Recognizing Health With Pregnant Cambodian American Women by Finding Meaning in Relationship

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Late entry to prenatal care is a complex problem disproportionately affecting immigrant and refugee women living in Western-style countries. Improving the health and well-being of these women and their children is a critical need. Utilizing Newman's praxis research approach, this study explored engaging 6 Cambodian American women living with pregnancy in the process of finding meaning. Dialoguing on important events and relationship from childhood to present day, patterns of health emerged. Considering data across participants, 3 preliminary themes were illuminated. Study provides new knowledge about environmental disruptions and promoting health. **Key words:** *bealth as expanding consciousness, maternal bealth, Newman's pattern recognition, refugee*

TEALTHCARE during pregnancy is an Lopportunity to deliver interventions that will improve maternal health, perinatal health, and neonatal survival. In a diverse world, promoting maternal and infant health across populations and cultures is challenging. Also, healthcare during the antenatal period is particularly important for vulnerable populations such as those displaced by war and political strife. A comprehensive review of the nursing literature by Lipson and Meleis² on immigrant and refugee health supports that experiences leading to arrival in the host country have implications for health; in particular, refugees experience a more complex and sustained disruption to their lives. Im-

proving maternal and neonatal outcomes for these vulnerable pregnant women necessitates nursing knowledge on the meaning of the health experience in their day-to-day lives. Research as praxis that takes on the form and purpose of nursing practice may offer an opportunity for improved health for women burdened by the loss of country, culture, friends, and family from refugee experiences. Engaging in finding meaning via Newman's³ pattern recognition process is an important nursing skill that facilitates personal integration and transformation.⁴⁻⁶

A prenatal concern for those who provide healthcare for immigrant and refugee Cambodian American women living in the United States is late entry to prenatal care. According to the director of a healthcare center delivering care to one of the largest Cambodian American populations in Massachusetts (D. Grigg-Saito, MSPH, oral communication, October 2006), Cambodian American women enter prenatal care substantially later than their American counterparts. Nearly one-third of all pregnant women living in Massachusetts do not receive prenatal care in the first trimester. Fuidence supports that late entry

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to prenatal care is a complex problem related to individual and environmental factors such as age of the mother, ethnicity, socioeconomic status, patient-provider relationship, and ability to access healthcare information.8 For immigrant and refugee women living in Western cultures, this problem is compounded by language barriers, distinctive cultural traditions, and a lack of knowledge about Western prenatal care. Although equivocal evidence on the effectiveness of prenatal care has cast doubt on the timing and content of visits,9 late entry to prenatal care remains a concern in high-risk populations. Given the complex and uncertain nature of the problem, a shift in perspective beyond late entry to prenatal care onward to the whole person in interaction with the environment is necessary.

The purpose of this exploratory study was to recognize pattern with pregnant Cambodian American women by mutually appreciating insights, choices, and decisions impacting their health experience. To improve maternal and neonatal outcomes for these vulnerable pregnant women, clinical nursing knowledge is essential. To date, no studies were found that have investigated the experience of pregnancy for women of Cambodian ethnicity living in the United States from a nursing perspective. Consequently, there is need for clinical knowledge regarding their evolving values, perceptions, and choices over time and during this critical life transition period.

HEALTHCARE DISPARITIES IN ASIAN AMERICAN WOMEN

Asian American women, including immigrant Cambodian American women, are at greater risk for increased morbidity and mortality during pregnancy than their American counterparts. Nationally, women of Asian and Pacific Island ethnicity had highest incidence of diabetes during pregnancy, second highest rate of dysfunctional labor complication, and a slightly higher late entry to prenatal care rate than did all other ethnic groups studied. ¹⁰ Re-

cent epidemiological data investigating birth outcome differences among Asian subgroups in California found that Cambodians and Laotians have the worst maternal risk profile, including the highest birth rate to young mothers (<20 years), least amount of education, and lowest rate of prenatal care initiation. ¹¹ Thus, a key strategy to promoting Cambodian American women's and infants' health is to improve the use of prenatal services. In the area of maternal, infant, and child health, the goal of *Healthy People 2010* is to increase the proportion of pregnant women who receive early and adequate prenatal care to 90%. ¹²

Late entry to prenatal care

Studies focused on late entry to prenatal care have investigated predictors of the onset of prenatal care, ¹³ barriers to care, ¹⁴ beliefs of prenatal care, ¹⁵ social support, ^{16,17} and satisfaction with prenatal care. ¹⁸ Factors common to women who arrive late to prenatal care are mothers of multiple children, lack of family and friend support, unplanned pregnancy, low income, less than high school education, and beliefs in the importance of prenatal care. Participants in these studies were primarily whites and African Americans.

