A Qualitative Study about Cervical Cancer Screening Among Latinas Living in a Rural Area of California: Lessons for Health Educators

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ABSTRACT

*Cervical cancer is a major health concern for Latinas, who are also less likely to undergo a Pap smear exam than the general population. This study identifies alterable determinants of Pap smear screening for Latino women living in a rural area of California. It involved the design and pilot testing of a culturally appropriate instrument and the development of semi-structured interviews with 51 Latinas. Qualitative data were analyzed using NUD*IST. Results from this study indicate that the main factors identified by participants as hindering their decision to seek Pap smear exams were long waiting periods, a lack of continuity of care, a perceived lack of quality of care, language differences, and a lack of knowledge regarding how to access the health system. This article provides health educators working in health care settings with an analysis of the cultural and logistic factors influencing health-related decisions in immigrant and rural Latino populations. It also presents some of the lessons that health educators can learn to enhance their professional practice when working with disadvantaged populations.*

INTRODUCTION

Hispanic/Latino groups comprise 12.5% of the population in the United States and are considered the fastest growing population segment in the U.S.[1] Cancer is the second leading cause of death among Latinos, accounting for 20% of the mortality in this population.[2] Cervical cancer is the fourth most commonly identified type of cancer among new cases diagnosed in Latinos.[2] Latino women are twice as likely as non-Hispanic women to develop cervical cancer.[3] In fact, the incidence of cervical cancer amongst Central California Hispanic women is the highest of all ethnic groups and is more than double that of non-Hispanic whites.[4]

Cervical cancer is an avoidable condition. Although the incidence of cervical cancer has declined steadily since the introduction of the Pap test, some data suggest that its incidence may be increasing for certain subgroups, including Latinas.[4] Mortality from cervical cancer persists despite the availability of a simple screening procedure, the Papanicolau smear (Pap smear), that can detect precursors to cervical cancer at a curable stage.

Latinas and Pap Smear

The percentage of Latinas ages 18 and older who have had a Pap smear is significantly lower than the percentage in Caucasian and African-American populations.[5] Latinas report lower use of Pap smear and greater barriers to use in comparison to the general population.[6] Consistent Pap smear use among low-income, older Latino women is significantly lower than the desired levels for all American women as stipulated by the *Healthy People 2010* guidelines.[7]

Few studies have attempted to identify the barriers reported by Latino women to get Pap smear screening.[8,9,10] Limited research has been conducted in the Central

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California Valley to identify the factors that may account for the increased incidence of cervical cancer in Hispanic/Latino women living in this geographical region. The identification of the barriers to adopt health-enhancing actions among Latinas is of paramount importance for health educators working with diverse groups. This article provides health educators working with clients in health care settings with an analysis of the cultural and logistic factors influencing Pap smear compliance in immigrant and rural Latino populations. It also presents some of the lessons that health educators can learn to enhance their professional practice when working with disadvantaged populations.

METHODS

Qualitative inquiry was the basis for the collection and analysis of data in this study. A phenomenological approach was used to gather data and interpret the experiences related by the study participants. In this approach, personal experiences and day-to-day events are the basis under which people construct and see the world.[11] This experiential construction of reality has a major impact on people's health-related decisions and reactions to particular morbidity situations and disease prevention recommendations. This study incorporated phenomenological principles by allowing participants to talk about life experiences that influenced their decision to comply or not with recommendations regarding pap-smear screening. These phenomenological principles have been used by health educators in other studies,[12,13] and have proven to be effective when conducting research with minority groups.

Instrument

The first step in this research process involved the selection of the survey instrument and the identification of the sample for this study. After reviewing the available literature regarding studies on Pap smear screening and cervical cancer prevention conducted with Latino women, five survey instruments were analyzed to determine their appropriateness for this particular research. Although some of the selected instruments were highly compliant with cultural sensitivity recommendations, none of them were suitable for the population in this study due to literacy challenges. For this reason, the research team had to design a new instrument for the collection of data that could be answered by a sample with an average literacy level of fourth grade.

