

## **Chapter 6**

### **THE FAMILY MICROSYSTEM AS THE**

### **CONTEXT OF FAMILY HEALTH**

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**CHAPTER OBJECTIVES:**

At the end of the chapter, students should:

- Identify traits and dimensions pertinent to the family microsystem.
- Explain potential relationships between aspects of the family context and health.
- Compare and contrast the potential affects of the family context on processes of becoming and well-being.

## **ECOLOGICAL CONTEXTS**

*There are many hypotheses in science which are wrong. That's perfectly all right; they're the aperture to finding out what's right. Science is a self-correcting process. To be accepted, new ideas must survive the most rigorous standards of evidence and scrutiny.*  
- - Carl Sagan

*Contextual ideas are like invisible threads that link life aspects across time and persons or subliminal themes that impact and influence throughout the life course. The impact or influence of these contexts may not be obvious or immediately evident and may easily overlooked or thought to be insignificant. This chapter more fully explains the contextual perspectives of family health germane to the family microsystem. Contextual systems are multidimensional, potentially static or dynamic, global in perspective, transactional in nature, and mediated by individuals' actions (Wachs, 1983). Ecology is a science concerned with relationships between living organisms and environments, but the term also refers to experiences that affect organisms. In the Family Health Model, the context refers to the forces, processes, and experiences that shape health over the life course. The ecological context provides a way to appreciate health from diverse cultural, ethnic, racial, religious, and international perspectives. Ecological contexts affect all persons regardless of where they are born or the*

*places where they live. The chapter describes family's contextual factors and explains potential health relationships.*

Familiarity with the language of ecological systems is important for understanding the potential impact of embedded context on health. The Family Health Model uses the terms microsystem, mesosystem, exosystem, macrosystem, and chronosystem to identify the concentric contexts that affect health (Box 6.1). These concepts provide ways to conceptualize relationships and interactions pertinent to the well-being and processes of becoming associated with development and health. It is not possible to discuss all the possible relationships between context and family health that exist, but some examples are provided to show what is meant. Better understandings about the contextual systems should offer ways to envision how unique and shared environments affect developing persons and families. Infinite variations exist in the ways families define them self, exchange information, and interact with larger environmental systems. Family context might be compared to a labyrinth with complex pathways, dead-ends, and endless unanswered questions. The context provides a way to view family health from alternative paradigms.

<<<<<<<INSERT Box 6.1>>>>>>>>

Ecological dimensions contain ideas about factors contributing to and confounding family health. By examining each area separately, one can more clearly distinguish among variables associated with specific contextual spaces; identify places where overlap, intersection, and boundaries occur. Just as a set of Russian dolls each has different characteristics, so do family's embedded systems. Greater appreciation for the impact of space, time, and family traits enables one to differentiate among potential triggers with potential health effects. While it is not easy to discriminate contextual spaces or dimension, an ability to identify these spaces as internal or external to the person and family provides additional ways to understand health.

### **Impact of the Ecological Context**

The pervasive impact of ecological contextual systems begins in early life and retains potential for causal relationships throughout the life course. The technical languages used by various disciplines are often divisive and interfere with communication. It is purported that considering prospective causes embedded in family context can increase understandings about health. Buying into the idea that the context (e.g., family culture, community resources, social milieu, political ambience) is a key determinant affecting health refutes assumptions that health problems are

mostly inherited or lifestyle traits. Views that context and health are correlated implies things such as: (a) health risks are influenced by social and political policies, (b) accountability for sustaining the environment is a global responsibility, and (c) population-based care may hold greater promise for family health than continued focus primarily on individuals.

The Family Health Model assumes that the family is affected by:

- Member's inherited and acquired traits.
- Relational interactions among individuals, sub-systems, and families as they are impacted by and impact context over the life course.
- Relational interactions with others beyond the boundaries of the family of origin and procreation.
- The cultural, social, economic, and political influences of the embedded household niche.
- Health information, knowledge, skills, and experiences of family members and others with whom the family interacts.
- The beliefs, values, traditions, behaviors, and routines of family members and related others.
- Threats, risks, and availability of resources.

As stated earlier, the contextual domain has an internal and an external environment. The ecological context includes traits of family members, such as values, beliefs, attitudes, abilities, intelligences, personalities, behaviors, and biological attributes. Family members may have bio-physical, emotional, psychological, and genetic similarity or differences. Traits may retain their original essences throughout the lifespan, but may also be altered. It is probable that within single households sanguinous and non-



openness to change. In the Family Health Model, contextual spaces have as great of a potential to affect health as functional processes. Transitional or interactional processes are viewed as functional aspects of family health. Individuals often use functional processes to choose contexts for interaction, but some contexts are imposed and not chosen and others encroach upon members without their conscious awareness. Function and context affect health!

### **Literature Examples of Ecological Context**

Although the literature about the family context and variables relevant to health are not major forces in thinking about health, substantial evidence about relationships between context and health exist. “Society exists as a shifting structure of groups and of positions to be occupied, a structure to be differentiated along a number of dimensions: socioeconomic, ethnic, age level, gender, and lifestyle” (Goodnow, 1995, p.367). For example, an ecological framework was used to study adherence to treatment and health status of children with diabetes (Auslander, Thompson, Dreitzer, & Santiago, 1997). Socio-demographic, family, and community predictors of mothers' satisfaction with children's medical care and medical outcomes were identified. Mothers' level of satisfaction was related to her adherence to the medical regimen and did not account for differences in child health status. Mothers who described greater concern with racism and family stress were

less satisfied with medical care than mothers reporting less stressful environments. Using the Family Health Model to understand variables in this study, family stress corresponds to functional processes of family health, but the environmental causes and racism are viewed as contextual aspects. Family-focused care would target the child's medical needs, but also consider interventions aimed at racism and environment important for improving family health.