Cambodian women refugee experience

Cambodian women initially immigrated to the United States primarily as refugees and more recently to reunite with family members. Thirty years ago, between 1975 and 1979, Pol Pot, the leader of the communist Khmer Rouge, systematically ordered the repression and murder of Cambodians on a massive scale. They were prohibited from practicing customs, forced to move out of cities and to live in cooperative agricultural communities, and at times ordered to emotionally distance themselves from those they loved so as to demonstrate loyalty to Pol Pot. 19 Intellectuals, social elite, and military were targeted for torture and murdered by the government. Approximately 1.7 million Cambodians (nearly 21% of their population) died of torture, starvation, and disease during those 4 years of the Khmer Rouge.²⁰

A handful of studies focus on Cambodian women who live in America. Inquiry into their healthcare decision making, 21 health beliefs about stress,²² childbearing experiences, 23 and experiences with domestic violence²⁴ contributes to an emerging profile of the vulnerabilities of Cambodian women of childbearing age living in the United States. Evidence from these studies suggest that immigrating has placed a great strain on families and increased Cambodian women's vulnerability to isolation, abuse, and a Karmic attitude to endure to promote family equilibrium.²²⁻²⁴ Cultural practices surrounding pregnancy, childbirth, and the role of women are in transition, shifting from traditional practices rooted in Cambodia to a blended approach mixing the old and the new.^{21,23} For Cambodian American women, this time of transition is characterized by uncertainty, questioning of tradition, confusion about Western care, and a desire to protect the mother and the baby.²³ These health disparities place pregnant Cambodian women and their unborn children at risk and contribute to the worst birth outcomes among Asian American subgroups. 11 In addition, evidence suggests that pregnant Cambodian American women living in Massachusetts bear a greater burden of health risks than their Californian counterparts because of more recent immigration, more dependent children living at home, and being more likely to be the head of household. 22,25 Yet, an extensive search of MEDLINE and CINAHL from 1980 to 2008 provided no studies exploring the lives of pregnant Cambodian women within the context of a nursing theoretical framework. Studying Cambodian American women's perceptions of meaningful relationships and events over time and while pregnant through the perspective of Newman's³ theory of health as expanding consciousness (HEC) provided the opportunity to better understand their health experience in a new way grounded in nursing science.

RESEARCH OUESTIONS

For the purpose of this exploratory research study, the following questions were posed: (1) What is the life pattern manifested by persons who are of Cambodian ethnicity and experiencing pregnancy, as expressed through story? (2) What are the themes expressed by life pattern manifestations across participants who are Cambodian American women and experiencing pregnancy?

THEORETICAL FRAMEWORK

Nursing is a human practice discipline based in scientific knowledge and caring values seeking to facilitate human understanding of meaning and inform choice to improve quality of life and healing. 26,27 Important to evidence-based clinical practice is employing research methods grounded in the philosophical and practice realities of nursing to further the development of our discipline. Newman³ defines her research methodology as hermeneutic dialectic and emerging out of Rogerian nursing science, which is concerned with the person as a whole, being unitary in nature, and continually changing via mutual process with the environment. From Newman's perspective, a phenomenon is identified by pattern and by interaction with the larger whole such as family, community, or universals. Manifestations of pattern are specific to the whole and characteristic of the person-environment field. Meaning, connections, and disconnections in relationships and to events, and their evolving nature over time, reveal pattern. Change is unidirectional and unpredictable. Transformation may occur during disruptive processes and moves from lower to higher levels of complexity.

The process of HEC develops in transforming stages of the evolving whole. Newman³ proposed that faced with disruption, an opportunity presents to recognize new forms or patterns and emerge at a higher level of organization. Building upon Young's²⁸ sequencing of human evolution, Newman proposed that persons move through time

and space toward real freedom developing self-awareness in stages of (1) being bound to others' ways, (2) self-determination via disillusionment with others' ways and trialing new approaches, (3) recognizing that the old rules no longer work, thus arriving at a choice point, (4) making new choices and implementing new behaviors, and (5) deepening connections to self and others. Over time, the process becomes increasingly diverse and complex. The individual is able to react to the environment in increasingly varied ways. A beginning body of research utilizing the HEC perspective supports that experiencing an illness, 4,29-31 and moving through a life transition, 6,32,33 is an opportunity to increase self-awareness and transform and develop closer relationships with self and others.

Newman³ and other nursing theorists³⁴⁻³⁶ describe the relational process as central to the evolution of the patient's movement toward health. The a priori embodiment of Newman's theory provides the structure for understanding pattern appraisal, pattern analysis, and expansion of consciousness, thus laving the foundation for the nursing praxis model. Also, studies utilizing Newman's praxis approach suggest that being heard within a nurse-created environment of care promotes self-expression, integration, and expansion of consciousness. 4,6,31,37 In a praxis model, the nurse as a researcher engages with the participant and within a mutual process, comes to know the person through pattern recognition and self as part of experience. Newman³⁸ describes the partnership process as dynamic, evolving through dialogue on meanings, insights, and actions, and transforming for all participants. The process involves both personal and environmental systems and integrates knowledge from other disciplines. The focus is the dynamics of relating.

