

Barriers to Nursing Education for Native American High School Students

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ABSTRACT

Native Americans are the least represented of all minorities in US schools of nursing and the nursing workforce. Despite numerous efforts and strategies for recruiting and retaining Native Americans in nursing education, there has only been a slight increase in the Native American student nurses in the past decade. The shortage of Native American nurses in the workforce reflects this problem. The purpose of this qualitative study was to learn about barriers to nursing education from a select group of Native American high school seniors who expressed the desire to pursue nursing education. This study reflects the perceptions and experiences of seven Native American high school students through the analysis of qualitative interviews. An analysis of these interviews revealed five major barriers to nursing education: (1) insufficient knowledge about nursing as a career; (2) inadequate academic preparation in high school; (3) inadequate knowledge of financial resources available; (4) concerns and experiences with racism, negative stereotyping, and lack of cultural self-esteem; and (5) ambivalence about leaving the Tribe to attend nursing school. It is hoped that this study contributes to the growing body of knowledge about barriers to nursing education for Native American high school students and will contribute to future research on similar topics.

Keywords: Native American barriers ■ high school ■ nursing education ■ higher education

INTRODUCTION

The lack of ethnic minority nurses is a problem for the profession (Sullivan Commission, 2004). Despite ongoing efforts to increase racial/ethnic and gender diversity in the nursing workforce, the vast majority of nurses continue to be white women. As US society becomes more structurally diverse, the lack of diversity in nursing could be harmful to the profession and the population it serves.

Nursing's academic leaders recognize the strong connection between a diverse workforce and the ability to deliver quality patient care (American Association of Colleges of Nursing [AACN], 2001). Greater diversity has been shown to strengthen cultural competence and to help in eliminating health disparities for minority populations (Sullivan Commission, 2004). However, efforts to recruit and retain nurses from racially and ethnically underrepresented groups have proved inadequate. Only 12 percent of registered nurses are members of ethnic minority groups as compared to 33 percent of the overall US population. Schools of Nursing, the pipeline for the future workforce, must identify and respond to the barriers preventing ethnic minority students from pursuing careers in nursing in order to provide quality care for all patients. The American Association of Colleges of Nursing encourages the nation's schools to intensify their efforts to increase racial/ethnic diversity and calls for actions to promote ethnic/racial minority representation in the nursing workforce.

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Racial/ethnic diversity in the nursing workforce is important for several reasons. Studies have shown that racial and ethnic minorities are more likely than their white counterparts to serve in underrepresented communities (Smedley, Butler, & Bristow, 2004). Some studies report that given a choice, patients are more likely to select a healthcare provider of their own racial or ethnic background (Adams & Price-Lea, 2004). Others show that patient satisfaction with healthcare increases when the provider is of the same racial/ethnic background (Sullivan Commission, 2004). While some evidence suggests that many patients do not prefer providers of the same race/sex (Malat & Ryn, 2005), we can conclude that persons who have experienced racism may. A diverse student body and workforce can help to bridge cultural gaps in nursing practice and education, particularly in communities where racism and bias remain prevalent.

According to data from the National Sample Survey of Registered Nurses (2008), Native Americans are the least represented of all minorities in nursing, comprising 0.3 percent, while representing 1 percent of the US population (US Census Bureau, 2002). Recruiting Native American students into nursing education is complicated by their circumstances and the higher education environment. Cultural, familial, individual, educational, professional, and financial concerns have been consistently identified as barriers to higher education recruitment and retention generally (Thomason & Thurber, 1999) and may also discourage Native Americans from pursuing careers in nursing. Despite numerous strategies for recruiting Native Americans into schools of nursing and the availability of financial aid for these students, their numbers have increased only slightly in the past 20 years (Adams & Price-Lea, 2004). To recruit, admit,

and graduate more Native American students, we must discover what may be preventing them from pursuing nursing careers. This research aimed to identify barriers for a select group of Native American high school students who had expressed a desire to pursue a career in nursing.