A study that examined relationships between paternal roles, residence, and the well-being of 3-year-old children from low income, African American families found no differences in children's cognition, receptive language, behavior, or home environment related to the father's presence (Black, Dubowitz, & Starr, 1999). Although relationships were identified between paternal roles and children's well-being based upon father differences, the biological relationship of the father and parental marital status were not significant. When fathers lived in the home and were satisfied with parenting roles, played with children, and made financial contributions to the family, the home was more child-centered and children had better cognitive and language competence. Children also had fewer behavioral problems when fathers were employed and satisfied with parenting roles. All variables were not affected by the presence of the father in the

home. Based upon the Family Health Model, functional processes would include parenting roles and child outcomes and context would include the presence of the father, employment, and other community factors. Family-focused care would aim to promote positive father involvement in the lives of children, but also ascertain which contextual influences most affected father's participation and satisfaction with parenting roles.

Greater emphasis on gender differences and social inequalities as health determinants is needed. Analysis of data from the 1994 Canadian National Population Health Survey identified that health effects were caused by gender, social, structural (i.e., age, family structure, education, occupation, income, social support), and behavioral determinants (i.e., smoking, drinking, weight, physical activity) (Denton & Walters, 1999). Findings indicated that social inequality was the most important health determinant, but men and women differed in health predicting factors. Social structural factors (i.e., high income category, working full-time, caring for a family, social support available) were more important for women than men. Smoking or alcohol consumption was a key health determinant for men, but weight and physical activity were more important for women. A study that focused on young adults' risk behaviors concluded that social context influenced behaviors and should be included in health

promotion interventions (Allison, Adlaf, Ialomiteanu, & Rehm, 1999). A study of Australian adolescents and parents investigated relationships among family capital, children's attributes, family settings, and adolescents' aspirations (Marjoribanks, 1998). Findings indicated that (a) family contexts are moderately to largely associated with children's academic performances and adolescents' aspirations, (b) relationships between family contexts, children's attributes, and adolescents' aspirations are mediated by adolescents' perceptions of their parents' support, and (c) gender-related differences exist between associations among family capital, attributes, family settings, and adolescents' aspirations. This study implies the possibilities that complex relationships between individual attributes or contextual variables, as well as functional processes contribute to health. Using the Family Health Model, these studies suggest that the context is an important indicator and predictor relevant to health. Family-focused care would not only consider biological factors or behavioral processes, but also determine what interventions related to the larger contextual systems would enhance health outcomes.

Literature provides many examples about the effects of contextual variables on health, but context is often only viewed in terms of socio-demographic factors. While education, employment status, income, and others are important, they are not the only

relevant contextual factors. A problem with only looking at these variables is that they tend to make individuals more accountable, but ignore potentials related to affects of larger societal systems, politics, morals and values of powerful populations, and time. For example, while we may hold individuals accountable for smoking behaviors, choices are also influenced by contextual factors over time (Denham, 1997). While health outcomes are often linked to lifestyle behaviors, a growing body of research affords evidence of the importance of environmental relationships.

### **Unnumbered Box 6.1**

#### **Cooperative Learning Activity**

Take a few minutes to reflect about a current social problem. The teacher might want to assign some specific issues to consider. Students should spend some time independently reflecting and making some notes about their ideas before sharing them with others.

For instance, the use of alcohol might be a choice. Who is to blame if an individual chooses to abuse alcohol? While the first response might be to blame the individual thinking that they decided to participate in abusive drinking, be temperate in use, or refrain from imbibing. Is it possible that other influences exist? What are those influential factors over the life course? Take a few minutes and list some family factors that might contribute to the drinking behaviors individuals choose. Then think about other factors (e.g., school, work, friends, the community, the media, the law) that may have been contributors to individual choice.

After time for reflection and a list of factors is completed, 3-4 students looking at the same issue should join together in a small group and compare ideas. What has been overlooked? What are the contextual factors that potentially alter the choices made and resultant behaviors? What are the implications for nursing? Describe ways that nurses can intervene to provide care for the individual with the problem if family is the unit of care.

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(McCubbin, McCubbin, Thompson, & Han 1999; Skolnick & Skolnick, 1999). While many still value traditional views of nuclear families, others think and live differently! The U.S. Census Bureau informs us that the percentage of children living with two parents has been declining among all racial and ethnic groups. In 1997, 32% of all U.S. births were to unmarried women (National Center for Health Statistics). There are 11.9 million single parents in the US with 28% (20 million) of all children in the US under 18 live with one parent (US Census Bureau, 1998). Children who live in one-parent households are substantially more likely to have family incomes below the poverty line than those with two parents. Most children living with single parents live with a single mother. In 1998, 68% of American children lived with two parents, down from 77% in 1980. In 1998, 76% of white, non-Hispanic children lived with two parents, compared to 36% of black children and 64% of children of Hispanic origin (America's Children, 1999a). Some children live with a single parent who has a cohabiting partner; 16% of children living with single fathers and 9% of children living with single mothers also lived with her partner (America's Children, 2000). Although parenting is a functional process related to health, absence or presence of parents, race, and economics are contextual factors that are equally important.