METHODS

Participants

The participants in this study were 7 women who self-identified as older than 18

years, pregnant, of Cambodian ethnicity, and agreeable to sharing stories about the important people and events in their lives (Table 1). Following human subjects approval, participants were initially recruited at their prenatal appointments by clinic staff using an informational flyer. Following slow enrollment, recruitment procedures were amended to include an introduction to the study by a Khmer interpreter when placing appointment reminder phone calls. Participants were drawn from a multiprovider prenatal appointment master schedule. Over a 5-month period, 73 participants of Cambodian ethnicity were contacted by phone; of these, 10 agreed to participate. Three participants initially agreed but later did not participate because of work schedule conflict, pregnancy complication, and failure to show for interview. According to Asian scholars (K. Dinh, PhD and I. Ho, PhD, written communication, February 2008), low participation rates are common in this population. Barriers include mistrust, time constraints, primary caregiver for family members, transportation issues, and a lack of knowledge about research. Participation was voluntary, confidential, and could be terminated during the study at any time without compromising care. In the event that any participant shared information that suggested mental health concerns, referrals would be made. No referrals were necessary. Data collection occurred over 1 to 4 months for each participant depending upon the number of interviews, which varied in number from 1 to 4 among participants.

Two participants reported being born in the United States, 3 in Cambodia, and 2 in Vietnam. Numbers of years living in the United States ranged from 1 to 18. Of those born in Cambodia, 1 participant was 4 years old at the time of Pol Pot's take over, 1 was born during the Pol Pot's regime, and 1 was born after the Pol Pot's regime. Two others were born about that time in Vietnam in the southwestern area bordering Cambodia. Four of the participants were unmarried, and of these, 2 were teens. All but one participant had less than a high school education. One participant withdrew at the beginning of the

Fable 1. Demographic data

Pseudony Age, m y	Age, y	Place of birth	Language	# Years in the United States	Marital status	Place of work	# People in same household	# Of children	Problems with pregnancy	Other health problems
Bopha	18	United States	English	18	Single	Student	7	0	None	None
Ноа	24	Foreign	Khmer	1	Married	Home	2	0	None	None
Kimly	37	Foreign	Khmer	8	Married	Factory	4	2	First-trimester	Chronic
									bleeding	headache
Nary	32	Foreign	Khmer	4	Single	Factory	8	0	Morning	Chronic
									sickness	headache
Sokha	18	United States	English	18	Single	Unemployed	8	0	None	None
Soriya	31	Foreign	Khmer	ς	Married	Home	4	1	None	None
Thida	27	Foreign	English	6	Single	Small business	2	0	None	None

second interview when her husband refused her participation. He had to return to work, though his manner suggested he was also wary of the interviews.

Data collection

Data collection occurred via Newman's³ hermeneutic dialectic process. Data consisted of transcribed interviews, field notes, narrative and life diagrams, narrative summary, pattern appraisal, and memos. Field notes included researcher reflections after interviews and dialogue with Cambodian healthcare workers about their culture, beliefs, and personal stories. Problems shared pertinent to area Cambodians were the high price of rice, high prices of homes, difficulties facing Cambodian American youths, complex immigration issues, a lack of awareness about the need for prenatal care, and a lack of transportation services to distant medical technology/diagnostic services. A source of pride was the courage of those speaking out on past human rights abuses in Cambodia. A master's nursing student from Cambodia and fluent in Khmer and English interpreted for those expressing a need and was present at all interviews but one. Over time, the researcher-interpreter relationship expanded and evolved becoming increasingly connected. The researcher-interpreter praxis partnership evolved to include some spontaneous questioning by the interpreter with participants for meaning in Khmer. At these times, a fuller rendering of story emerged facilitating understanding.

A minimum of 2 interviews were proposed for each participant because previous research focused on describing pattern found 2 interviews sufficient to understand meaning and experience HEC.^{6,39-42} Yet, the process of pattern recognition may call for more than 2 interviews, particularly for those who may have experienced early trauma or loss⁵ and not being known in childhood.^{6,30,37} Thus, at the outset, participants were made aware that 2 or more interviews may be needed to come to know what was most important in their

lives. For those participants who were in the process of recognizing pattern and expressed a desire for another interview, more interviews were conducted. Most participated in 2 interviews, 1 withdrew after 1 interview, and 1 who was in the midst of a personal disruption participated in 4 interviews.

Newman's 38,43 research as praxis approach emphasizes the need to interact authentically from a commitment of unconditional caring with each participant while listening for unfolding life pattern. Thus, a centering intention to come to know the participant preceded each interview. The first interview began by asking each participant to tell about the most important people and events in her life. For those who needed more prompting, the question, "What is most important about being pregnant?" was included. Similar to clinical practice, consecutive interpreting,⁴⁴ in which translation occurs in the moment immediately after queries and responses, was used. If the researcher was uncertain regarding any part of the translation, clarifying questions were posed. The Khmer interpreter was first-generation Cambodian immigrant and of similar age and gender. Equally fluent in English, she interpreted for meaning rather than verbatim translation. Four participants spoke primarily Khmer, 2 only English, and 1 English and Khmer both. Follow-up questions were used to ask for further data, including some factual but primarily to understand meaning. Active listening, clarifying, reflecting, self-disclosure, and intuitive hunches were used when deciding what to say or ask in order to further dialogue and expose meaning and pattern. Each participant was encouraged to share whatever she felt was important in terms of significant relationships or events remembered from childhood through the present time.