LITERATURE REVIEW

According to the Institute of Medicine (IOM, 2004), increasing minority professionals is the key to eliminating healthcare disparities related to race and ethnicity. While the growth of ethnic minority groups, including Native Americans, is changing student pools and the US labor force, surveys of registered nurses (Health Resources and Services Administration [HRSA], 2004), the largest healthcare workforce, indicate that Native Americans make up only 0.3 percent. Few reports attempt to explain why Native Americans are underrepresented in nursing education and practice.

No research specifically identifies barriers to pursuing a career in nursing for Native American high school students, and although much of the literature related to Native Americans in nursing is anecdotal, some studies have examined barriers they face once enrolled in nursing programs. A significant body of research identifies common themes related to the underrepresentation of minorities generally in nursing education and practice.

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First, several studies found that minority group members are often unaware of what nurses do, the wide scope of practice opportunities, and the availability of jobs (Etowa, Foster, Vukie, Wittstock, & Youden, 2005; Evans, 2008). Some studies found that minority students perceived nursing to be low-paying and thought that most nurses worked in a hospital, assisting physicians. Students who are unaware of the wide variety of career options for nurses are not as likely to pursue a career in nursing, and nurse role stereotypes, few mentors, and lack of direction from early authority figures have historically presented barriers for minority nursing students (AACN, 2001; Coffman, Rosenoff, & Grumbach, 2001). To accomplish a career goal, students must decide what they want to do and determine a plan (Lent, Brown, & Hackett, 2000). Lack of knowledge about nursing career options and educational requirements is a significant barrier. No studies were found that examined Native Americans' perceptions and understanding of the role of the registered nurse.

The second theme to emerge in the literature related to minorities in general was inadequate academic preparation for higher education and nursing (Evans, 2008, IOM, 2004). Research specific to Native Americans identified inadequate K-12 preparation as a significant barrier to higher education. Native Americans in nontribal schools may be placed in tracks based on standardized test results that do not require the math and science courses prerequisite for entry into a nursing program. In addition, these students may not receive adequate pre-college advising about nursing program entrance requirements (Indian Nations at Risk Task Force, 1991; Weaver, 2001; Brave Heart, 1999; Struthers & Lowe, 2003). Without an understanding of what is required for admission into nursing school, Native Americans cannot be

prepared to compete.

Research has identified several culturally relevant themes that may be barriers for Native Americans who wish to pursue a career in nursing. The impact of historical trauma on self-esteem and self-confidence in Native American students has been examined (Beck, 1995; Hale Bellcourt, 2004). Negative self-perception regarding academic abilities may be a significant barrier for students. Some researchers suggest that actual or perceived racial prejudice and stereotyping may prevent Native Americans from pursuing higher education (Struthers & Lowe, 2003; Brave Heart, 1999; Weaver, 2001), and more studies of students' perceptions of the impact of their culture/ethnicity on admission to a nursing program are needed.

Several researchers report that some Native Americans do not pursue higher education because they do not wish to leave the familial and social support of the tribe (Weaver 2001; Taylor & Rust, 1999; Wells, 1989). They may experience a significant barrier when faced with the choice of staying in the close-knit community or leaving to attend nursing school. Family responsibilities and expectations have also been identified as barriers for Native Americans pursuing a career in nursing. Lack of familial and tribal support in the decision to attend nursing school has been found to dissuade potential students from pursuing higher education.

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The diffuse nature of the literature on higher education for Native Americans is a serious problem (Imel, 2001). Sources lack depth, research, and theory building. The literature documenting and describing barriers to Native Americans' pursuit of nursing education are crucially missing.

This study explored barriers to nursing education for a selected sample of Native American high school students who had identified "becoming a nurse" as a career goal. It was designed to learn directly from them factors not only perceived as potential barriers to nursing education, but actual barriers that they might or might not have identified. The goal was to develop a holistic understanding of the barriers experienced by a group of Native American high school students as they began pursuit of a career in nursing.

METHODS

Research Design

This study used a qualitative paradigm. Qualitative methods can be used to understand any phenomenon about which little is known, to gain new perspectives on subjects about which much is known, or to gain more in-depth information that may be difficult to convey quantitatively (Straus & Corbin, 1990). They are appropriate when the researcher has determined that quantitative measures cannot adequately describe or interpret the setting (Hoepfl, 1997).