In the past, intermarriage was rare and social mores encouraged unions within race, ethnicity, religion, and even community. While 3 to 4 decades ago it was unusual to see interracial couples in large cities, now they are seen in rural communities, magazine advertisements, and depicted in daytime soap operas. On June 12, 1967, the Supreme Court decision in *Loving vs. Virginia* struck down a miscegenation law that forbade mixing of the races. Laws against miscegenation, in America, appeared as early as 1661 and remained unchanged for hundreds of years. In some states interracial marriages were not legal and viewed as criminal, punishable by large fines, and long prison sentences. Interracial marriages have increased over 400% in the last 30 years. According to the 1990 U.S. census, there were 1.5 million interracial couples with 2 million children. Just as Americans are forming relational alliances different than some accepted in the past, families in other parts of the world are also finding that honored ancestral traditions are crumbling and new patterns are being developed. Contextual perspectives create questions about genetic futures and health/illness patterns when races are no longer pure and health implications when traditional practices are altered.

Traditional views of families with single heterosexual marriages where children are conceived and cared for seem

tenuous today. Today's families are melded (e.g., previously married parents with biological or step-children); single parent formerly married families, never-married families (e.g., single parent with biological children); non-married families (e.g., never married to one another, but living together for extended period of time with biological and/or step-children); homosexual families with biological, adopted, or step-children; grandparent families (e.g., biological relationships to children for whom they assist and support financially); adopted families (e.g., married partners with foster children, adopted children, or biological children); and others. Reproductive technologies redefine family and questions about genetics, cloning, implantation, adoption, surrogacy, and choice impose ethical and contextual concerns. Family may include children conceived through in vitro fertilization using donors that may or may not be biologically related or families with children conceived through surrogate births that may or may not be related by sanguineous relationships. In the Family Health Model, contextual concerns could relate to health implications of serial contexts where individuals reside across a lifetime, whether family types promote member health, or whether health routines retain resiliency when the family context is altered.

The family of procreation is usually understood as the place where a male and female join economic, emotional, and supportive

resources in order to give birth and place to rear children. Some parental roles and responsibilities are formally established by a nuptial agreement sanctioned by laws of the land and society. Marriage provides a mechanism to care for offspring from birth to maturity, but birth rates for unmarried women show significant variations since 1980 (Ventura, Martin, Curtin, & Mathews, 1999). Some patterns of procreation have changed dramatically in the US over the last two decades. Contextual perspectives cause the nurse to ask questions about affects of these changes on the health of mothers, children, and families and identify appropriate interventions. For instance, some health needs and concerns of a first time parent who is a teen mother could be very different than those of a mother in her late 30s. Family-focused care would encourage the nurse to consider potential health risks and resiliency factors in term of family context and not merely whether the mother can care for the infant's biological needs. Family-focused care causes the nurse to consider health potentials related to past, present, and future contextual factors and spaces.

Exploration of all family types would take more pages than allowed in this text, but it is suggested that variations alter family contexts. For example, older families without children during their years of generativity may differ from others with adult children, those raising grandchildren, or ones that acquired children from

other relationships. Families with preschool children may be contextually different from those where a child has a physical incapacity, mental disability, or a chronic illness. Families in their middle adult years (e.g., 40 to 60 years of age) raising preschool children may be very different from those who are seeing children off to college or those with children in prison or socially conflicted roles. Older families with higher gradients of social capital, economic prosperity, and health may look different from those with ill members, fewer material goods, and less support. The Family Health Model encourages nurses to consider potentials related to changing contexts and factors over the life course that might influence health that are different than functional processes and interactions.

### **Unnumbered Box 6.2**

#### **Reflective Thinking Exercise**

Adults often hold fast to beliefs, values, and attitudes deeply rooted in our early life experiences. Valued ideologies are often closely adhered to and time is seldom spent intensely examining what is believed or reasons for the beliefs. Implications of beliefs are often ignored unless a need arises to defend them. In fact, many seek information that confirms or supports beliefs rather than engaging ideas that contradict them.

Nurses are often involved with families who are different than their own. How do you cope with these differences? How well do you cope? How do you respond professionally to persons with cultures or ideas that you view as negative? What happens when your work environment presents situations that manifest biases or prejudice? How do you respond when you personally feel one way, but professional practice calls for actions contrary to your deep-seated ideas? Can you identify some particular examples of how you have responded?

Consider an issue related to family context that feels less comfortable. For instance, how do you feel about cohabiting adults who choose to raise children outside of wedlock? What about gay or lesbian partner alliances and issues of adoption? How do you feel about Caucasian families raising Black children? What do you think about fathers being the custodial parent of pre-school children?

Choose one issue related to family that causes ambivalence and identify your values and beliefs? Can you identify some positive aspects? What are the negatives? Can you identify why do you believe as you do? Given your personal values, beliefs, and attitude could you act professionally and competently? What are the biggest challenges? Are there things you need to alter or change?  
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### **Individual and Family Development**

In the Family Health Model, individual and family development is viewed as a functional process influenced by embedded contextual systems. Development is altered by personal, social, and environmental factors. Focus has mostly been on individual development with less concentration on what is implied by family development. Development is viewed as integration of race, class, gender, and culture (McGoldrick & Carter, 1999).

