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## Fostering Health Equity: Clinical and Research Training Strategies from Nursing Education

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### Abstract

Racism, ethnocentrism, segregation, stereotyping, and classism are tightly linked to health equity and social determinants of health. They lead to lack of power, money, resources, and education which may result in poor health care access and outcomes. Health profession faculties must address the complex relationships that exist between individual, interpersonal, institutional, social and political factors that influence health outcomes in both clinical and research training. Thus, the purposes of this paper are to provide examples of training strategies from nursing education that foster cultural sensitivity. First, assumptions about health equity, culture, ethnicity and race are explored. Second, clinical training within an undergraduate and graduate context are explored, including an undergraduate cancer case study and in a graduate pediatric nursing program are described to demonstrate how cultural models can be used to integrate the biomedical and psychosocial content in a course. Third, research training for summer scholars and doctoral and post doctoral fellows (short and long term) is described to demonstrate how to increase the number and quality of scholars prepared to conduct research with vulnerable populations. Research training strategies include a summer research institute, policy fellowship, and a scholars “pipeline” program. A unique perspective is presented through collaboration between a nursing school and a center for health disparities research.

### Keywords

clinical training; cultural sensitivity; ethnicity; health equity; race; research training

### Background

As the World Health Organization calls for improved health equity through actions related to the social determinants of health, health profession faculties struggle with how to educate and train clinicians and researchers about these phenomena [1,2]. In clinical teaching, faculties are asking themselves how they can enable a better understanding of cultural beliefs and practices within various social contexts from diagnosis to treatment, continuing into ongoing care [3]. That is, how can you train clinicians to practice with cultural

sensitivity and design effective systems of care that honor individuals of diverse ethnic and cultural backgrounds [4]? Faculties are also asking themselves how to train tomorrow's researchers to conduct research with vulnerable populations. That is, how can you train researchers to partner with and empower diverse, vulnerable populations and communities to derive findings that improve quality of care for these vulnerable groups? This paper will provide examples of both clinical and research training strategies that foster cultural sensitivity from a nursing training program partnered with a center for health disparities research at one institution in the United States.

Recent attention to health equity by the Institute of Medicine in the United States and the World Health Organization has refocused health faculties' efforts from training alone to education that includes not only issues about health disparities but also about the social determinants of health [1,2]. Attention to health disparities explains differences in health outcomes based on patient, provider, and health system issues. The focus on health equity allows us to take a broader view of health outcomes to include how the distribution of power, income, goods, and services enable access to health care and other sectors of society that support health (such as education).

Every encounter between health care providers, patients, and families is a cross-cultural experience. Different cultures among participants provide the context, or lens, through which they view, interpret and respond to their world because culture is, "The life ways of a particular group with its values, beliefs, norms, patterns, and practices that are learned, shared, and transmitted intergenerationally" [5]. Thus, culture encompasses commonalities and differences between different groups of people (i.e. provider and patients) and communities (i.e. health care and lay). Cultural sensitivity is used in this manuscript to describe the desired outcomes of training; it describes a person's desire to engage in the process of seeking cross-cultural encounters and becoming more knowledgeable, aware, and skillful [6].

Ethnicity is a more recent term than culture, appearing in 1969 in the Current Population Survey and 1980 in the US Census. While the boundaries of ethnic identity remain unclear, ethnicity refers to affiliation with a subgroup of a population. The subgroup shares a culture and way of life which is reflected in language, folkways, religion and other institutional forms, material culture, and cultural projects which socially distinguish ethnic groups. Ethnocentrism is the view that one particular ethnic group is somehow superior to all others; whereas cultural relativism is the view that individual beliefs and value systems are culturally relative. Thus, ethnocentrism and cultural relativism are mutually exclusive [7].

Race is a sociopolitical concept based on skin color and appearance. Society has attempted to categorize race (over the years, there have been 60 arbitrary racial types) based on supposed biological differences. Currently, in the United States, for example, citizens are asked to categorize themselves as belonging to one of five racial groups (American Indian or Alaska Native, Asian, Black or African American, Native Hawaiian or Other Pacific Islander, and White). "Hispanic" is reserved as an ethnic category which can be applied to any "race" (Mexican, Puerto Rican, Cuban, Central or South American, or other culture or origin) [8]. Stereotyping individuals based on race can operate in clinical and research

environments below the level of conscious awareness; for example, the casual mention of race in a presentation or inappropriately applying epidemiological risk data to any member of the group. Such stereotyping is intensified by time pressure and complex cognitive tasks and is resistant to disconfirmation (the recognition and acceptance of evidence that conflicts with the stereotype).