The new instrument underwent eleven revisions by research team members and advisors. After consensus was reached among team members that the survey instrument was close to the final draft, the research protocol was submitted for review and approval by the Committees for the Protection of Human Subjects at the participating institutions. This protocol included focus groups with experts, members of the community, and representatives from the participating health centers to determine the cultural appropriateness, the validity of the questions and constructs to be tested in the study, as well as to generate suggestions for improvement. Revisions were made and suggestions were incorporated.

The instrument was then translated into Spanish by a member of the community familiar with the Spanish used by Mexican populations, since the majority of the participants were expected to be of Mexican background. The instrument was also translated back into English to determine the accuracy of the Spanish version.

Participants

The protocol for the selection of research participants, approved by the Institutional Review Boards of the agencies involved in this study, included the identification of all patients who were enrolled in two state-sponsored MediCal managed care systems, who were 18 to 65 years old. Ethnicity was inferred from the list of Medicaid users by matching surnames to the Hispanic Surname List of the U.S. Census. Only those names categorized as being 95% likely to be Hispanic descendents were selected for this study. A total of 728 names were eligible for this study.

This study involved two major phases: (1) a review of medical charts to obtain participants' addresses and telephone numbers, and (2) the development of personal interviews with study participants. The instrument for the interviews and the protocol for chart reviews were pilot-tested between May and August 2001. A total of 45 women were invited to participate in the pilot test phase, from which 13 (28.9%) agreed to be interviewed. After the pilot-testing phase, a standard protocol for chart reviews and oral interviews was approved by the IRB of the participating institutions and adopted in the main study.

During the chart review phase (April to December 2001) it was identified that, from a total of 728 potential study participants, 354 (48.6%) had medical charts in their assigned health center and had a recorded address. They were invited to participate in this study by a mail package consisting of a letter of invitation from the participating health center medical director, a flier with the most important information about the study, and a self-stamped envelope to accept or decline participation. These materials were included in English and Spanish.

A week after receiving the invitation package to take part in the study, potential participants were called by one of the research assistants. A phone script was written to ensure consistency in the information provided by the research assistant. Women who did not respond by mail were telephoned up to six times. Home visits were made to the address recorded on the medical chart when a phone was unavailable or telephone contact was unsuccessful.

Interviews were scheduled at the homes of the participants or at the participating health care centers based upon the preference of each participant. Monetary compensation was provided for those women who accepted to participate in one-hour individual interviews. From the 354 women invited to participate, 51 (14.4%) accepted to be interviewed. Interviews were conducted between August 2001 and February 2002. A total of ten open-ended questions were used in the interview to determine participants' demographic characteristics, acculturation, fatalism levels, education, quality of the health care relationship, previous experiences with the health care system, and compliance with Pap smear screening recommendations.

Data Analysis

All the interviews were tape-recorded and translated from Spanish to English for data analysis. The participants' responses to one of the questions in the interview related to immigration status and its influence on health-related decisions were not tape-recorded. Data accuracy in the transcription and translation process was verified by a bilingual Latino faculty member. Data analysis was conducted with NUD*IST, a software program for qualitative data management.

Line-by-line coding constituted the first level of analysis in this study. Two Spanish-speaking qualitative researchers reviewed the original interviews and their transcriptions and compared them to the printout provided with the NUD*IST software. Common themes were identified through the analysis done with NUD*IST and verified by researchers' visual inspection of the data. This article presents themes associated with the practice of Pap smear compliance. Quotes from the participants were randomly selected for this article to illustrate each of the themes generated in the data. Quotes are used in this section to facilitate a comprehensive understanding of the participants' responses.

RESULTS

The focus of this study was to discern specific factors that discouraged Latinas in the Central California Valley from undergoing Pap smear screening exams. The recognition of the factors influencing Latinas' health-related decisions is a first step in the design of culturally sensitive health education programs for this population. The data gathered in this study consistently identified the following themes as major factors influencing Latinas' decision to have a Pap smear: 1) quality of care issues; 2) obstacles to care in general; 3) obstacles to getting a Pap smear; and 4) factors that facilitate getting a Pap smear.

Quality of Care

The women in this study expressed a sincere desire for what they described as "good" health care. To this group of women "good" health care appears to have several dimensions. To receive good care, one must have a "good" provider. According to this group of women, a "good" provider is one who is "caring." The construct of "caring" consisted of characteristics such as patience, sensitivity, good listening, availability, answers to questions, and follow-up.