Gender, class, culture, and race form a basic structure within which individuals learn what behaviors, beliefs, values, and ways of expressing emotion and relating to others will be expected to demonstrate throughout life. It is this context that carries every child from birth and childhood through adulthood to death and defines his or her legacy for the next generation. The gender, class, and cultural structure of any society profoundly influences the parameter's of a child's evolving ability to empathize, share, negotiate, and communicate. It prescribes his or her way of thinking for self and of being emotionally connected to others.  
(McGoldrick & Carter, p.28)

For example, an analysis of over 20,000 women and men aged 20-59 identify the importance of analyzing gender data for educational qualifications, occupational class and employment status (Arber, 1997). While educational indicators were good predictors of women's self-assessed health, chronic illnesses were more closely linked to work and household conditions. Findings indicated men's unemployment had adverse consequences on wives' health. Arber concluded that health measurement in women should consider changes in marital status, employment, and household circumstances. In the Family Health Model these factors would be viewed as contextual with potential to influence individual and family development.

Luscher (1995), in talking about human development, said systems originate in broad sociocultural and institutional structures to create belief systems that are transmitted to immediate family settings, affect proximal processes or interactions, and ultimately create belief systems in developing persons. In other words, individual and family development is affected by the larger contextual systems where they are embedded even when awareness of the influence is lacking. In this model, individual traits are viewed as contextual (i.e., genetic traits, gender, age, race, ethnicity, culture, education, spirituality). While some traits seem absolute and unchangeable (e.g., genetics, race, ethnicity, gender,

intelligence), others are expected to change over time (e.g., cultural traditions, education, health). However, even traits viewed as absolute might be subject to change. For instance, a person who believes they have been wrongly sexually identified may undergo hormone treatments and surgical intervention to physiologically change their sexual orientation to align themselves with psychological perceptions rather than gender assignment by a physician, parents, or society. In this case, context would be shifted dramatically as the individual takes on a persona different from one previously held. Are nurses prepared to address the needs and concerns of trans-gendered individuals or provide care to support the developmental conflicts related to contextual change? Family-focused care would not only target needs associated with hormonal or surgical treatments, but include issues and relationships with larger contextual needs.

An adult child graduates from college and goes overseas as a member of the Peace Corp. Although a separate household has been established in a distant place, the members of the family of origin still view this adult son as a family member. How does the move or change of context alter the young man's development? How does the separation affect family development? If the family has a home computer and regularly interacts using e-mail, the new form of interaction that entails sharing ideas, information, and

feelings in different ways may be a way to overcome the physical separation and promote developmental processes. However, if the child goes to a remote place where communication is impossible, would the developmental affects be different? Family-focused care would ask questions about relationships between context and development that occurs across the life course.

### **Unnumbered Box 6.3**

#### **Critical Thinking Activity**

Suppose your practice as family nurse in a neighborhood urgent-care clinic entails regular interactions with the Green family. The staff in the clinic is well acquainted with this family due to the chronic asthma of their 10-year old son Tom. Mr. Green, a local businessman, has served several years on city council and his wife is an elementary school teacher. Financially, they are comfortable and have adequate health insurance for needed services. They have two other children, Alice a 14-year old daughter and James a 16-year old son. You know all of the family members from their frequent visits.

On this particular visit, Tom has had a flare-up of his asthma and his mother has brought him in for a breathing treatment. While the physician and the respiratory therapist are providing Tom with care, Mrs. Green pulls you aside and says that she really needs to talk with you confidentially. You locate an empty conference room and sit down to talk. By this time, Mrs. Green is visibly distressed. You anticipate that she will discuss Tom's asthmatic condition, as it has been a continual cause of family concern. As she begins to talk, you immediately recognize that her concern is not about Tom, but James.

Mrs. Green tells you that the family has been going through a great amount of stress because of James and this stress that predated Tom's present asthmatic episode. The Green's relocated to this community from a neighboring state after James' birth. It seems that when James was born, the obstetrician was uncertain about the sex of the child and the Greens were told that he had a sexual anomaly. The child had what appeared to be a partially formed penis through which he urinated, but also had what might be a small vaginal opening. Tom had no testicles, but had what appeared to be a single poorly formed ovary and a single fallopian

tube. The family was faced with the crisis of gender. The obstetrician and others encouraged the Greens to identify the child as male and a surgical procedure closed the vaginal opening.

The present crisis has been developing for some time. During puberty James became especially withdrawn and somewhat depressed. His smaller size and lack of interest in athletics has often been the cause of ridicule from peers and on occasion from his father. Over the last few months he has repeatedly expressed to his family that he is not a boy, but a girl and wants to be treated as such. He has taken to wearing female clothing when at home and wants to change his name. Lately he has been asking about the possibilities of a surgery that would change his gender to what it should be. This situation has created a rather tense home environment with continual arguments among family members.

As the family nurse, how should you address this family health issue? What are the contextual concerns? What developmental factors might be impacted by the family's context? What will you say to Mrs. Green? What suggestions would you give for follow-up care? If family is the unit of care, what interventions might be needed?