Each first interview involved a dialogical exploration for and of the pattern that connects, an important event or relationship that would transform the dialogue from bits of information to sharing of meaning. Participants responded to the opening interview question: "Tell me about the most important people

and events in your life, with 1 or 2 words such as 'mom' or 'my mom and my husband.'" Aware that questions about their past might stimulate painful memories, care was taken to follow gently where led. When follow-up prompts such as "how so" or "tell me more" were answered with cryptic responses such as "She work hard. That's it really," the focus of questions was shifted to pregnancy experiences. This usually facilitated sharing stories. Over the interview experience, participants shared meaningful events and relationships from childhood through present day. Beginning with the first interview and continuing throughout data collection after each interview, both the researcher and the interpreter would reflect on the dialogue and note moments of detachment and connection when the participant's dialogue indicated closure or flowed. Over time attending to these moments, during interviews with participants and after interviews with each other, awareness expanded.

Subsequent interviews began with a sharing of the diagram created by arranging the narrative into chronological order and noting the sequential configurations of relationships and meaningful events (Fig 1). Viewing the life diagram presented an opportunity for reflection and validation by both the participant and the nurse researcher. During interviews, signs of pattern recognition and insights gained from the process by participants were noted but not probed. Signs of pattern recognition were communicated as understanding that particular experiences contributed to increased awareness, choice, and new actions/behaviors. Newman^{3,38} addresses that the pattern recognition process is not to be forced.

Participants varied on the amount and depth of both information shared and insights gained. At the end of the interviews, participants were asked to discuss what was their experience participating in the research. Responses varied from "prenatal appointments are fine for [me] because they do help out" to "It's been good telling people how I feel." Interviews ended when participants indicated

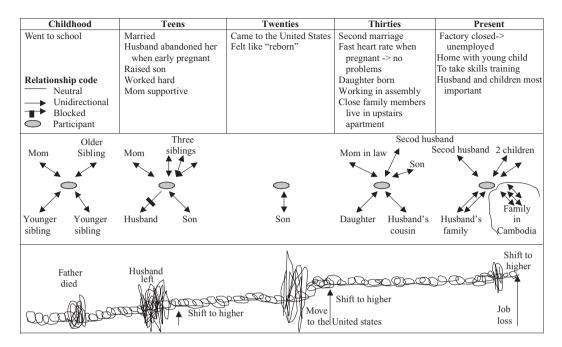


Figure 1. Kimly's life diagram.

that there was no more information or stories to be shared.

Data analysis

Data analysis followed the same procedure for each participant. It occurred within Newman's³ hermeneutic dialectic process, which involves 6 steps: (1) the first interview, (2) transcription, (3) development of narrative, (4) diagram, (5) continuing interviews, and (6) application of the theory. After a centering meditation, the researcher carefully listened to the recording and transcribed the tape English word for English word, noting tears, smiles, distractions, pauses, and when Khmer was used by participants and the interpreter. A pseudonym copy of each transcript was created for each participant. Each interview was reread, the diagram considered, and a narrative summary written noting the evolution of pattern. The complexity and quality of sequential patterns of interactions were reviewed and then applied to Young's²⁸ spectrum of consciousness as recommended by Newman.³ The narrative summaries including the evolution of pattern were then shared with the Khmer interpreter and mutually reflected upon. Early in the research experience, a photograph of an animal carved into river stone became a metaphor for listening to the whole. In antiquity, Cambodian artisans carved shapes of animals in the bedrock of a river near Angkor Wat, an ancient sacred temple. The animals appear to move as water flows over-simply stunning. Shared by a Cambodian healthcare worker, this photograph evoked deep reflections by the researcher on time, space, movement, and synchronicity. Also, in a similar way to animal shapes emerging from the riverbed, the swirl of participants' human responses would settle when sitting quietly and reflecting deeply on the connections between past and present experiences, thus illuminating pattern. Sometimes, this occurred in the moment with the participant and at times only after further analysis.

In this study, application of the theory included an online dialogue on the differentiation between Neill's⁴⁵ turning point and choice point among Newman scholars

(M. Schulz, MSN, CNP and M. Newman, PhD, written communications, January 9-16, 2009) to explore a connection between choice and a sense of personal control during a turning point. Participants in this study experienced events that were described as turning points such as moving to the United States, factory closings, and abandonment. When viewing participants' responses through the lens of evolving consciousness, ascertaining movement at these times was complicated by a lack of descriptors, suggesting an emerging sense of personal control or mastery over circumstances. Through the dialogue, an understanding emerged that a sense of personal control contributing to circumstances may be an illusion manifesting in the flux of the implicate order becoming explicate and aligned with an earlier stage of evolving consciousness than when choices are perceived regardless of circumstances. Then, reflecting more deeply on Young's sequencing of consciousness and these participants' responses, an awareness of the relationship among rules, movement, and choice emerged. Participants' stories revealed a need to pay attention to participants' awareness of whose rules were being followed and in which circumstances. Analysis was ongoing, prompted reflections and increased awareness. Over time, each interview contributed to emerging understandings of the women's stories as a whole. Then, viewing across the whole from the larger perspective of shared experience, common themes emerged giving voice to common meanings during pregnancy. These emerging themes were reflected upon with participants and Cambodian healthcare workers both to increase understanding and validate themes.