Racism, ethnocentrism, segregation, stereotyping, and classism are tightly linked to health equity and social determinants of health [4,9]. These factors lead to lack of power, money, resources and education, which may result in poor health care and poor health outcomes. Thus, health faculties must address the complex relationships that exist between these individual, interpersonal, institutional, social and political factors, which influence health outcomes in clinical and research training.

## Setting for this Paper

Faculty members using clinical and research training strategies described in this manuscript are members of the Center for Health Disparities Research (CHDR) and the School of Nursing at one US institution. The mission of the CHDR is to improve health among disempowered, marginalized, vulnerable, and under-represented populations through research and training. Faculty, students, and staff are united with the common goal of reducing health disparities and improving health equity through teaching and research.

Consensus amongst Center members exists regarding the importance of tailoring clinical and research interventions to the study population and culture; basing interventions on formative research with members of the study populations; and having an explicit theoretical basis [10–12].

## Clinical Training Strategies for Nursing

The four sets of examples provided demonstrate how to incorporate issues of race, ethnicity and culture into clinical training at the undergraduate and graduate levels, and into research training programs. Clinical training is assumed to have both theoretical and clinical components.

### I. Undergraduate nursing: use of explanatory models

This example uses explanatory models (EMs) to integrate “culture” into a clinically focused course, the Cancer Case Study. The EM approach was chosen as the organizing theoretical framework when the course was revised. The model focuses on eliciting and discussing a patient’s beliefs about their cancer experience and can provide a powerful basis for initiating difficult conversations, increasing understanding, enhancing the provider–patient relationship, and tailoring treatment plans to the patients’ beliefs to improve adherence and outcomes. Dr Arthur Kleinman developed “Kleinman’s Questions” to elicit cultural or EMs, for example, health beliefs and perceptions about an individual’s own illness or that of their loved one. Questions include: What do you think is wrong? What caused it? What do you want me to do? What is the course of the illness? What is the main way this illness or treatment has affected your life? What do you fear most about this illness or treatment [13]?

Students in the Cancer Case Study course tailor EM questions to their population of interest, submit them to faculty for feedback, and then use them to guide their clinical experiences and observations.

The impetus for the Cancer Case Study came from information gleaned from an elective experience in cancer care in the undergraduate nursing program at the University of Pennsylvania. Because cancer often evokes strong beliefs and meanings, faculty were concerned about designing a course where diverse student populations could not only master oncology nursing principles and data regarding cancer care outcomes, but also key cultural and psychosocial issues related to the patient and family experience. Feedback from the first student group revealed anxiety about communicating and offering psychosocial support to patients of all ages and their families and developing tailored interventions. Therefore, the course faculty sought to change the framework of the course from a biomedical to a more holistic, patient-centered model. The goals of the revisions were to better prepare the students through an immersion in the culture of cancer, including the values, beliefs, norms, patterns and practices common in cancer care on the part of the patient and the family, in addition to the psychosocial and biomedical aspects of cancer care. A gap in published literature exists with regard to the curriculum guidelines for undergraduate oncology nursing education and how to synthesize the biomedical aspects of disease with critical cultural and psychosocial competencies. Guidance was found, however, in the cultural anthropology literature about EMs.

The didactic format of the course now includes lectures and case studies supplemented by lay literature/videos and web-based homework assignments. The course begins with an introduction to the impact of cancer from a family systems perspective; cultural and psychosocial aspects of cancer; and an introduction to EM. A patient/family panel is incorporated that encourages students to participate in conversations about cancer using modifications of Kleinman's questions to elicit beliefs about cancer. The structured clinical experiences include observing care in the outpatient/inpatient settings, investigating cancer and its treatment, and interviewing the patient and/or family using their modified questions. Once the students begin the clinical component, weekly sessions are conducted in which they can share, reflect, and debrief about their experiences. Faculty members redirect students, as necessary, to develop specific interventions that reflect patient/family beliefs/preferences.

Students' evaluations of the use of EMs in the Cancer Case Study indicated that the framework heightened their insight into the beliefs/perceptions of cancer patients and families; increased comfort in communicating with patients and families across illness continuum; and expressed intent to incorporate aspects of an explanatory model assessment into future nursing practice. They also learned to modify interventions to reflect patient responses, and increased their ability to communicate with patients, elicit health beliefs, and engage in difficult conversations. They observed that the course offered a safe environment to debrief, share and reflect upon their experiences, and learn from families. Course faculty found that integration of an EM into the course was feasible and that they could expand the classroom and clinical opportunities for student practice of EM. Challenges and limitations included making EM foundational and core to the course rather than merely an additional

component. In doing so, the faculty had to carefully decide which relevant teaching–learning strategies, in addition to EM-related experiences, could be used so EM remained central. For example, some content was moved to homework and weekly quizzes to ensure the classes remained coherent.