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### **Race, Ethnicity, and Culture**

Most U.S. families have an immigrant heritage, but many have no memory or valuing associated with these roots. In fact, many of America's families see immigrants as someone other than themselves. Some families are of different racial, ethnic, or cultural backgrounds and continue to live near extended family members, but others have intermingled, intermarried, and reside in communities where diversity is common. Ethnicity may be important to some, but many Americans neither know about nor value their heritage. While some focus on stereotypes, others are blinded to differences. Within some families it is possible to

identify much intergenerational conflict based upon race and ethnicity (Carter & McGoldrick, 1999a). While Caucasians are the majority in America, predictions suggest that by 2050 this number will be matched by populations of Hispanic, Black, and Asians. The racial, ethnic, and cultural patterns of earlier generations have dramatically changed and continue to be altered. Diversity is not only a factor affecting Americans, but also concerns other nations. Migration, media influences, ease of travel, and rapid change all affect families in ways never imagined a few generations ago. Family-focused care suggests that nurses consider these contextual factors when they complete assessments, create care plans, consider appropriate interventions, and evaluate outcomes.

Identification and meaning of race becomes increasingly complex as children with mixed racial and ethnic heritage are born. How useful is race as a variable associated with health when ancestries are mixed? While a bi-racial person is raised in one cultural context, the individual might perceive closer alignment with the other. In what ways does race and ethnicity affect nurses' practice with families? How do persons of the same race or ethnicity differ intergenerationally? In what ways do these factors related to race, ethnicity, and culture affect individual and family development? What are the potential influences on health? For example, immigrant parents may have different beliefs and

practices from their children and grandchildren. A nurse interested in treating family as the unit of care may need information about cultural differences pertaining to these generations in order to fully address individual health needs.

Culture is certainly associated with race and ethnicity; however, all persons have culture even that when they are oblivious, indifferent, or unaware. Cultures may have correlated symbols, traditions, celebrations, rituals, and practices that are not consciously thought about by members, but are observable by others. Members within the same family may have generational differences in the ways cultural behaviors are valued and practiced. Culture includes factors that give rise to beliefs, values, attitudes and behaviors. Marginalization of some individuals and families based upon racial, ethnic, cultural, and even gender divisions continues to be problematic worldwide. Some might argue that more variation exists within a group than between groups. The context of race, ethnicity, and culture have meanings beyond the labels and have potential to affect processes of becoming, development, well-being, and health of individuals and families. Family-focused care is targeted at understanding the implications of these contextual factors and their relevance to health needs.

#### **Unnumbered Box 6.4**

##### **Cooperative Learning Activity**

Divide the class up into five groups. Assign each a different family type (e.g., African-Americans, Asian-Americans, European-

Americans, Hispanic-Americans, Native-Americans, Middle-class Caucasians). Groups should complete their assignment independently and prepare a handout to share with all class members. Set a date for completion and schedule an in-class discussion to compare and contrast findings.

**Each group should do the following:**

- List the various ethnicities and cultures in each family type.
- Identify the number and percentage of Americans that fall into this group.
- Where in the United States do most families of this type live?
- What is the median family income for your group? Identify the kinds of work done by most wage earners.
- What is the educational preparation for most family members in this group? Are there variations of education based on generations, if so what are they?
- What are the major health risks for family members in this group?
- What cultural practices of families in this group might be strengths for health?
- What cultural practices of families in this group might be threats to health?
- Describe the kinds of housing where most families in this group live.

After group members have gathered the information, decide what it might mean for nurses concerned with family as the unit of care. Discuss implications for individual and family health. Prepare a handout that synthesizes what your group has learned and its potential implications for health and nurses.

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**Age of Members**

Ages of family members are viewed as part of the family context in the Family Health Model and affect developmental expectations. A family household with a 14-year-old mother, her newborn infant, the mother's siblings aged 12 and 10 years of age and a 30-year-old unmarried mother may present different concerns than a household where the teenage mother and newborn

live alone, or one where she lives with the 18-year-old father of the child. How might the context affect this young mother differently if she lived with siblings aged 12 and 10 years old, but the home had two-parents aged 34 and 36 years? What might it be like if the teen mother gave the child up for adoption, but continue to live with her family of origin? Age is a factor in each setting, but the context of each presents potentially different outcomes for the newborn, mother, and others. Age neither indicates maturity nor ability to provide childcare, but ages provide some developmental information about the members that could be pertinent to health outcomes. How might a nurse intervene differently based upon these different family contexts?

### **Intelligence, Education, and Employment**

Intelligence, education, and employment are also contextual factors with potential to influence health. A person without formal education may not lack intelligence, but holding a college degree does not necessarily identify intelligence. Formal education is important, but questions about the values and ability to learn about particular life tasks or health needs may be of greater concern to the nurse. Questions about the value of education relative to a situation may be as important as need for education. What education is needed? What is the purpose of the education? Why does it matter? Answers to specific questions may produce

more helpful information than merely knowing whether a person completed high school or has a degree in chemical engineering. Contextual concern focuses on whether persons have developmentally appropriate knowledge and skills needed to complete life tasks and address health concerns. The world's families do not have equal opportunities to obtain formal education, but many are eager and able to learn what is necessary for a good life and health. Reasons why persons have less formal education may rest more in larger contextual systems than in the abilities of individuals.

According to Marmot, Fuhrer, Ettner, Marks, Bumpass, and Ryff (1998), findings from the National Survey of Mid-life Developments, a study about socioeconomic gradients in mortality during midlife, show that higher education predicted better health and mediating variables, such as household income, parents' education, smoking behavior, and social relationships. Kohn (1995) suggests that education and work are part of the same process not competing factors and education determines job conditions, work complexity, and individual personality. Persons with higher education often acquire jobs with greater financial security, fewer risks, better health care coverage, and a larger stream of social networks. Higher education may increase job opportunities and employment choices, but work conditions and

value orientations may have as much to do with contextual systems as intelligence or abilities.