The following statement illustrates what the participants meant by "caring":

> …she was real caring about my illness… and right away she called to tell me I was anemic. I came in Thursday. Friday I found out I was a real anemic. She wanted to see me and do all the [tests] she had to do and from then on she recommended me to another doctor… so I think for me…she did a very good job. She was real caring because…I was, real anemic. She really, really pushed everything…like, right now she's mad at me cause I didn't go [to] do my mammogram…

In this example, what made the medical provider "good" was her caring attitude, which was illustrated by her concern, follow-up of her patient's situation and recommendation for further analysis. To the patient, this demonstrated complete and thorough care. The following statement further illustrates the participant's desire for comprehensive care and follow-up:

> I think that [name of the clinic]… That clinic is good, because if something comes up wrong in your physical checkup, they [notify] you, by mail, that you have to do another checkup or the doctor [tells] you on the phone that it came out wrong and the clinic has all that…

Another attribute of quality of care that was described by this group of women was not only the opportunity to ask their provider questions but, more importantly, to have them answered. This point is illustrated by the following statement:

> Because when [providers] finish attending me they ask if I have any questions, and I ask the questions and they always answer me…

This interaction between patient and provider appears to give the women a greater sense of connection with their provider, which serves to increase the confidence of the patient, both in the care she receives as well as in the provider. As one woman stated:

> He gives me a lot of confidence, the doctor. [He's] very good…in other words, he tends to [treat] me well.

When asked to describe how well her doctor listened to her, the same woman replied:

> …he asks 'Ma'am, do you have another question for me before you go?' I say 'no, doctor, everything is good.' And everything he gives me makes my children get better. He gives me very good medicine.

Lessons for patient health educators and other health education practitioners include the importance of recognizing how participants define good care. It is clear that this group of women is concerned with the quality of the care dispensed to them. It is also clear from their responses that they perceived to have received good quality of care and that this quality of care encouraged them to seek out their provider. This type of relationship between patient and provider played an important role in increasing health care utilization rates among participants in this study, and became especially important when dealing with intimate exams, such as the Pap smear. This finding is in line with previous studies that have indicated that quality of care is an important factor that individuals consider when deciding whether or not to seek health care.[14,15]

Obstacles to Care

The participating women were asked about their general experience in getting the medical attention that they or a doctor believed necessary for them. This line of questioning elicited several factors that the women believed made it difficult to obtain medical care, or made the process of obtaining medical care arduous and frustrating. These factors included long waiting times, poor attendance by the medical staff, the bureaucracy involved in accessing managed care, and language differences.

Long waiting periods have been identified as a factor that discourages individuals from utilizing health care.[14,15] Thus, unless it is perceived as urgent or an emergency, patients are unlikely to seek out routine exams or check-ups, such as the Pap smear exam. When not discouraging people from actually seeking care, these long waiting periods serve to delay the adoption of preventive measures as well, as is illustrated by a 24-year old respondent when she stated:

> Mostly, [what] I don't like about the [exam] rooms [is] that sometimes…I have to wait in the room at least for half an hour…sometimes I leave or I tell them…I have things to do, my child [is] at school.

In addition to long waiting periods, the attitude and behavior of the medical staff have also been identified as important in shaping a patient's perception of the quality of care they receive. In previous studies, patients—in particular poor, ethnic minority patients—have described the attitude of some medical staff as disrespectful and demeaning.[16,17] This may serve to discourage them from returning for follow-up or future care. However, when a provider develops a trusting relationship with a patient, he/she is in a position to alleviate the anxiety a patient may experience as a result of the perceived negative treatment by a member of the medical staff. For example, one respondent shares her feeling about a particular nurse in one of the health clinics and describes how she dealt with this situation:

> …there is this nurse I don't really appreciate. She works at that clinic and I don't like her. I tell the doctor 'you know doctor, I don't want that lady to be there. Please call another nurse.' And he puts another nurse. She treat[ed] my mom real bad at a Pap smear and I don't want that to happen to me… I'm really concerned about that and I'm really aware of the nurse that attends me.