## II. Graduate nurse practitioner training: family and community experiences

This course uses a series of family and community experiences to integrate “culture” into a series of clinically focused modules within a Pediatric Acute–Chronic Care Nurse Practitioner Program leading to a Masters in Nursing Sciences. The experiences have been developed and implemented over the past 20 years with over 300 students in the midst of a highly medicalized system of care for seriously ill children in the United States.

Clinical rotations in the community are the first distinctive aspect of these experiences. Within the block of four clinical semesters, a progressive thread of community participation evolves while the students are otherwise engaged in hospital rotations. In the first (Fall) 12-week clinical semester, the clinical experiences for the pediatric physical assessment course are conducted in urban, community daycare. While the students do become involved in the day-to-day life of the children in the daycare settings, their learning objectives primarily focus on interactions between the children and the staff. During this semester, theory content related to culture and family is introduced.

In the second (Spring) 12-week clinical semester, clinical experiences for the second major theory/clinical course are conducted primarily within the hospital setting (inpatient/ outpatient). Special experiences, however, are conducted in an urban public high school. While the nature of the student initiative at the high school changes each year, it consistently involves: (1) direct interaction and collaboration of the Nurse Practitioner students with the high school students and elementary school children; and (2) fostering leadership in the high school students so that they can teach and support their peers and younger students. For example, Nurse Practitioner students taught high school students skills to assess growth and the risk of type 2 diabetes. The high school students then used these skills to evaluate younger students enrolled in an after school program. To date, over 200 children have been evaluated; 28% have been identified as being at risk for type 2 diabetes. The Nurse Practitioner/high school student team also provides culturally relevant interventions related to nutrition and activity. To highlight the participatory nature of this teaching strategy, each year the high school and Nurse Practitioner students present the results of their project at a national pediatric nursing conference and have been honored with three research awards.

During the second and third semesters, theory content related to family management of serious health care problems is introduced. Issues related to culture and health are included, as appropriate, in all written assignments (histories and physicals, scholarly papers, projects, case presentations and daily logs about clinical experiences).

Lastly, in the fourth and final (Summer) 6-week clinical semester, the clinical experiences for the last major theory/clinical course are conducted in a community setting whose focus is on care of vulnerable populations. While the setting involves medical and nursing issues, social and psychological issues dominate. Students assume key leadership roles within the

settings and are encouraged to engage in participatory learning activities. During this semester, classroom activities are structured using the principles of problem-based learning, which focuses on topics that include the social determinants of health. Students also complete a capstone case study paper that describes a “family level” issue that includes community aspects of care.

The “Family Experience” is the second distinctive aspect of the cultural training model. Role neutral, “non-medical” visits are made to a family, which is currently doing well managing their child’s serious, chronic condition. The assumption justifying the experience is that the patient and family are the experts and the health care provider (student) is the learner. To facilitate learning and the ability of the student professional to remain in the learner role, important guidelines are included regarding learning expectations and behavior.

Taken together, student evaluations of these two graduate learning experiences identified the key insights gained and their relevance to cultural competence and health equity. Such issues included: strengths and resources of families; lack of community infrastructure for the care of chronically ill children; and the skills to enable transitioning of children amongst settings. One student’s remarks embody the learning goals for these assignments, “*We did not problem solve in a community way...we did it like oncology nurses instead and we did not think through how we could have provided [creative] supports for the teen whose mother could not be at home during the day...*”.

### III. Research training for nurses

Research interests and subjects within the CHDR are varied. Beliefs about the tenets of community-based research training, however, are shared. Training focuses on all phases of the research process, including: (1) elicitation (e.g. focus groups); (2) questionnaire development; (3) intervention design; (4) pilot intervention; (5) evaluation; and (6) dissemination [14]. Both classroom and practical experiences are offered that include working collaboratively with the community, identifying and working effectively with gatekeepers to gain access to the population, conducting focus groups, funding for planning and implementation of the research plan, and maintaining motivation and persistence. Specific research training strategies include undergraduate, graduate, and pre- and postdoctoral experiences.

**Scholars Program (undergraduate and graduate levels)**—The Scholars Program is a pipeline experience that provides a unique opportunity to interest undergraduate and graduate (not necessarily nursing) students from under-represented minorities in a research career. The curriculum includes participatory and experiential learning strategies and coaching related to clinical scholarship, health disparities, and racism and ethnocentrism. Examples of short-term outcomes from the Scholars Program include integrative reviews, scientific posters (regarding obesity), debates and a publication (e.g. regarding patient–provider racial concordance [15]).