Another concern related to education has to do with the organizational structure of the educational system and the ways it affects individual learners. Although we might view an individually self-directed and motivated to learn, one must inquire about the contextual factors that support individual behaviors.

What success factors in an educational structure are products of individual personality? Which ones are related to teacher excellence, a budget for teaching aides, or a system that assures quality and opportunity for all learners? After years of researching relationships between personality, education, and occupation, Kohn (1995) concludes:

People learn from their experiences, and learn most of all from having to cope with complex and demanding experiences. There is more to education than attuning people to the printed page, important though that is. (p. 151)

Bio-genetic factors with potential to influence intelligence can also be viewed as contextual (e.g., learning potential, developmental disability, exceptionalness). For instance, a child with genetic or developmental disabilities may still have the ability to learn, but proceeds at a different pace from those without disabilities. Abilities to learn differ based upon contextual and individual traits. A study of children's verbal IQ scores and

relationships with parent's education, genetics, and environment found greater variability for environment than genetic heritage, but parent's education, genetics, and environmental factors also affected scores (Rowe, Jacobsen, & Van den Oord, 1999). Old ways of measuring educational impact may be less effective with current trends such as magnet schools, charter schools, home schooling, continuing education, second life careers, and Internet asynchronous learning modes. Many children start pre-school earlier and higher numbers of children attend day care with some educational component. In 1997, 48% of children were enrolled in preschool compared to 45% in 1996. Preschool enrollment increased among black, non-Hispanic children, from 45% to 55% and among children living in poverty from 34% to 40% (America's Children, 1999b). However, in 1998, about 8% of the Nation's 16- to 19-year-olds were neither enrolled in school nor working, a significant decrease from the 9% found in 1997 (America's Children). Merely assessing grade level or possession of a degree of formal education only provides a partial picture of the broad contextual relationships between health, intelligence, education, and employment. Family focused-care implies a need to consider factors that enhance learning, capabilities, and resources relevant to health outcomes.

## **Spiritual Context**

In the Family Health Model, *spirituality* is viewed as an important contextual aspect and is defined as an innate trait of all persons that concerns connectedness to self, others, a higher power, transcendence to places and energies beyond one's own being, and an essence of meaningfulness. Spirituality often includes religion, faith systems, sacred principles, worship, symbolic meanings, and ritual practices. Friedemann (1995) suggests that spirituality is a family target that leads to congruence, hence family health. She describes spirituality in terms of togetherness, individuation, and commitment, but also explains it as a means to reduce isolation, find connections, and comfort. Fish and Shelly (1978) describe spirituality in terms of love and relatedness, forgiveness, and a search for meaning. While most persons have some sense of spirituality, it may wax and wane over a lifetime and be expressed outside of formal religion.

Religion is defined as acknowledgement of an ultimate reality or deity and usually refers to inward and outward expressions of belief guided by doctrine. Religion often demands adherence to specified beliefs and symbolic practices. Religion may have a classification such as Christianity, Hindu, Islam, Judaism or be discussed as denominations such as Catholic, Protestant, Baptist, Mormon, Lutheran, Jehovah's Witnesses, or in

terms such as fundamentalist, reformed, or orthodox. Religions usually have authority, guide values and beliefs, define what is right and wrong, identify expectations of followers, and unify members. Religion and spirituality provide a life context and are often associated with health and illness. Dying persons may not have attended church or followed religious practices for decades, but when faced with an uncertainty may return to beliefs learned in the family of origin.

Some persons fulfill spiritual needs through religion; others use things such as poetry, arts, nature, music, exercise, and other things. Spirituality is often evoked when the human spirit is distressed (e.g., during grief, suffering, search for reason to be, seeking answers to life's questions, facing eternity). Spiritual needs are evoked when persons feel isolated from others, lack a sense of purpose, and experience a need for relationships to fill life voids (Carson, 1989). While the scientific academy often undervalues the strength, influence, and power of religion and spirituality, it is viewed as an intrinsic contextual aspect of individuals that has meaning for family identity, values, and behaviors related to health. Family-focused care includes considerations about spirituality and religion as immediate rather than an afterthought.

## **Genetics and Family Health**

Biogenetics is another contextual aspect of individuals and families. The Human Genome Project presents evidence with tremendous potential to impact health. Although important relationships exist between genetics and disease, nurses and others may be ill-prepared to address basic genetic principles, genetic testing processes, and implications of testing (Jacobs & Deatrick, 1999). Counseling about risks requires specialized knowledge that presently extends beyond the expertise of many nurses. Gene testing for rare hereditary syndromes and family diseases will offer new options and challenges. In the near future, some oncology nurses will assess hereditary risks, offer susceptibility testing to those who may benefit, and provide follow-up counseling, support, and referral (Biesecker, 1997). Many ethical, legal, social, and practice issues will be re-evaluated in light of knowledge derived from the human genome. Nurses working with families experiencing chronic illnesses, developmental disabilities, hereditary conditions, and issues related to conception and birth will be especially challenged by genetics.

Developmental behavioral genetics is the study of genetic and environmental influences on individual differences in the development of behavior (Plomin, 1983).

