and Bacon; 1998.
- Patton MQ. *How to Use Qualitative Methods in Evaluation*. Newbury Park, CA: Sage Publications; 1987.
- Patton MQ. *Qualitative Evaluation and Research Methods*. 2nd ed. Newbury Park, CA: Sage Publications; 1990.
- Patton MQ. *Qualitative Research and Evaluation Methods*. 3rd ed. Thousand Oaks, CA: Sage Publications; 2002.
- Bogdan RC, Biklen SK. *Qualitative Research for Education: An Introduction to Theory and Methods*. Boston, MA: Allyn and Bacon; 1992.
- Huberman AM, Miles MB. Data management and analysis methods. In: Denzin NK, Lincoln YS, eds. *Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications; 1994:428-445.
- National Native American AIDS Prevention Center. Clinician's Guide: Working with Native Americans Living with HIV. Oakland, CA: NNAAPC; 2002. <http://www.nnaapc.org>. Accessed January 9, 2008.
- McLeroy KR, Bibeau D, Steckler A, et al. An ecological perspective on health promotion programs. *Health Educ Q*. 1988;15:351-377.
- Stokols D. Establishing and maintaining healthy environments: toward a social ecology of health promotion. *Am Psychol*. 1992;47:6-22.
- Stokols D, Allen J, Bellingham RL. The social ecology of health promotion: implications for research and practice. *Am J Health Promot*. 1996;10:247-251.