**Doctoral and postdoctoral training**—Research training is available to nursing students during and after their doctoral training. In one program, it is focused on vulnerable women, children and families; and on implementing community interventions with vulnerable

women, children, and families at risk for health disparities. Future research training is being planned that also incorporates biobehavioral and intervention strategies that are in concert with community participatory interventions to promote the health of individuals and communities.

Aggregate data over the past 11 years indicate that, while varied, trainee research focuses on the health care and health outcome disparities of vulnerable populations. Students receive 2 years of training either during or after their doctoral program. Doctoral trainees and members of their teams have received 31 grants, and postdoctoral trainees or their teams have received 42 grants. Predoctoral trainees have produced more than 70 in-print or under-review publications, and postdoctoral trainees have produced 58 publications. Finally, they have received many honors and awards including those on local, national and international levels.

A Summer Nursing Research Institute is conducted over a 2-week span and is another opportunity for postdoctoral candidates. It is based on an immersion model of postdoctoral nursing education including mentorship and peer support to increase knowledge, skills, and networking related to health disparities. Sixty hours of onsite instruction, mentored research experiences and follow-up consultation focus on scholarly development.

Fellows apply and are selected based on their potential for research productivity, and the match of their goals to those of the Summer Nursing Research Institute. Each fellow is assigned a faculty mentor who meets with the fellow while they are in Philadelphia, and who is available throughout the academic year. Fellows are also able to use campus resources throughout their fellowship, including library resources. Onsite instruction consists of classroom and small-group experiences to establish a program of research related to potentially vulnerable populations, including research methods, grantsmanship, publishing and professional development. Outcomes include publications, grants, career influence and postdoctoral fellowships. Fellows evaluate the experience highly, including the access to electronic library resources [16].

The purpose of the Leadership Education and Policy Development Program is to inspire doctoral and postdoctoral nursing students, biomedical students, and 4<sup>th</sup> year medical students to use their research and clinical expertise to shape health policy that will eliminate health disparities at the federal, state and local level, early in their careers. The focus of this program is on leadership development, which includes understanding personal leadership styles and learning to communicate and network with policy makers, staff in the legislative and executive branches of government, advocacy/lobbying groups, and interdisciplinary professional organizations such as the American Association of Colleges of Nursing and the American Association of Medical Colleges. Activities are held on campus, in Washington, DC, in the state capital and with representatives from the city government of Philadelphia. While most students are not expected to remain in Philadelphia, they are expected to understand the importance of their research and clinical skills to shaping the health policies that impact the vulnerable populations in their communities and states after graduation. The selection of fellows is based on their commitment to eliminate health disparities, how they will use the knowledge and experience gained after graduation, their potential for

interdisciplinary collaboration, and their ability to communicate their research and clinical focus. Outcomes include establishment of a cohort of health policy scholars committed to using their research to transform health policy at the federal, state or local level; interdisciplinary networks and partners to lead change; opportunities for potential positions in the federal government; and graduates with expanded abilities to communicate their research beyond traditional peer-reviewed journals and professional conferences, in the policy arena. Fellows have described the experience as “life changing” and have remarked at the importance of interdisciplinary collaboration and networking in communicating the findings to congressional staff. Medical students, in particular, have learned about the scientific preparation of PhD nursing students [17].

## Conclusion and Lessons Learned

While these training strategies from nursing education are believed to foster cultural sensitivity within various contexts in nursing education, they do present challenges. First, the biomedical model is strongly valued within clinical settings within the United States. Therefore, creative teaching strategies and a well-prepared faculty are required to achieve success. Second, individuals within the Center for Health Disparities provide a unique and diverse cadre of professionals with whom to plan, execute and evaluate these strategies. Such diversity is not achieved by accident, but through design. While these strategies can be carried out by less diverse groups, careful training and supervision is necessary. Third, through these training strategies, the faculty learns a tremendous amount, not only about themselves but also about those whom they are teaching. Thus, self-reflection not only needs to be encouraged, it should be expected throughout the period of engagement.

Strategies to increase cultural sensitivity all require participatory methods; both faculty and student are learners and contribute to each other’s learning. Direct attention to concepts of race, culture, ethnicity and health equity form an important basis for growth as a scholar and as a clinician. Careful selection of curricular content and experiences are an important platform for learning. Finally, outcomes can include not only improved patient and family care, but also innovative research, publications, and impact on health care policy. Our model of curricular integration at all levels of nursing training and research can be adopted by other health professions such as medicine and pharmacy. True integration through interdisciplinary and interprofessional training, to lead to effective and culturally appropriate team-based practice, is a foreseeable future challenge.

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