This research aimed to facilitate an understanding of barriers to nursing education for Native American high school students. Data were collected by the principal investigator conducting individual, in-person, in-depth, 45-minute interviews with 7 students from one tribal

high school. Questions were based on an extensive literature review and used to obtain data related to actual and perceived barriers to nursing education. Open-ended questions allowed participants to provide additional information. Following completion of the interviews, the data were analyzed using constant-comparative analysis, and themes related to the research questions as well as unanticipated themes were identified.

Sample

The population of interest was high school students who were enrolled members of a selected Native American tribe, chosen to gain an understanding of why more high school students from this tribe do not pursue nursing careers. Seven Native American students at a single tribal high school were purposively sampled based on the following eligibility criteria: 1) currently enrolled in grades 9-12; 2) enrolled member of the tribe; 3) member of Health Occupations Student Association (HOSA); and 4) stated interest in pursuing a nursing career. They volunteered to participate.

Instrument

The principal investigator developed a semi-structured protocol to guide the interview process. Because of the lack of research specific to Native Americans and nursing education, themes identified as barriers for minorities in general were used to guide the questions: knowledge and perceptions of the role of the registered nurse; knowledge and perceptions of the academic requirements to pursue a nursing career; knowledge and perceptions of the availability of financial assistance for pursuing a nursing career; perceptions of family and peer support for attending nursing school; and perceptions of social and cultural barriers to pursuing a nursing career. These questions guided the interviewer in exploring the participants' knowledge, perceptions, and concerns, although the impact of ethnicity and culture on decisions about nursing education was explored indirectly; that is, racism and fear of discrimination were not addressed directly, but open-ended questions led to rich data relevant to these themes.

Data Collection

After receiving Institutional Review Board approval, the researcher visited each of the four HOSA classes at the tribal high school to explain the purpose of the study and to ask for volunteers using a standardized script. A total of 42 students, grades 9-12, were present on the date that voluntary participation was requested. A total of ten indicated interest in participating. They were mailed a cover letter explaining the study, along with parental consent and minor assent forms. They were asked to return the signed forms to the researcher by mail in a self-addressed, stamped envelope within ten business days.

After ten business days, nine of the ten students who had expressed an interest in participating in the study had returned parental consent and minor assent forms, including consent to audiotape interviews. All nine were interviewed as part of the study. Two withdrew for personal reasons. Although not part of the research design, after withdrawal of these two participants,

the resulting sample consisted of high school seniors who would be eligible to graduate within two months of completing the interview.

Individual, in-person, private interviews with the participants were conducted by the researcher. They lasted approximately 45 minutes. To protect participants' confidentiality, demographic data and other information that could link their responses to audiotapes or transcriptions were collected from each before beginning audio taping. No demographic data or other potential identifiers were used in reporting the results of this study. In addition, references that could link this study to a particular tribe or region have been obscured. Some information not related to the findings that could identify participants has been eliminated or obscured.

Data Analysis

Qualitative research methods as outlined by Miles and Huberman (1984) guided data collection and analysis. Bogdan and Biklen (1982) define qualitative data analysis as, "working with data, organizing it, breaking it into manageable units, synthesizing it, searching for patterns, discovering what is important and what is to be learned, and deciding what to tell others" (1982, p. 145).

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A general inductive approach for qualitative data analysis was used to categorize data into themes and subthemes related to each research question. The researcher read the interview transcripts several times to develop a global understanding of the content. The audiotapes were played simultaneously to facilitate immersion in the interview experience. Transcripts were then analyzed using for the emergence of frequent, dominant, or significant themes.

Initially, interview transcriptions were coded by response to individual questions. These data were then compiled into a document that created a data set that contained at least seven responses to each question from the interview protocol. Once categorized, the data were coded into more specific categories and subtopics. In vivo coding created categories or subthemes from responses or actual phrases used in specific text segments. First, each respondent's answers to individual questions were listed verbatim under that question. Second, answers to individual questions were grouped into categories related to the research question. Third, answers were coded into subthemes or categories under each research question. Constant-comparison analysis was used to refine categorization of data and to ensure that coding was consistent. While this process is described as process, constant-comparative analysis created a dynamic system.