Genetic research may have its greatest impact for clinicians in terms of understanding the environment and how the environment relates to development (Plomin, 1995). In behavioral-genetic studies the environment is either estimated or indirectly measured, but questions center around the ways the genotype or person and the environment interact to influence development (Wachs, 1983). Arguments about nature and nurture are being challenged by research that indicates developmental involves a substantial contribution from genetic factors and relationships to family environment measures. A rapidly growing body of evidence indicates relationships exist between genetics, health, disease, and behavior linked to individual differences, environment, and the interactions among them rather than either nature or nurture processes (McClearn, Vogler, & Plomin, 1996).

According to Plomin (1994), genetics rarely accounts for more than half of the variance in any research, thus non-shared environmental influences may help explain non-genetic factors related to behavioral differences for children within the same family. Genetically similar siblings raised within the same family differ in personality and psychopathy in ways that are not explained by genetics and appear to be related to within-family processes or non-shared environments (Dunn & Plomin, 1991). Conventional strategies of matching children on a family-by-

family basis are often inadequate for understanding why siblings are so different. In a literature review about adolescent psychopathology, children's behavioral genetics and non-shared environments were considered factors related to depression (Pike & Plomin, 1996). Findings indicated that environment and genetics are important for understanding childhood psychiatric disorders and non-shared sibling environments are especially salient. The proposed health model suggests family genetics and contextual systems have health implications. Family-focused care entails assessment, interventions, and outcome measurement in both areas.

### **Family Household**

The U.S. Census Bureau says a household includes all people who occupy a housing unit. A household consists of a single family, one person living alone, two or more families living together, or any group of related or unrelated people who share living arrangements. The Census Bureau designates one person as the householder; usually the person who owns the home or is responsible for buying or renting. A housing unit is described as a house, an apartment, a mobile home, a group of rooms, or a single room that is occupied as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from other people in the building and which have direct access from the outside of the building or through a common hall. The

Census Bureau definition of household is appropriate for use in the Family Health Model.

In the Family Health Model, households are identified as niches or embedded settings where (a) family members dwell, (b) share values, beliefs, information, and resources related to health, and (c) behaviors related to health are performed. Households are the places where individuals learn health information, develop health values, and participate in health-related behaviors. Family culture guides values, traditions, and rituals relevant to health practices of members. The household is the institution where “production, consumption, and social reproduction are organized” and other dimensions of social order manifest themselves through the dyad and triad interrelationships (Berman, Kendall, & Bhattacharyya, 1994, p. 207). The family household is the place where families use their available resources to produce health (Schumann & Mosley, 1994). Individuals are likely to live in several geographic locations and residences over the life course, but others may live in a single location and the same or a similar residence for an entire lifetime. Household factors affect health outcomes and could assist in the development of effective interventions (Harkness & Super, 1994).

The household niche provides a way to understand the contextual setting where members spend time caring for

themselves and one another. The Family Health Model views the interactions among individuals, family sub-systems, families, and larger contextual systems mostly occurring from the household perspective. The household is “a mediator of both environmental risks and programmatic interventions to promote better health” (Harkness & Super, p. 217). The household is the place where individuals develop and members interact related to their health and illness needs. The household has implications for the health of individuals and the family, as well as implications for inter-generational transmission of health patterns. Family-focused care would not only consider characteristics of individual members, but also those of the household niche that might be relevant to a specific health concern or individual and family well-being.

### **Immediate Neighborhood or Community**

Households are situated in neighborhoods and associated with communities and larger contextual systems. Definitions of neighborhood might be different depending upon the cultural context of the family (e.g., a housing development, low income projects, a gated community, an apartment complex, a farming community, a dormitory, a prison block). Community is often defined in terms of its geographic area and agencies, institutions, businesses, services, law enforcement, and others. Children usually attend school in the community, adults have jobs there, and

members may vote, shop, attend to religious practices, and pay taxes there.

The family may be congruent with societal expectations or present a gross contrast to neighborhood norms. Neighborhoods and communities may have values that support or threaten family lifestyle and individual health. Race, religion, ethnicity, and culture of residents may be barriers or strengths to accessing resources related to health and well-being. If residents are viewed as marginal or less acceptable, then they may be viewed as threats to the welfare of the community and not have access to the same resources afforded others. The geographic location of the family household may facilitate access to services or resources, but it may also be inhibiting. Neighborhoods can:

- Influence the ways family boundaries are established.
- Influence the activities that individuals participate in when they are at home.
- Influence who members regularly interact with outside the family network.

Playmates and friends are often established based upon neighborhood proximity.

Macintyre (1994) suggested that the production of health is a consequence of variations of social mechanisms over the life course as material resources, psychosocial, and biological factors interact. Neighborhoods and communities may offer different resources pertinent to health care services and availability of

professionals to meet health needs, but may also be the perpetrators of environmental threats that increase risks for illness and disease. Health inequalities are related to (a) physical or social environments, (b) availability of information, resources, and experts, and (c) accessibility, affordability, and availability of services. The Family Health Model suggests that health is not a unique individual quality, but one that is enhanced and placed at risk by larger contextual systems. Family-focused care targets not only individuals and families, but also advantages and disadvantages, threats and assets, and strengths and limitations imposed by neighborhoods and communities.