In this situation, this respondent took an active role in determining the quality of the care that she sought. Her active participation is facilitated by the nature of her relationship with the health provider. In this case, the relationship is characterized by trust. It is this trust that gave her the confidence to make such a request without fear of retaliation from the nurse.

In addition to the obstacles related to the personal characteristics of health providers or specific clinics, some women also expressed frustration with being part of a managed health care system and found obtaining the desired medical care cumbersome and frustrating, as a result of the bureaucracy involved. This frustration is clearly evident in the experience of one of the respondents. When asked whether there are certain things that prevent or make it difficult for her to receive health care services, she responded:

> [In] [name of the managed care system] you have to call an 800 number to notify what kind of doctor you want. Sometimes…they don't have my doctor in the program. They have another doctor in that program…For my health card to work, I had a lot of problems at the beginning because I would go to the doctor and they would send me a bill and I would go 'why is this happening?'…

Another characteristic of managed care that this group of women found frustrating is the lack of continuity of care. Respondents expressed their displeasure in not always being able to see the same provider. This lack of continuity of care, vis-à-vis the medical provider, discouraged the adequate use of health care services in general, but in particular, it added to the discomfort women already felt with getting a Pap smear exam. This uneasiness with having a different provider conduct a Pap smear exam is illustrated by one of the respondents:

> Having a different doctor doesn't help because I don't know the doctor. I don't know his tricks. People have different ways of checking people. Sometimes when you are laying down, who knows what happens under the table…and I trusted my doctor because every time he does the work on me he goes 'I [have] this in my hand. I'm [going to] do this. If you feel a pinch…tell me so I can stop doing it. If you feel I'm hurting you, tell me. I'll stop doing it.' He [warns] me.

As expressed by this respondent, the lack of continuity of care disrupts the personal trust that a patient develops with her primary provider, thus making the medical encounter an impersonal and embarrassing experience. The participants' responses in this study were centered on the attitude of medical providers; no statements alluded to the attitudes of health educators in the participating sample.

Language is another factor that was identified by this group of women as a factor influencing their choice of provider, as well as enhancing the quality of the care offer. For example, the statement of a 50-year-old immigrant woman illustrates the importance of being able to communicate with a provider in her own language:

> …I'd go to another person after a doctor that doesn't speak my language…I'd go to another person and I'd…feel better with a person who speaks…my own language, because I'd have to have other people [translate]…

This quote illustrates two major points that can be used by health educators to enhance their professional practice: 1) most non-English-speaking patients will make an effort to find a provider that speaks their language; and 2) non-English-speaking patients are concerned with being able to communicate with their health provider directly, and not with the assistance of a interpreter. From the previous statement, it is evident that not being able to communicate with a medical provider may lead to women delaying or underutilizing care until they find a provider who can communicate with them in their language. In a managed care situation, this is not always an easy task. In many instances, specific providers, such as health educators with specific skills (e.g., being bilingual) or characteristics (e.g., gender, in this case female) are heavily sought out and may not be able to deal with the larger number of patients assigned to them. This situation may lead to patients delaying care or underutilizing the medical care available to them. Moreover, in a region where non-English-speaking patients, in this case Spanish-speaking patients, clearly outnumber Spanish-speaking health providers, language, then, can limit a patient's choice of provider and serve as an obstacle to receiving quality medical care, as perceived by the patient.

Obstacles to getting a Pap Smear

With regards to Pap smears themselves, this group of women identified several factors that discourage them from undergoing a Pap exam. These factors, while primarily related to the nature of the exam itself and to the personal attributes of the medical provider conducting the exam, are also related to the lack of continuity of care inherent in a managed care system, as previously mentioned. In particular, the factors identified by these women as discouraging them from receiving a Pap exam fell into the following three categories: 1) gender; 2) discomfort/"rough" exams; and 3) lack of continuity of care.

Most women stated that the gender of their provider did not affect their utilization of health care services. However, this was the case because at the time of the interview, most of the women were seeing a female doctor. Preference for a female doctor was especially high when considering Pap smear exams. The idea of a strange, male medical provider conducting the exam served to discourage women from seeking a Pap smear. This point is demonstrated by one of the respondents when she states:

> "I'd rather have a female doctor than a male…it's more embarrassing…seeing me down there…if it's a man, if it's not my husband, put it that way."