Verification

A basic assumption of qualitative research is that individuals construct multiple realities as they interact with their social world; "reality is holistic, multidimensional, and ever-changing" (Merriam, 1998, p. 202). Lincoln and Guba (1985) state that "the determination of such isomorphism is in principle impossible" (p. 204) because the "precise nature of reality" (p. 295) would have to be known, and if known, testing would be unnecessary.

To support the study's validity, member checks were conducted, although member checks

of compiled data were deemed inappropriate due to confidentiality concerns. Three of the seven participants were asked to review a summary of the researcher's interpretations of their own interviews. All three reported that their personal reality was well represented in the findings.

A nurse educator who has extensive experience with qualitative research reviewed the database to determine if she would reach the same or similar conclusions as the researcher. She reviewed coding, theme development, and interpretations and agreed with the conclusions.

RESULTS

Native American high school students face several significant barriers to nursing education. Study findings support previously identified barriers cited for minorities in general.

Lack of Knowledge about Nursing as a Career

Results of this study supported previous research regarding students' lack of knowledge about nursing as a career. To open the dialogue, participants were asked how they became interested in becoming nurses to determine when most made their career decision and to identify themes in their reasons to discover potential barriers to a nursing education. In response to the interview question, "Tell me about how you decided you might want to become a nurse?" the following participant's response was typical. "When I took Mrs. X.'s class. It's just a fun class." Each of the seven students said she developed an interest in nursing as a career because of her experiences in the 9th or 10th grade Health Occupations Students of America (HOSA) class and the encouragement of its instructor. The choice of nursing was based on the HOSA activities and experiences, which do not necessarily reflect the role of the registered nurse. Each participant indicated that she believed the Certified Nursing Assistant (CNA) and the HOSA class affected her decision to become a nurse and implied that success in HOSA would prepare her for success in nursing school. All participants indicated that attending HOSA classes and obtaining the CNA would assist them in achieving admission and success in nursing school.

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Participants also demonstrated lack of knowledge about levels of nursing. These high school seniors with a self-identified goal of becoming an RN who had participated in HOSA for two years could not articulate the most basic information about levels of nursing. For example, in response to the interview question, "Tell me what you know about the different levels of nurses," one stated, "I don't remember the names. I know there's a registered nurse. I've met, like, I'm around the CNA and their clerk, and I work with them a little bit. I guess that's all I know." A second answered, "I don't know too much. I know that CNA is where you start, then Registered Nurse is like the highest, I think, and then you have the licensed nurse and then you have the nurse that travels." A third student, who had been accepted into a pre-nursing program at a major university for the upcoming academic year, said, "I know there's the RN—that's the Regular Nurse who kind of runs the hospital or is the boss to the CNA. You know, she gives the medicine and writes the stuff down and all." These statements are representative

of the uncertainty about the levels of nursing and the role of the RN expressed by each of the seven participants. All participants identified obtaining the CNA as a step toward becoming a registered nurse, and three thought that the RN could be obtained by “working your way up” in the hospital setting.

The impact of making a career-path decision based on HOSA experiences can be a significant barrier to nursing education for two reasons. First, students begin HOSA in the 9th or 10th grade. They should have been advised about the math and science courses required for a nursing career well before they entered high school. Second, the HOSA class in this high school prepared students to become CNAs. All seven students reported basing their decision to become a nurse on the academic and clinical skills required for the nursing assistant program, but the rigorous academic skills required for a nursing program greatly exceed those required for the CNA. Participants believed that being a CNA prepared them for nursing school. Three believed, inaccurately, that the CNA was a necessary step in becoming a registered nurse. This study found that information these students obtained in HOSA classes was a barrier to nursing education. Rather than providing enough information to make informed decisions about a nursing career, it prepared them to be CNAs and left them with the impression that it would greatly assist them in becoming RNs. Although some community colleges do require the CNA for admission to the nursing major, it is only one of several requirements.

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Students had additional knowledge deficits regarding nursing as a career. Although they wanted to “become a nurse” or be “an RN,” none could identify the different levels of nurses. The only student who had been accepted into a baccalaureate pre-nursing program stated that RN meant Regular Nurse, not Registered Nurse. No student was able to explain the difference between baccalaureate RNs, RNs prepared at the Associate Degree level, or an LPN. HOSA’s role is to educate and promote career opportunities in healthcare (HOSA, 2008). Our students’ ignorance about the distinctions among nurses and the educational requirements and career opportunities for each professional level could be a significant barrier to nursing education.

