A COLLABORATIVE CASE STUDY: THE OFFICE OF NATIVE MEDICINE

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Abstract: National concerns about reducing the persistent health disparities found among varying racial and ethnic populations have led to initiatives to improve health care delivery systems. Many of these initiatives also promote the cultural competence of health care providers as a way to meet unique patient needs that go beyond immediate health problems, and to account for other critical components of patient care, such as health literacy, health beliefs and behaviors, and cultural practices. This case study describes a patient-centered care model developed by the Chinle Comprehensive Health Care Facility on the Navajo Reservation in Arizona, a model that has added a cadre of traditional tribal practitioners as part of its hospital and other clinical service resources.

Various national policy efforts are underway to decrease health disparities, efforts that are coupled with other movements that advocate for patient-centered care. The latter take into account determinants of health that contribute significantly to disparities, including culture and culturally appropriate care provision.

Although the Indian Health Service (IHS) has had the responsibility for providing health care to tribes since 1954, it has utilized only a few traditional tribal practitioners as consultants or staff in some behavioral health programs. Only recently have some IHS facilities started to include tribal practitioners in other health care delivery services, but these expansions have primarily been limited to community health programs (Roubideaux & Dixon, 2000).

One of the important outcomes from the Indian Self-Determination and Education Assistance Act (P.L. 93-638; 1975) has been the opportunity for tribes to contract with the IHS to take over management of their local health care programs. In doing so, several have integrated some of the services provided by their traditional healers or practitioners. In other instances, tribal leaders have negotiated with health insurance carriers to include coverage for certain services provided by their Indigenous practitioners. And while some attention has been paid to the promotion of culturally

appropriate health care in these programs, no systematic studies and/or evaluations have been done on the impact of the services on patient care (Dixon, 2006). While this case study is not evaluative in scope, it does describe and examine one such program, the Office of Native Medicine (ONM).

ONM was initiated on the Navajo Reservation by the IHS's Chinle Comprehensive Health Care Facility (CCHCF). One hospital administrator describes this initiative as the Chinle Service Unit's commitment to providing culturally appropriate patient-centered care (CCHCF, 2013).

The Collaborative Effort

Following an earlier partnership with Chinle hospital staff on a health promotion program, investigators from the University of Arizona approached the ONM staff about a collaborative venture to conduct a case study of the program. Initially, the ONM staff had requested an evaluative study, but, because only a limited description of the program was available, it was decided that a descriptive case study would be more appropriate. The ONM and University Staff developed a proposal, which the University staff then submitted to the National Institutes of Health's National Library of Medicine (NLM), an agency soliciting proposals for a planned exhibit on Native Peoples' Concepts of Health and Illness (NLM, 2012). The proposed study was reviewed and approved by the Institutional Review Boards of the University and the Navajo Nation.

The aim of the study was to explore the following research questions: 1) In what ways do the traditional Navajo practitioners assist allopathic providers with patient care in the hospital and its other clinical settings? 2) In what way do the traditional practitioners interact with physicians and other service providers in the workplace? and 3) How are the services of the traditional practitioners perceived by the physicians, other coworkers, patients, other Native practitioners, hospital administration, and the community? The study method called for the collection of data from multiple sources, including focus groups, formal and informal open-ended interviews, participant observations, filmed interviews, and extensive review of relevant reports and other archival documents related to the program. Study participants were to include former patients, ONM staff and board members, physicians, hospital administration representatives, and traditional practitioners.

Why the Case Study Approach?

In any research endeavor, the research question(s) to be explored routinely dictate the type of design necessary.

Each research strategy has its advantages and disadvantages. Yin (1984, p.1), for example, lists the following three criteria that come into play in selecting the most appropriate research design: 1) the type of research question, 2) the control an investigator has over actual behavioral