Having a female provider helped alleviate the embarrassment that these women experienced during the exam, as illustrated by the following statement:

> "One feels embarrassed, nervous…that they're checking you, that the doctor is checking you. You always feel a little strange, yes [laughs]?"

In addition to being embarrassed, all the women also described the exam as very uncomfortable. While the exam, by its nature, is uncomfortable, the discomfort is often exacerbated by the way it is administered. This is clearly illustrated by the following statements:

> Some nurses…or …doctors can be gentle and some can be rough, but… you do feel it when they put it in there…Some doctors have a big hand. When I had my last baby I had a Pap smear and [the] doctor wasn't gentle. His hand was too big. His hands were thick, big fingers, big hands and I [didn't] like it. In that occasion I prefer a nurse doing it, gentle and soft and slowly… Sometimes [doctors] are not as gentle as possible. Sometimes they just want to do a quick check up and that's it.

Another factor that enhances the discomfort level of a Pap exam is the lack of continuity of care often reflected in a managed care system. When asked whether or not there are factors that hinder or make it difficult for a woman to get a Pap exam, a common response by the women was having a doctor other than their usual provider conduct the exam. This sentiment is poignantly captured in the following statement made by a 24 year old, single mother:

> What prevents it is doctors that [are] not helping…like say my doctor is not there and someone else, [may be] his assistant [is going to do it], I'll probably cancel and do another appointment until my doctor is there… Having a different doctor doesn't help because I don't know the doctor. I don't know his tricks. People have different ways of checking people…

Similarly, other women also stated that they would be discouraged from undergoing a Pap exam by an unknown provider. For example, a 27-year-old Mexican immigrant states:

> …the only thing that would prevent me [from having an exam] is if it was to be a doctor whom I've never seen, or who's never touched me. Or if I see I can't trust him. Or if they would tell me that an assistant student would do it…Because then they hurt you.

This statement illustrates, once again, a key problem that arises from the lack of continuity of care: a lack of trust in the provider. Although this may be present in managed care, here we see how it directly impacts the utilization of Pap exams. It is important, therefore, for medical providers to attempt to develop a trusting relationship with their patients in order to encourage adequate use of medical services in general, and Pap exams in particular. This is an important finding for health educators since it demonstrates the value of investing time in developing a trusting relationship with the client.

Another interesting finding was that some of the women perceived the exam itself as potentially causing cervical cancer if not done correctly. This perception is clearly reflected in the following statement by one of the women:

> Sometimes I feel afraid because they say that you can get cancer or diseases in any way by the doctor not putting the right thing…They say that they touch the meat part or anything to see if I have any sicknesses and sometimes I do get afraid because anything that they do to do check ups sometimes [does] affect the inside of the women, and I'm really concerned about that…Sometimes I feel afraid. I feel afraid because later on you

> have pains…later on you discharge a lot or sometimes you have a scratch or…ummm…or you have to go make an appointment again to see what's going on because sometimes a doctor doesn't do it, the nurse does it, and they do it the wrong way…

This statement reflects an attitude that has been described in earlier cancer studies (i.e., the belief that the treatment itself is worse than or causes the actual disease).[18,19] Health educators can play an important role in clarifying misconceptions while respecting the cultural and social values of the populations they are working with.

Factors that Facilitated Getting a Pap Smear

Although a Pap smear is often uncomfortable and embarrassing, there are certain things that health educators working with clients in health care settings can do to alleviate this discomfort. Just as the women were clear on what hindered their use of Pap smear screening exams, they were also clear on what facilitated their use of these exams. Once again, the most salient theme was trust. To these women, trust was essential in having a positive experience. Trust means that the providers and health educators view the patient from a humanistic perspective, and not simply as a client. Trust implies to the women that their provider will have their best interest in mind and treat them with dignity and respect. These points were clear from the responses of the women. For example, one woman described how her provider conducts a Pap exam:

> My doctor fortunately checks me real good, he touches my inside…also it's so helpful… he tells me, you know, what this is…'one last thing I'm doing to you' or 'this is the first thing I'm doing to you' to tell you step by step. My doctor tells you 'this is the first thing I'm doing, the second thing…' Step by step.