Participants in this study were not exposed to Native American nurses as role models. According to Evans (2008), ethnic role models are essential in influencing minorities to pursue a career in nursing; otherwise, they do not see themselves becoming successful nurses. Participants in this study had only worked with Native Americans in the CNA role. Although stating they wanted to become RNs, they expected to become CNAs. The lack of Native American nurse role models is a barrier for these students. Throughout the interviews, they seemed to lack confidence in their ability to succeed in becoming a nurse. Each participant discussed plans to work as a CNA after graduation.

Although participants were unable to identify Native American nurses who served as their role models, they did not identify it as a barrier. They had no opportunity for exposure to RNs, either Native or non-Native. The only role models they could identify were two of

their peers who were unsuccessful in gaining admission into nursing programs, making them ambivalent and uncertain about their own capacity for success in their career choices. The negative impact of the peers' experiences served as a barrier for these students.

In summary, lack of basic knowledge about the profession, the value of becoming a CNA, educational requirements, career options, and role models is a significant barrier to recruiting Native American nursing students. It is particularly disturbing that although each had indicated a plan to "become an RN" upon graduation from high school and after being active participants in HOSA for two years none could articulate exactly what an RN does, how an RN is educated, or career options for RNs.

Academic Preparation for Nursing Education

Previous research related to academic preparedness for higher education reports that Native Americans are underserved by the K-12 educational system in terms of promoting their scientific and quantitative literacy (Babco, 2003). Few studies related to high school academic preparation for nursing education specific to Native Americans were found in the literature. However, one study identified insufficient academic preparation to meet nursing school admission requirements as a major barrier to nursing education for Native American high school students (Etwoa, et al., 2003). Results of this study supported these findings.

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The themes that emerged with respect to academic preparation for nursing education were related to lack of appropriate academic advising, non-completion of required math and science courses, inadequate preparation for the SAT or ACT, and insufficient assistance with college selection and application.

Insufficient academic advising is a major barrier to nursing education for these seven Native American students. While they have above-average high school GPAs (self-reported between 3.6 and 4.0), the lack of required math and science courses in their respective curricula and inadequate guidance in preparing for the SAT and selecting and applying to college or university will create what can be viewed as insurmountable obstacles to their acceptance into nursing programs. Although they may still be accepted into pre-nursing programs, inadequate high school preparation in math and science courses will make it extremely difficult for them to succeed in the college-level math and science courses required for the nursing major.

Most nursing program admission criteria rely heavily on the SAT, yet these students were not taught how to prepare for the tests or improve their scores. Four of the seven had not taken the SAT and were unaware that their scores would be required for consideration by nursing programs. Although all students had spoken with the HOSA instructor about their plans to attend nursing school, they received no academic advising about how to apply or the requirements for admission.

This group of students also received little guidance in navigating the college selection and admission processes. Only two had visited college/university campuses. Lack of exposure to college campuses is a barrier to higher education in general and may prevent students from applying to institutions where they can obtain a degree in nursing. Given that all seven indicated a desire and a plan to attend nursing school after graduation, a significant barrier to achieving this goal is lack of exposure and orientation to, and familiarity with, different schools of nursing and institutions of higher education in general.

These seven Native American high school students, who wish to pursue a career in nursing, have the academic ability to succeed, but insufficient advising and preparation are major barriers.

Perception of Family and Peer Support

Previous studies have discussed the importance of family and peer support for Native Americans who plan to leave home to attend college (Coffman, Rosenoff, & Grumbach, 2001; Evans, 2004). Some cite family responsibilities as barriers to nursing education for Native Americans (Harrigan, Collin, & Casken, 2003; Evans, 2004). The results of this study supported those studies; participants identified the importance of family and peer support to their decisions regarding nursing education.