events, and 3) whether the focus on contemporary or historical phenomena. The ONM endeavor called for a comprehensive overview as well as examination of the services provided by the cadre of traditional practitioners in this new program. Because there had not been any formal examination or descriptions of how these services were being utilized or perceived, the logical choice was a case study. Gerring (2004, p.352) outlines the following seven characteristics that help determine when it is appropriate to use the case study method: 1) when inferences are descriptive rather than causal, 2) when propositional depth is more important than breadth and boundedness, 3) when internal case comparability is preferred over external case representativeness, 4) when insight into causal mechanisms is more important than insight into causal effects, 5) when causal proposition issues are more invariant than probabilistic, 6) when the strategy of research is exploratory, and 7) when useful variance is available for only a single unit or a small number of units. Case study design is flexible and permits investigation of a well-defined phenomenon holistically and within a real-life context, which can be documented factually with the use of multiple relevant data sources (Baxter & Jack, 2008). The approach is useful for in-depth exploration, although the boundaries between the phenomenon and the context may not always be clearly delineated (Crowe, et al., 2011; Feagin, Orum, & Sjoberg, 1991; Yin, 1984, 1993). The phenomenon under study, however, cannot be examined without its context. The case study approach frequently is utilized in studies investigating Indigenous traditional healing systems—for example, traditional Chinese medicine and India's Ayurveda medicine (Jafari, Abdooahi, & Saeidnia, 2014). Descriptive information gleaned from such case studies often is intended to help identify culturally acceptable ideas or methods that might be borrowed to help increase utilization of modern health care resources by members of a specific Indigenous population (Kaptchuk, 2000; Svoboda & Lade, 1995).

The limitations of case study design are also readily noted, because it deals with small sample sizes that are not amenable to producing reliability and/or generalization, and it has the potential to be biased. As an exploratory research tool, however, the case study approach is useful (Eisenhardt, 1989; Hamel, Defour, & Fortin, 1993; Mays & Pope, 2000; Stake, 1995). In this study, every effort was made to avoid the latter problem by including the voices of many participants in film and in print.

Against the backdrop of the national concern with health disparities, this case study was undertaken to present an in-depth description of a culturally based health resource in one Navajo community in Arizona, the ONM. In addition, this case study utilizes a naturalistic design, rather than an experimental design in which investigators generally control or manipulate the variables. The intent here was to provide an in-depth description of a unique patient-centered care model that emphasizes the importance of culture in the delivery of health care.

Utilization of Indigenous and Western health care resources

Today, many Indigenous communities worldwide continue to rely on health services provided by their traditional healers, sometimes in addition to services received from physicians or other health care providers. When both allopathic and Indigenous health resources are available, patients in need of care often match their perceived needs with one or both of these resources.

Where such systems coexist, they often remain parallel and complementary but not integrated. Torri & Hollenberg (2013) describe these various complementary systems as an *intercultural health approach,* where dual utilization positively contributes to patient care (Mignone, Bartlett, O'Neil, & Orchard, 2007). Mable and Marriott (2001), however, caution that, in order to positively meet the health care needs of their patients, the complementary systems need to be maintained by shared mutual respect as well as a common understanding that both resources do contribute to patient care.

The presence or extent to which Indigenous and Western health care systems coexist is largely dependent on the willingness of providers in the Western health care system to make room for Indigenous resources. Thus, most intercultural health care models are shaped by the degree of flexibility permitted by the local western health care resources and the context in which services are delivered. The context requires the involvement of relevant key entities—that is, the allopathic providers, the traditional practitioners, and the patient population.

In a comparative case study of several intercultural health programs in Latin America, Mignone and colleagues (2007) found three models of collaboration: 1) informal collaboration, where both types of service providers interact and periodically collaborate on patient care at the local community clinic; 2) a more formal model, where hospital or clinic staff schedule days or times when part-time Indigenous practitioners (i.e., herbalists, massage therapists, spiritual healers) can see patients in their clinics; and 3) a model with limited collaboration that permits certain certified or trained Indigenous providers, such as midwives, to have access to physicians and/or receive referrals from physicians (e.g., to assist women expected to have an uncomplicated pregnancy or delivery).

ONM at Chinle

The ONM case study reveals that, unlike the three Latin America models described above, the Chinle ONM model is leaning toward a more formalized, *intracultural* health care service model, where Indigenous practitioners are not only on the staff of the hospital but also collaborate with physicians daily in providing patient care in both the hospital and outpatient clinics. The roles of the practitioners are also more diverse (i.e., in addition to providing cultural diagnostic services, they also serve as consultants, educators, mentors, and counselors).

The establishment of this program in a federal health care system, however, probably would not have been possible without a formal directive from the director of the IHS. In 1994, such a directive was issued by the then-IHS director, Michael H. Trujillo, an American Indian physician. He instructed IHS health care facilities to develop and implement ways to work more closely with local Native practitioners (Trujillo, 1994).