FINDINGS

Individual patterns

In coming to understand participants' individual pattern, the research findings focused on each individual's pattern and movement in relationship with the HEC framework. Meaningful relationships and events were dis-

cussed in relation to change, illuminating insights into each participant's pattern at that moment in time and evolving consciousness over time (Table 2). One participant's narrative summary and pattern analysis are presented as an example of her pattern and sequential patterning over time. Pseudonyms are used and some life details are veiled for confidentiality. Her life diagram (Fig 1) is presented.

Kimly's pattern: Moving forward by making her own opportunities

Kimly, is the second oldest of 4 children. They lived together with their mother in Cambodia during the time of the Khmer Rouge. Her father died when she was young. Although it is unclear how long she attended school and why she stopped, she says, "She didn't get too far in school." When she was in late teens, she married and 2 years later became pregnant. Her husband left her when she was just a month and a half pregnant. In talking about her siblings not being married now, she says, "Since what happened to me and my husband, they were all afraid to get married afterwards." Her husband's actions and his leaving were not discussed further.

Her son was born when she was in her 20s. She raised her son by holding down various jobs, trading and selling at a booth in a little market and working for a company. During this time, she was close to her siblings and her mother who helped her. Tearing up a little, she describes this time as a "very difficult time to make a living." Through the translator, she relays that

because of my young age and having to grow up without a Dad and then during my time it was during the Khmer Rouge also it was just a very difficult time to even try to make a living. And that I had my son too and it was just too difficult. And I couldn't further my education even though I wanted to.

Then, in her late 20s, she got the opportunity to be sponsored to come to the United States. She chose to do so because she knew she "wanted a better life" and moved to where she had an uncle living. She describes this

Table 2. Participants' evolving patterns

Pseudonym	Disruption	Timing	Meaning	consciousness
Soriya	Move to the United States	20s	Following other family members and to marry "Comparing feel good comparing plan," and mother helping	Shift to higher
Kimlv	Father died	Childhood	Childhood Not discussed	
	Husband's abandonment	Teens	Relied on her mother and siblings and hard work to survive	Shift to higher
	Move to the United States	20s	"Reborn"—working hard can advance and "more choices"	Shift to higher
	Fast heartbeat when pregnant	20s	Very painful, to emergency department, medicine resolved,	
			continue working	
	Factory closed—no job	Present	Will learn new compatible skill—"electronics"	Shift to higher
	Miscarriage	Present	Will try again	
Bopha	Father abandoned family	Childhood	Childhood "He was never there"	
ı			Mother worked hard to support family	
	Entering high school	Teen	"Hang out with bad people" and truancy	Shift to higher
	Pregnancy	Present	Closer to mother and family	Shift to higher
Ноа	Move to the United States	20s	Unknown	
	Interviews discontinued	Present	Bound by husband's schedule/ways	
Nary	"Born during Pol Pot"	Childhood	Childhood Father died, raised by single mother and older sister	
	Move to the United States	20s	"Easier to make a living" and misses home	Shift to higher
	Fiancé abandonment	20s	Need to connect led to living with "good person"	Shift to higher
	Pregnancy	Present	"More complete as a husband, wife, and a kid"	
	Morning sickness	Present	Felt overwhelmed—"It was too much"	
Sokha	Sisters' pregnancies	Teen	"They hurted a lot for them" and family disruption	Shift to higher
	Family problems	Present	Stopped school and distanced from parents and siblings	Shift to higher
	Pregnancy	Present	Creating new family and parents "always there for me"	Shift to higher
Thida	Move to refugee camp	Childhood	Childhood Concealed	
	Move to the United States	Teen	Concealed	
	High school	Teen	Difficult and "hate school I always skip school"	Shift to higher
	Brother died	20s	"It [big heart] happen and then he die"	
	Rahy health threat	Drecent	"So worry about that" and after testing "everything okay"	Shift to higher

time as, "I reborn when I came here." She learned that "if you work hard you can earn more. And there's more choices for women than like it was in Cambodia." Four years later, she brought her son over when he was in his early teens. She left her son in the care of her mother, and her mother's actions to raise her son as well as her mother's brother being here when she arrived are deeply felt as a source of strength and support.

In her early 30s, 2 years after arriving in the United States, she married her second husband. She describes him as "a good person. He has never really done anything to make me think otherwise. And I appreciate him for that." They have a daughter together who is $2^{1}/_{2}$ years old. When she was 6 months pregnant with their daughter, through the interpreter she said that she "had to go to the emergency room because of a heart problem. It was beating really fast." "I only went for a few hours. They gave me some IVs to slow it down." When asked if it was scary, she responded, "It was just very painful so I was concentrating on that. I couldn't speak it was just too painful." Then, as advised, she went to a cardiologist. "They prescribed me some medication to take. And so I felt better. But they wanted me to take it for my pregnancy until about a half a month after the birth." Her heart problem was resolved.