This woman goes on to describe how her provider attempts to alleviate the patient's discomfort by allowing her to have a moment of privacy at the end of the procedure.

> … I'm really concerned about that. That's why I like the doctor to tell me one by one what's going on and when its finished, tell me, 'I'm almost finished I'll step out so you can change.'

An important lesson health educators can learn from these statements is that patients need to feel respected and be allowed to maintain their dignity and privacy in any health-related procedure. Health educators should make every attempt to treat patients in a dignified manner in any potentially undignified situation.

DISCUSSION

Despite the widespread availability of an effective screening procedure, cervical cancer remains a significant cause of mortality in the United States, particularly among Latinas of low socioeconomic status. Preventive health groups universally recommend screening for cervical cancer with Pap smears as an effective and acceptable screening measure for cervical cancer.[20]

Numerous factors have been documented in the literature as affecting Pap smear utilization rates, among them: continuity of care, age, race, education, country of origin, population density, and ethnicity.[21] Factors negatively affecting a woman's decision to get a Pap smear include ineffective communication with the health practitioner, lack of knowledge about Pap smears, lack of continuity with primary clinicians, and discomfort with the provider.[22]

The study presented in this article addressed specific themes and patterns regarding the perceptions and experiences of Latino women within a managed care system in the U.S. This article presents some of the lessons that health educators working in medical settings can learn to enhance their professional practice.

The first lesson is that health educators need to develop skills in recognizing how their clients define quality of care. High quality of care was defined by the participants in this study as having practitioners that respect their time, make every effort to answer the patients' questions in a timely and clear manner, and show genuine concern for the clients' problems and circumstances.

The second lesson is that health educators need to show a "caring attitude" as defined by their clients. Although gender and ethnicity of the provider were important, the most important characteristic in a trusting relationship identified by the participants in this study was the "perceived" caring attitude of the provider. A "caring provider" was defined by the study participants as someone who was patient, sensitive, a good listener, answered questions, and was readily available. These characteristics ought to be present in health educators working with Latino populations.

Study participants seemed drawn to those providers who cared not just about the symptoms of the patient, but also about her family. A "caring" attitude from the health care provider was associated with being asked about the participant's children and other members of the family during the first appointment. Health care providers, and particularly health educators, need to pay attention during the first encounter with the client to other issues surrounding the participant's life. Health providers who talked with the client about issues different from the cause of consultation itself, were perceived by participants as caring and easier to talk to.

A provider who asked for the health of the children of the participant and who took time to establish a relationship during the first consultation seemed to be perceived as caring. This is an important lesson for health educators working in medical settings since it suggests that time should be devoted during the first encounter to talk about general issues of the client's life. A caring attitude from health educators and other health providers is one of the major determinants of health-seeking behaviors among Latino women.

A third lesson is that health educators must view "access" to health in a broad sense. In other words, "access" must not be viewed simply as the ability to pay for health care services (either out-of-pocket or through medical insurance). The participants in this sample all were covered by Medical. However, this did not guarantee "access." Long waiting periods, a lack of continuity of care, a perceived lack of quality of care, language differences, and a lack of knowledge regarding how to access the system hindered access. Clearly, "access" is multidimensional and all its dimensions must be understood and addressed when attempting to improve medical compliance by particular sub-groups in society, such as low-income Latinas in Central California. The advocacy role of health educators certainly is applicable in this situation. Health educators ought to advocate for a broader understanding of "access" in the health field and for reducing health disparities in disadvantaged populations.

Another lesson for health educators in this study is that reaching low socioeconomic Latino women requires a simplification of traditional research methods. Requirements from the Institutional Review Boards of the collaborating institutions in this study resulted in a four-page document that had to be presented to and signed by potential participants. This was a major difficulty in approaching the participants in this study since they had a limited educational background. In an attempt to comply with IRB requirements, researchers may tend to forget the real meaning of consent forms, which is to allow participants to make informed decisions. Thus, making "consent forms," and other materials used in research, readable to a low-literacy population requires considerable thought and effort. This effort includes careful training of the interviewers in reading and explaining the consent forms to participants, as well as designing forms in accordance to the educational background of the participants. In this study, in addition to the required consent form, a one-page simplified version was presented and explained to the participating women.