Prior to this directive, the CCHCF staff had made some efforts to make its hospital and some services culturally sensitive. In planning the new the hospital, a special ceremonial room was included in one wing, where practitioners could consult with patients and their families. Two of delivery rooms also were set up to accommodate mothers who requested traditional Navajo birthing positions. Hospital volunteer staff also built a hogan on the grounds of the new hospital for use by practitioners when consulting with or assisting patients and their families.

Understandably, the hospital's ongoing effort to provide culturally sensitive health care services is also due to its location. Chinle is located in the center of the Navajo reservation, a place where natural geographic isolation has helped maintain a strong monolingual (Navajo) population, and where many residents continue to adhere strongly to the Navajo cultural heritage, including use of traditional healing resources. In addition, most of the personnel employed by the IHS are Navajo, many of whom advocate strongly for the provision of culturally appropriate health care services (Knoki-Wilson, 2008).

THE CASE STUDY

Data Sources

This collaborative case study sought to describe 1) the new model; 2) the day-to-day experiences of the traditional practitioners in their work alongside physicians and other providers in the hospital and clinics; and 3) how the services provided by the practitioners are perceived by physicians, other co-workers, patients, other traditional practitioners, and the community. Case study results are dependent on the collection and analysis of data from multiple relevant sources, all converging on the same findings (Yin, 1984, p.78). In this case study, the collection and use of data from multiple sources helped provide a greater range of relevant information about ONM's historical as well as its contemporary services and the perception of these services by co-workers and the community. All of these data sources, collectively, helped to create understanding about the culturally based patient-centered model, how the services provided by the practitioners contribute to patient care, and how their role in the larger health care delivery system is serving the Navajo communities.

The data collection methods included onsite observations, structured and informal open-ended interviews, focus groups participant observations, and reviews of archival documents containing relevant information on the services provided by ONM staff. These documents included the original feasibility study conducted by the CCHCF that led to the establishment of the ONM, ONM staff reports, the hospital's annual report on patient activity, curricula and attendance records from the practitioners' in-service training, and data on a special diabetes course conducted by the ONM and physicians for other traditional healers. Other relevant data included reports prepared by the hospital on its patient services, especially monthly activity reports submitted by ONM staff. The study team also filmed some of the interviews to be included in a 25-minute film, *Two Cultures of Healing* (Native American Research and Training Center 2010).

Language

From the outset, the research team anticipated that some data would need to be collected in the Navajo language. In preparation for this part of the data gathering, the team developed informal and formal interview guides so that questions could be understood in both languages. All interviews and focus groups (in both Navajo and English) were recorded digitally and transcribed. The Navajo data transcription was provided by a highly experienced local Navajo research assistant. The Navajo transcriptions were reviewed and analyzed by the principal investigator and another Navajo graduate research assistant at the University.

Participant Recruitment

In addition to consulting on the questions for the interview guides, the ONM practitioners also were instrumental in recommending possible participants for focus groups and filmed interviews. Those suggested included physicians, administrative staff, former patients, and other community-based Native practitioners. The community partners felt it was important to tap individuals who had been patients of the ONM, practitioners who had attended the program's in-service training, and family members of patients who had used the services of the ONM. Similarly, physicians or other health care providers who worked closely with the ONM were suggested as possible participants.

Focus Groups

Three focus groups were conducted with different groups of participants: 1) ONM practitioners, 2) hospital staff and providers, and 3) a community group. Examples of the open-ended questions that guided the ONM practitioner focus group included: "In what ways do you work with other health care providers in providing care to patients?" and "Tell me about the kinds of help sought most often from the Office of Native Medicine."

The hospital staff/provider focus group also explored a number of questions, including "Under what circumstances are patient most likely to request the services of the Office of Native Medicine?" and "Have there been any examples where allopathic treatments have been compromised or threatened by the use of Native medicine?"

Eight community members were invited to participate in the third focus group, all of whom were Navajo but came from different regions of the larger Chinle community. All were acquainted with the ONM and some indicated that they or a family member had used the services of the ONM. Among the questions discussed with this group were: "What are some ongoing barriers or challenges that face the Office of Native Medicine?" and "In what ways does the Office of Native Medicine help the communities in the Chinle area?"