She, her husband, son, and daughter live together. Her mother-in-law and husband's male cousin live close by. In response to asking whether she has any friends, she answered, "mom-in-law." Her mother-in-law or her husband's cousin often babysits for her daughter. Up until 6 months ago, she worked at a factory when it closed. She will start training in electronics soon. She chose this because she can work with her hands and "the other choices might be too difficult because of my language barrier." During the first interview, Kimly was experiencing some bleeding and awaiting an ultrasound. She no longer felt pregnant. By the second interview, she had learned that the baby had not survived and described that she was "okay" and plans to have more children. Her husband is most important to her now.

Presently, she worries about her family in Cambodia and her son here. She speaks with her family on the phone usually every couple weeks and more frequently when there is trouble. Her mother is ill. The translator relays, "My mom is so swollen (pointing to arm) she doesn't know if it will be cured. My mom has to go to Vietnam, the hospital in Vietnam so I am thinking that it won't be cured". Her son causes her worry because "they are allowed to go out more and they can. I am afraid that he will have too much fun and then forget about school". She shares, "[I] follows him sometimes to school to make sure he isn't skipping school." Happily, she shares that he has not. She pushes him to do well because "I know I worked hard. But if you are poor you weren't given the opportunity as much and the kids here they have much more opportunity." In the future, she hopes for more children and her children to get a good education and be successful. She knows, "I living the good life. I don't want that [bad life] for my kids."

For Kimly, returning for a second interview was important. She came, although she was worried she might not be interviewed. She reflected, "Thank you for still taking me because I don't have a baby. I know you want to interview pregnant people." She was grateful for the opportunity to participate in the research.

Kimly's sequential patterning

Kimly's pattern analysis revealed a child-hood and adolescence full of hard work to survive as well as 2 particularly traumatic events, her father's death and her husband's abandonment. Bound by meager financial means, she maintained very close relationships with her mother and siblings. Her husband's abandonment forced her "to find whatever I can do to raise my son." The demands of her early life gave meaning to the importance of maintaining close family relationships, work, and education. In her late 20s, when an opportunity to leave Cambodia presented itself, she took it and moved to the United States. Her life changed dramatically, and she gained a

tremendous sense of freedom. Now, her role as wife and mother is most important. She appreciates having a good husband and through trial and error is learning to be a parent in a dramatically different environment. Kimly has responded to disruptions in her work by moving forward to learn a new skill and in her pregnancy with plans to try again. She hopes for the future that her children will get a good education and have a good life. In Young's sequencing of human evolution, Kimly was at the third substage, creating a center. Faced with job loss, she made decisions on the basis of personal insight, was creating a family, maintaining ties with family back home, and trialing ways to be a parent in a foreign culture.

Participant's expanding consciousness

For Newman,³ health is expanding consciousness. Each person manifests a pattern that is unique and whole and known by his or her behavior and interaction with the larger environment. Meaning identifies pattern. 46 Individuals' stories illuminated that each found meaning in family relationships and anticipated happiness with her children. The process of HEC develops in transforming stages of the evolving whole. As outlined by Newman, reflecting upon the complexity and quality of each participant's pattern within the context of Young's²⁸ sequencing of human evolution revealed that most were moving between centering and choice. Young describes centering as a time of trial and error, self-identification, and movement away from a group consciousness. This period correlates with Newman's³ concepts of space and movement. The research experience revealed disconnections, such as a move to a new country or the loss of a sustaining relationship, that were described as routine by participants yet included the before and after quality changes that characterize a life disturbance. These changes were noted as disruptions and validated during the second interview. When participants described choices and actions during a disruption as conforming to rules, their movement was noted as stable, whereas participants' choices and actions described as contrary to rules were noted as expanding consciousness. For example, 2 participants described moving to a new school as a time of change during which both skipped school. One described her actions as falling in with a bad crowd. She shared, "Like you meet the wrong people like. You hang out with bad people and stuff. And then I did stuff like skipping school and then I stopped school because I met [my boyfriend]." She followed along with others, whereas another said, "I hated school. I didn't go." Her choice reflected her own experience. For those who became aware that the old rules no longer applied, participants trialed new relationships, new jobs, new ways of parenting, and new ways of behaving such as truancy. Whether participants' movement was appreciated as conforming or contrary to rules was critical to understanding the evolution of consciousness. In this study, women whose choices and actions were described as conforming to norms were considered to be at an earlier stage of the evolution of consciousness than those who were aware that the rules no longer applied.

Patterns across participants

Reflecting across participants, the uniqueness of each individual's pattern was revealed and themes common to all participants began to emerge. These themes were clustered into 3 patterns: (1) participants became increasingly aware of self and environment as they aged; (2) during times of disruptions, anchoring self in the world was fostered through work and close relationships; and (3) participants were finding their way and building a new life. Recognizing these patterns increased awareness and moved researcher-participant relationships toward increased connectedness.