An additional lesson of special relevance for health educators was related to the efforts needed to motivate Latino women to participate in research projects. In this study, the group of women for whom there was no evidence of being seen by the assigned physician constituted the most difficult to reach population. Several efforts were undertaken to reach this group such as conducting several home visits for those participants who could not be accessed by phone, calling directory assistance to get another phone listing, and trying to locate community members who could provide additional information.

Encouraging lower-income Latinas to participate in research definitely is a challenge for health education professionals. Two strategies could successfully be employed in research to motivate hard-to-find populations. The first one is to employ research staff that resembles the ethnic and cultural profile of the study participants.[23] The second one alludes to granting payment or another form of compensation to study participants. It is very important that researchers acknowledge the monetary value of the time invested by the research participants.

Another lesson for health educators is related to finding mechanisms to improve the access of clients to health education services and medical care in general. In this study, once the participant had a first encounter with the health practitioner, she seemed to be more likely to remain in the system and to engage in preventive practices, such as compliance with Pap smear recommendations. Research with Latino women has suggested the appropriateness of working with promotoras and other community lay health workers.[24] These community agents can become very effective health educators since they know the cultural expectations and social limitations of their communities.

A final lesson for health educators is related to finding appropriate mechanisms to ensure the quality in the translation of materials used in the research process. Often, it is difficult to find an equivalent in a different language that accurately depicts the meaning of a word. The real or colloquial meaning of a word may be lost in the translation process, thus reducing construct validity. It is essential that health educators involved in research conduct back translations of the research instrument and any other data collection measure. This is particularly important for qualitative analysis. Interpreters and translators should not only be familiar with the grammatical issues of the Spanish language, but should also be knowledgeable of the colloquial language commonly used in the region. Periodical quality controls of translations and interpretations should be scheduled as part of the interaction with the client.

Limitations of this Study

Health educators have discussed several research limitations that can be present in studies related to health education.[25] The study being described in this article had three important threats to internal and external validity that ought to be recognized and controlled for in future studies.

The first threat to internal validity included the possibility that respondents provided socially acceptable answers to the research questions instead of ones that reflect their real behavior. Since this study involved the development of face-to-face interviews, some participants may have felt obliged to respond in a way congruent with perceived expected values of the interviewers.

The second threat to internal validity was related to the "extent that a questionnaire could not be read and fully understood by potential respondents."[25] Although the survey instrument was translated into Spanish and back-translated into English, some of the terms (e.g., cervical cancer, Pap smear, risk, etc.) may have been very technical and difficult to understand even in the respondents' primary language. Factors such as limited literacy skills and cultural variations in the understanding of health terms may have affected the outcomes of this study.

The third threat is related to the external validity of the instrument for the interview. Low response rates posed challenges for the researchers in this study. A 14.4% response rate was obtained in this research attempt. Along with the limitations in generalizability of the results posed by low response rates, it is important to acknowledge that this study involved the voluntary participation of Latinas. As indicated by Price and Murnan,[25] studies that involve the participation of volunteers face threats to external validity because they may have values and perceptions that are different from those of the general population.

The researchers in this study made all possible efforts to control possible biases. These efforts have been previously described in the methods section of this article, but it is important to recognize that the threats to internal and external validity described above may have been present in this study.

Future Research Directions

Future qualitative research is needed to explore the issue of power shift and power distribution in the client-health provider relationship. Although several studies reveal that Spanish-speaking providers are preferable for Latino participants, there is an interesting theme that deserves future exploration: the issue of power shift when the provider attempts to communicate with the participant and her/his first language is not Spanish. In this case the participant may become empowered by the fact that, perhaps for the first time he/she has "something" to teach to the provider: "Spanish." That sense of being able to teach the provider may be an important motivator for compliance with preventive behavior.

Future research is also needed in the identification of characteristics associated with a "caring attitude" in health education. It is of particular interest of the researchers in this study to find out if a "caring attitude" can be identified by study participants among providers of different ethnic backgrounds and language preferences. Although some studies indicate that language and ethnicity are essential in creating a sense of trust among Latinas,[26,27] it would be relevant to identify if that same sense of "trust" is present with a provider who is perceived by participants as "caring," but has a different ethnicity and language.

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