Each ONM practitioner also was interviewed individually, and, where appropriate, portions of their interviews also were filmed. Questions asked in the open-ended interviews with ONM practitioners included, "In what ways do you work with other health care providers in providing care to patients?" Practitioners had an opportunity to review the transcripts of their interviews, allowing them to correct any misinformation. And, as is customary in ethical endeavors, each person filmed was given a draft of his or her semi-edited section of the film to review and approve.

The research team also conducted other semi-structured interviews with a number of hospital administrative staff, physicians, and patients. These interviews were recorded, transcribed, and, in some instances, captured on film. In all, the film features two physicians, two members of the hospital administration (the director of public health and the assistant to the CEO of the hospital), the ONM practitioners, and two other traditional practitioners from the community, one of whom recounts his own medical emergency. Not all clinical staff or physicians were interviewed, primarily because not all health care providers interacted with the ONM practitioners, especially surgeons, dentists, or other specialists who come on a periodic basis. In addition to the interviews, the film also shows some of the regular activities and services of the practitioners.

Analysis

Jorgensen (1989, p.107) notes that the process of analysis in qualitative research starts with disassembling the collected data elements or units that can be sorted and searched for factual information and categorized by types, classes, or sequences. The units are then reassembled to form meaningful datasets and documentation of study results.

Because the activities of the ONM practitioners ate the phenomenon under study and the research is bounded by this context, the case itself serves as its own unit of analysis (Miles & Huberman, 1994, p.25). Thus, the questions guiding this inquiry focused primarily on services provided by the ONM, and all of the data collected and analyzed had to be directly related to the ONM. Each data source became part of the formal database for producing the study findings; that is, they converged to present a holistic picture of the operation of the ONM.

The process of data reduction helps make the data more manageable and also helps identify key evidence needed to produce the case study findings. For example, one of the first steps in the analysis of the transcribed interviews and focus groups was to reduce the data from multiple pages to those sections or comments most relevant to the study. Guided by a priori sets of study questions, the research team then further analyzed the abridged dataset, sifting for themes, trends, and patterns that contained participants' opinions, firsthand experiences, comparison of services provided or received, etc. The culled thematic data then was converged with other ONM data to compose the case study findings. Some of key points made by study participants were also selected and included verbatim in the study results, while the film also captures some of these voices, which helps add creditability to participants' perspectives.

In addition to the evidence sifted from the interviews and focus group discussions, the university-based research team members verified the observational data by distributing a draft of the findings to the Chinle-based team members. Team members verified via phone that what was reported or interpreted was correct. Any errors or misunderstandings in the observations or descriptions were corrected in the final version.

FINDINGS

Because the accompanying article, *At the Bedside*, discusses the findings in more detail, this section will provide only a summary.

This descriptive case study indicates that the resources of the ONM are appreciated by patients, the community, hospital administration, Navajo employees, and many health care providers, especially those who work closely with the practitioners. The findings also indicate mutual respect

between the practitioners and physicians, especially those who work more closely together. The central patient care role for the practitioners is to provide cultural diagnostic services, as well as some of the minor ceremonies in the hospital or on its grounds. Their value, however, goes beyond these services. They provide patient education, in-service training for hospital staff, and patient consultation, and they also help facilitate training of other Native practitioners on such chronic diseases as type 2 diabetes, a major endemic health problem. They accompany the physicians on grand rounds so that they are able to complement allopathic treatments with their services. In other words, they perform many culturally based services that complement the medical treatments offered by physicians. Most participants in the community focus group indicated an appreciation for the added services and the convenience of having the ONM in the hospital and clinics. From the hospital administrative standpoint, the ONM has helped their efforts to provide culturally based patient-centered health care.

The Navajo patients who seek complementary health services are pragmatic; they know which physical health needs are best met by the physicians, and also when it is necessary to seek the services of the practitioners for cultural diagnostic services—or for referral to another practitioner who can help them with their spiritual and emotional health care needs.

Findings indicate that family involvement is central to patient care for practitioners. Families are welcomed to the counseling or diagnostic sessions to support patients and to help plan recommended ceremonial or cultural interventions. This approach also allows family members to help monitor treatment or intervention outcomes, and lends itself to community evaluation of the ONM program. Care or diagnostic services provided by the practitioners that are not helpful are quickly noted and discussed at community meetings or with hospital administration. Such situations were not found during this case study; rather, it was evident that the practitioners had gained the trust of the patients, the allopathic providers, and other hospital staff, as well as community leaders.