Participants became increasingly aware of self and environment as they grew

All participants described a process of growth and change over their lives. The depth

and breadth of change varied among participants. For example, the 2 participants born and raised in America were younger and had experienced fewer disturbances in their lives. They spoke of falling in with a bad crowd and family disruptions due to pregnancy as difficult times. In general, those born abroad had experienced greater difficulties such as living hand to mouth, moving to a new country, learning a new language, adjusting to a winter climate, changing jobs, and losing daily contact with friends and family. One immigrant participant had spent time in a refugee camp, another's father died when she was very young, and another's husband abandoned her when she was newly pregnant with her first child. This last experience was so profound for her and her family that none of her siblings, all of whom were in Cambodia, chose to marry.

During times of disruptions, anchoring self in the world was fostered through work and close relationships

Work carried participants through difficult times. For some working hard meant survival. Kimly speaking about her life after her first husband's abandonment shared,

[It was] a very difficult time to even try to make a living. . . . So I had to find whatever I can do to raise my son because my husband had left. I was only pregnant a month and a half when the guy left so I took care of my son while I was like that.

Along with her mother and siblings, she worked in a market, trading and selling. Nary, who immigrated in her 20s without family here, relied on her work environment as a source of income and place to meet people. She explained her early circumstances in the United States as, "And I did find someone who was supposed to marry me but that [fell] through because he eventually left." Now "not fully married," she is living with a man who has been here 20 years and whom she met at work. She describes him as "a good person" and that "I am just happy I have my husband who knows his way around. I am happy I

found him." Also, her work in assembly makes it "easier to make a living" than in Cambodia, although she remains homesick.

Close relations with relatives helped secure footing and aided transitions in difficult times. Childhoods, the time when mothers and family members carried them through, were remembered. With pride Soriya shared that her mother raised 4 children and was a "single mom for 25 years. Everything nice, everything good." Later reflecting that as the oldest, she must have helped raise her younger siblings, she responded, "I did but my mom was also there so it was okay." Family members introduced couples for marriage, single mothers worked hard to raise children and encourage education, and moves from one city to another were prompted when a relative found a better house. Also, sometimes, this support came even when breaking Cambodian traditions. One teen describing her disconnect with her parents' values shared,

If you have a baby they think you have to get married. Yeah, marriage before like doing anything. And then cuz that's what they did. Yah, and they expect children to do it too. And some time they don't approve of that. And they want you to go to college. Do everything first before you get a baby or something.

Also, in response to "what is everything first?" she continued, "Graduate, go to college, get a steady job." Later when her relations had improved, she shared, "Both my parents are [important]. Because they are always there for me even though like when they are mad at me they will get over [it]. And then they still help me with whatever I need help." Also, Thida shared about her mother, "She work hard. Actually she loves me and everything I want I ask her and then I get it." Striking even to the Khmer interpreter was that all participants began by naming their mother as the most important person in their lives. Mothers were valued for their hard work, their love, and their acceptance even in the face of misdeeds such as truancy or pregnancy. Next mentioned were husbands and boyfriends who were caring, kind, and taking on responsibilities of fatherhood. At this time in life, family mattered.

All participants were finding their way and building a new life

Each participant was pregnant when entering this study, most for the first time. They moved through common experiences such as morning sickness, fatigue, growing bellies, and heavy bodies without much complaint. For some, particularly the 2 teens, pregnancy occurred during a time of disruption. For others, disruptions occurred during the pregnancy. Problems faced were a potential heart problem for the baby, ambivalence with the pregnancy, job loss, septicemia, and miscarriage. Choices reflecting self-awareness manifested as choosing American baby names despite family wishes, lengths of maternity leave beyond paid leave, decreasing work hours now and after the birth, and sharing child care responsibilities to recover from an illness. All participants spoke of their desire to create stability through family. One participant shared, "I am getting older. Just take one kid and then just want to have a family." All were increasing connections with self and family. Bopha described the changes in her life since being pregnant this way:

That I've been home a lot. Before I always like to go out. But not anymore. And then I talk to my mom a lot now. Before I was out and I didn't get a chance to talk to her much. But now I'm around my family a lot. And that is fun.

Also, Nary reflecting upon her ambivalence about this pregnancy said via the interpreter:

I found what's going to be the most important is that I am really happy I have my first child and I feel that it will be more complete as a husband, wife, and a kid.... But then when I finds out that the further along I get in my pregnancy I am also scared that sometimes I don't feel I'm ready. I don't want it. But then I think about the whole complete picture and then I do want it. So I'm in the middle because it is my first baby.

Later in the interview process, while sharing her future hopes, she said, "As long as the kid grows up as a good kid and then go to school that is the kind of happiness I see." Their choices and actions reflected increasing connections with self and others to move forward building family. Emerging from the data, these 3 patterns suggest that participants' self-awareness increased during pregnancy leading to new choices. During the course of interviews, one participant's process of expanding consciousness brought new insights, which drew her closer to her parents after an estrangement.