### **SUMMARY**

The concept of microsystem is an embedded context that includes concrete and abstract ideas related to family life and health (Box 6.4). Although nurses have some knowledge about environments, concerns seldom include the ways contextual systems integrate all developmental aspects to influence health and illness. The Family Health Model emphasizes the powerful ways contextual systems shape family processes and health outcomes. The microsystem is only one aspect of the embedded context, but is the one family member's have the greatest awareness and familiarity. The microsystem not only includes family members and their unique traits, but also the household niche, neighborhood,

and community. Family-focused care proposes that nurses complete individual assessment related to specific illness or health needs, but also include family dyads and triads, household, neighborhood, and community context influences. Plans of care for individuals would also include interventions for issues related to family context.

<<<<<<<INSERT BOX 6.4>>>>>>>

### **TEST YOUR KNOWLEDGE**

1. Describe what is meant by the term ecological context?  
Family microsystem?
2. Explain what is implied by contextual influences on the health of a developing person.
3. Identify three ways the ecological context can potentially affect health.
4. Choose three contextual aspects of the family microsystem and describe each.
5. Compare and contrast potential effects of residing in multiple family contexts over the life course.
6. Discuss differences the nurse might anticipate related to an individual's educational attainment and health?
7. Identify two cultures with which you have some familiarity and compare the potential effects of that culture on individual health?  
Family health?
8. Do you think that health risks differ for families living in rural or urban settings?  
Support your answer using contextual perspectives.
9. Discuss three health implications imposed by employment.

**Box 6.1**  
**Defining terms associated with the embedded ecological context**

**Microsystem:**

Microsystem is the immediate and principle environment where developing persons and significant others share meanings, objects, resources, and information. It includes interactions between individuals, sub-systems, family, the household niche, neighborhood, and community.

**Mesosystem:**

Mesosystem is the multiple settings where individuals actually participate. While these settings may not be physically connected, they are not independent of one another.

**Exosystem:**

Exosystem is the multiple settings where developmental processes related to individual and family health occur. Although the individual does not actually participate in them, these systems still directly affect developmental processes, well-being, and health.

**Macrosystem:**

Macrosystem is the complex interrelated and shared societal systems (e.g., ideology, political systems, social institutions, laws, morality). It characterizes the culture or sub-culture and includes things such as ethnicity, socioeconomic factors, religious beliefs, and traditions that have potential to impact individual and family health.

**Chronosystem:**

Chronosystem refers to passages of time and the altering changes related to individuals, families, and embedded contextual systems. Measurement and influences of change can be measured over time, through the life course, and by historical periods.

\* Ideas based upon Bronfenbrenner (1979, 1986)

## **Box 6.2**

### **Assumptions about contextual relationships and health**

- Health of is affected by member participation in a variety of contexts.
- Health is influenced by dynamic interactions among multiple family members within the household niche and various contextual influences.
- Family members' shared and distinct contextual influences affect health.
- Interactions occurring within a specific context or as a result of a context can enhance or threaten individual and family health.
- Contextual pressures encourage individuals to learn, seek, and value some health knowledge and behaviors and ignore other health knowledge and behaviors.
- Contexts can create resistance to individual and family health behaviors and potentiate negative responses.
- Larger contextual systems provide moral ideologies, resources and threats, and patterns of rights, responsibilities, and obligations that cause resistance, acceptance or challenge to health.
- Embedded contexts provide an almost infinite number of possibilities for considering health related interventions in a variety of contexts and at different developmental stages over the life course.
- The embedded context is in the forefront of individual and family health rather than in the background.

**Figure 6.1**  
**Ecological framework of family health**

**Box 6.3**  
**Aspects of the family microsystem**

- Characteristic traits of all members viewed as family (e.g., genetics, gender, ages, race, ethnicity, culture, education, spirituality)
- Dyad and triad relationships internal to the family.
- Dyad and triad relationships external to the family.
- Intergenerational relationships (e.g., kin traditions, rituals, religion, valuing, collective memory, social class)
- Household niche (e.g., physical structure, material goods, immediate surroundings, tangible and intangible family resources)
- Immediate neighborhood (e.g., proximal relationships and processes)
- Larger community (e.g., institutions, federal, state and local agencies, employment opportunities, support systems, health related resources)

**Box 6.4**

**Propositions about relationships between the context and family health**

- Health learning and behaviors that is reinforced across multiple contexts is more likely to be consistently adhered to by family members.
- Health learning and behaviors adopted by family triads will be more consistently adhered to than health learning and behaviors of single individuals or dyads.
- Families with more open boundaries will have members more accepting of information and behaviors to improve health.
- Health is increased when genetic potentials are increased and environments are stable and advantaged.
- Health potentials are greatest when environments are disadvantaged and disorganized.
- Consistently sustained interventions aimed at contextual systems over extended time periods will increase the degree of health actualized in given environments.

LEGEND for Fig. 6.1

Ecological Framework of Family Health

Member functions are not only affected by the family household, but also by larger contextual systems (i.e., exosystem, mesosystem, macrosystem).

Terms to be inserted in Fig. 6.1, where indicated on faxed copy:

FAMILY

Individuals

Family Dyads

Family Triads

Ecocultural Domains

Microsystem

Mesosystem

Exosystem

Macrosystem

Results in Family Health Paradigm

Ecological impact upon contextually embedded individuals, dyads, triads and ecocultural domains.

Impact of contextually embedded individuals, dyads, triads, and ecocultural domains upon ecological systems.