Providing culturally based health services at the bedside, however, is not without its challenges. The long-term sustainability of the program is one challenge, as there are no codes for services rendered by the practitioners under the existing ICD-10 (International classification of diseases). Most of the practitioners are well schooled in their practices, but various legal policies governing the hospital, as well as health care regulations, limit what they are able to do in the hospital setting. Finally, it is important to note that each tribal community has its own Indigenous healing resources and practices, many of which cannot be transported to the hospital setting. The ONM, however, demonstrates that some elements of the Navajo healing system can be delivered safely and appropriately in such a setting as part of patient-centered care.

Limitations

As with all research endeavors, the case study method has limitations. For example, as noted before, if not planned correctly a case study can produce biased findings, either by focusing on atypical individuals or relying on biased expectations (Jackson, 2009). Bias was avoided wherever possible in this undertaking, mainly by keeping the focus on learning about and understanding a single program, which was unique at the time because no comparable programs existed. It is possible that the selection of data sources and interview participants could be considered biased, but for the purpose of this case study, it was necessary to give priority to sources most knowledgeable about the program, and to obtain data from different perspectives (e.g., community, patient, providers).

Another shortcoming of the case study method is that the outcomes cannot be generalized due to the qualitative nature and small sample size. Again, because this was an exploratory, descriptive case study, generalization was not the intent, although every effort was made to be objective.

We attempted to avoid these pitfalls not only by making this case study collaborative and reporting on the program in its natural environment, but also by including a cross-section of participants who are knowledgeable and respected by their communities and peers. In addition, we made every effort to keep participants' voices in all of the data.

Dissemination

The project took longer than a year to complete. The case study and the accompanying film were begun in late 2007, and most work was completed in 2010. Delays were due to processing of the award and to extra time needed for film editing and waiting for feedback from key participants on the film and on drafts of the final report. When both of these deliverables were ready, each case study participant, the NLM, and two Institutional Review Boards received copies of both products. One of the conditions placed on approved research by the Navajo Institutional Review Board is to ask investigators to report the results of their study at one of its annual research conferences. The study team did deliver the results and showed the film at a conference.

Lessons Learned

In most tribal and other Indigenous communities, there is considerable resistance to granting researchers permission to study traditional healing ceremonies. This resistance is understandable, as some tribes have encountered unethical researchers whose publications or studies have exploited information considered confidential or sacred, or have contributed to negative stereotypes. As a

result of these experiences, most tribal communities now have established research protocols as well as a designated research committee charged with reviewing and approving research proposals that have the potential to benefit their communities.

Increasing numbers of funding agencies also now require investigators to include documentation of tribal support for their proposed studies. In addition, more community-based studies are being conducted under joint partnerships between the investigators and tribal entities, e.g., staff from the tribal epidemiology program. Such partnerships not only create research-related capacity-building opportunities for tribes, but also help foster cultural competency for academic researchers. The ONM case study benefited from such a partnership.

The case study provided an opportunity for the community partners to explore how the new ONM program was being delivered and how its services were perceived and utilized by the patient population. It also allowed an opportunity to learn how the services of the practitioners were perceived and utilized by physicians, other health care providers, and the hospital administration. The investigators benefitted from the partnership by having experienced and skilled partners who were not only familiar with the daily workings of the ONM, but also could provide input into the overall research agenda from the beginning through dissemination of the results. The researchers also were assured access to study participants that would not otherwise have been possible without time-consuming recruitment efforts. The data analysis also was enriched by the contributions of the community partners, especially those who had more expertise on culturally based healing practices. Their perceptions helped framed some of the key concepts that emerged from the narratives (e.g., ideas about the importance of kinship as mediator in provider/patient relationships, or the emphasis placed on family involvement in patient care).

This case study does not detail a particular diagnostic process offered by the practitioners, nor does it specify the healing ceremonies they have recommended; however, findings illustrate that the diagnostic component of the traditional Navajo healing system can be delivered within an allopathic setting and can enhance culturally oriented patient-centered care.

Finally, the completed ONM case study can also help pave the way for a more rigorous study that evaluates the impact of this program on patient care, retrospectively or prospectively.

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