DISCUSSION

The purpose of this exploratory study was to understand life pattern, meaning, and awareness of the human experience of being Cambodian American and living with pregnancy. Findings from this study support Newman's³ theory of HEC. Individual stories and patterns over time revealed that increasing connectedness was central to increasing order during times of disruption. Lives disturbed by outside events forced disconnections, new awareness, and new connections. For those whose increasing connectedness included resolving estranged or disconnected relationships, movement toward real freedom emerged. The 3 themes that emerged in this study expanded awareness of the value of family connectedness for these pregnant Cambodian American women. This awareness was transformative for participants, the interpreter, and the researcher.

Transforming presence Resonating with the whole

Resonating with the whole was a complex process involving opening self to the unfamiliar, being present to the whole, and dialoging with Cambodians fluent in both Cambodian and American cultures to explore unfamiliar responses and cultural norms. In the beginning, interviews were cryptic and disjointed as questions were trailed searching for the pattern that connects. Connecting in relationship manifested as sustained eye contact, a respectful bow, a heartfelt expression,

mutual laughter, an increase in warmth, and sharing increasingly personal stories. As well, the praxis relationship was embedded within an environment of partnerships forged by the mutual concern for Cambodian American women and families. Persons within these partnerships supported the work by sharing through personal stories their perceptions, meanings, and awareness of either being Cambodian American or working with pregnant Cambodian women. Participating in the unfolding process of recognizing pattern included an increasing awareness of Cambodian cultural influences active in participants' past and present in their now. Time was spent dialoguing with Cambodians and those who care for them, watching contemporary movies set in Cambodia and documentaries, listening to popular Cambodian music, shopping in an Asian food store, seeing travel photographs, and reading historical and personal accounts of the Khmer Rouge. As understanding expanded, it became easier to see pattern and ultimately to use an understanding of the whole to help shift relationships toward increasing connectedness.

Locating each participant in time and space and viewing their environments in light of theory was central to the process of pattern recognition. A central tenet of Newman's theory of HEC is that human development of self manifests in mutual process with environment. Bound by time and defined in space, a person's sense of self emerges in interaction with the environment. Today's Cambodian American women, who are in their 30s and older such as Kimly and Soriya, were infants and children during the Khmer Rouge. Their childhood environment was bound by experiences of seeing parents and family members starve and/or killed, dangerous escapes to refugee camps in neighboring Thailand, forced evacuation to communal communities, separation from family members, forced work in labor camps, and living in dire poverty. 20,47,48 Women who are in their 20s such as Thida were raised in a more stable political environment in Cambodia. Yet, their lives were full of their families' dayto-day struggles for survival, working, trading and selling in cities, or farming in the country. Their family structures and relationships were altered by death and migration and burdened by tremendous grief for lost relatives and way of life. 49 They may have attended school surrounded by landmines and graveyards and learnt only "political morality and folk tales."50(p17) Then, immigrating to the United States, they faced a new language and culture often with little preparation or support. Cambodian Americans in their teens such as Bopha and Sokha are Americanized children whose parents experienced the Khmer Rouge genocide. Their lives are disconnected from their parents by dissimilar languages, customs, cultures, and childhood landscapes. Appreciating the meaning of past events and relationships and then connecting it with their present prompted new insights and awareness. Participants shared disconnections forced by environmental and cultural disruptions. When meanings of these disconnections were appreciated, awareness expanded, leading to new choices. In this study, amidst environments wounded by dehumanizing and disconnected relationships, these participants manifested health as increasing connections with others to find their way and build a new life.

Being fully present

Being fully present involved deep and active listening, with participants attending to the rhythm and flow of the conversation that often manifested as cryptic responses to open-ended questions. Attending to this rhythm involved entering into their pattern of response by asking more direct questions. Questions about school, pregnancy, hobbies, and social activities were trialed and the length and ease of response were noted. In this way, when participants expanded on their responses, more probing questions would follow. When responses included unfamiliar information such as Khmer Krum, clarifying questions were asked while holding in the moment the awareness that each participant might embody trauma experiences, shock to the senses of living in drastically different climates and cultures, and loss of loved ones and places. Compassion surged and care while questioning manifested as gently following their lead. During awkward pauses, shifting the conversation to personal anecdotes of pregnancy experiences such as morning sickness would move the dialogue. In this study, participants' choices on questions answered and participation in continuing dialogue contributed toward understanding pattern.

CONCLUSION

The opportunity to share important life events and relationships while engaging with Western healthcare via prenatal appointments opened both participants and the nurse researcher to the complexity of being in relationship. Multiple experiential differences such as cultural norms of marking time and defining important events, resettlement demands, and culturally prescribed relation-

ship dynamics initially strained our relationships. Over time, these constraints became the source of expanding awareness and aided in moving the participant-researcher relationship to increasing levels of connectedness. Understanding the participant-researcher relationship constraints as a manifestation of relationships embedded within the whole of multiple simultaneous relationships with self, other, local community, and Cambodia gave new meaning to these constraints. Then, the insight emerged that appreciating relationship constraints was central to the process of pattern recognition. When the importance of the relationship constraints emerged, the participants' past shifted to a new meaning in their present, enabling new choices and new actions. The findings in this exploratory research study offer evidence that Newman's praxis approach focused on understanding life experiences for Cambodian American women promoted health by increasing opportunities for finding meaning.

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