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Each perceived her family as supporting her decision to attend nursing school, but this support was primarily verbal. Complex family dynamics, teenage pregnancy, and participants' perceptions of responsibilities served as barriers for these students. Students believed they should remain at home to meet the needs of their families. Friends were perceived as supportive of their decision to attend nursing school but opposed to their leaving the tribe to pursue this goal. The unstated but undeniable opposition of family and friends constitute significant barriers to nursing education for these students.

Financial Concerns

The literature review revealed that many Native Americans come from low-income families for whom the cost of higher education may be prohibitive (Adams & Price, 2004; Gardner, 2005). This study found that the perceived financial barriers to education for this cohort were greater than the actual barriers. Each participant expressed doubt about her ability to pay for tuition, housing, transportation, or daycare. None were aware that the tribe would pay the full cost of tuition, room, board, transportation, and childcare to enable them to attend any college or university to which they were accepted. Their lack of knowledge about benefits available to them as tribe members is a significant barrier to these students.

Cultural Concerns

Several researchers have cited the wider culture's lack of respect for Native American culture as a barrier to higher education for Native Americans (Tate & Schwartz, 1993; Struthers & Lower, 2003; Evans, 2004). Results of this study differed. None of the participants suggested

that she expected her heritage to be acknowledged positively, much less respected, when she attended nursing school. The term *cultural heritage* had negative connotations for these students and led them to identify ways they could hide or play down their Native American identity.

As they told stories and related impressions of how Native Americans would be treated when away from the tribe, it became evident that past experiences with racism and stereotyping made them fearful of leaving the tribal boundary. They seemed to accept that if they went away, they would be mistreated and that concealing their ethnic and cultural origins would be emotionally advantageous. Racism and stereotyping of Native Americans are real and constant experiences for these students, and unless openly confronted and eliminated they will make them reluctant to leave the tribal boundary for any reason, including nursing school.

Fear of Leaving the Tribe and Social Isolation

Several studies have identified reluctance to leave the tribe and fear of social isolation as barriers to higher education for Native American (Thomason & Thurber, 1999; Babco, 2003; Evans, 2004). Feelings of loneliness and isolation and a struggle to maintain ethnic identity were identified as personal barriers to success for Native Americans (Evans, 2004). This study identified a different perception: each of the seven participants discussed dissatisfaction with tribal life, particularly its lack of privacy. They had ambivalent and sometimes conflicting perceptions about the role of the tribal community in their decisions to pursue nursing education. On the one hand, they perceived the close-knit community as supportive and difficult to leave, especially in relation to perceived family responsibilities; on the other hand, they all expressed dissatisfaction with the lack of privacy on the reservation and identified it as a reason for leaving.

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CONCLUSIONS AND RECOMMENDATIONS

The current need for greater workforce diversity in nursing has been identified a priority for the profession by a variety of groups (IOM, 2002; AACN, 2001; Sullivan Commission, 2004). Native Americans are a minority group not well represented in the nursing workforce, and they will not be well represented unless they can obtain nursing education. Despite efforts to attract, retain, and graduate Native American nurses, they are the least represented of all minorities in nursing.

Few Native Americans apply to nursing school; fewer still are accepted, and, once accepted, their attrition rate is high. No studies identify why so few Native Americans pursue a career in nursing. Of greater importance, no research explored why Native Americans who express a strong interest in becoming nurses as high school seniors do not enroll in nursing schools and ultimately join the profession. This study was designed to explore the Native American high school student's experience from a new framework and contribute to the body of knowledge by

exploring difficulties these students face even before they graduate from high school.

This study explored barriers to nursing education with Native American high school students who had identified nursing as a career goal after high school graduation, including:

- insufficient knowledge about nursing careers;
- inadequate academic preparation in high school;
- inadequate knowledge of available financial resources;
- concerns and experiences with racism, negative stereotyping, and lack of cultural self-esteem; and
- ambivalence about leaving the tribe to attend nursing school.

The results of this study have limited generalizability. The small sample size—only seven participants from one high school and one tribe—self-reported data, and personal interaction with the researcher must be taken into account when assessing results. Moreover, while qualitative research enriches our knowledge, it has limited generalizability. Nonetheless, these findings support previous studies and identify barriers not discussed in the literature. They help to fill the gap in the knowledge base about Native Americans and nursing education and can be used by nursing schools interested in decreasing or eliminating barriers to Native American high school students.

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