

## **Chapter 7**

### **BROADER ASPECTS OF THE FAMILY'S EMBEDDED CONTEXTUAL SYSTEM**

#### **Chapter Outline**

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##### **Chronosystem Characteristics**

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Preschool, School and Child Care

Work, Employment, and Underemployment

Play: Adult and Child

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Social Support Systems

#### **EXOSYSTEM**

Peer Relationships

Educational Systems

Work and Play

Health Care Systems

Social Support Systems

#### **MACROSYSTEM**

Social Policy

Health and Public Policy

Larger Environments

### **CHAPTER OBJECTIVES:**

At the end of this chapter, the reader will be able to:

- Identify aspects of the microsystem, mesosystem, exosystem, macrosystem, and chronosystem relevant to health.
- Differentiate potential interactions between individuals, family sub-systems, and families and the broad contextual systems where they are embedded.
- Describe potential relationships between the embedded context, development, health, and well-being.

### **THE CHRONOSYSTEM AND ITS PERVASIVE EFFECTS**

*Although understandings about the family microsystem are important, nurses desiring to provide family-focused care must also possess knowledge and skills pertaining to the larger contextual systems affecting individual and family lives. This chapter provides a more complete description of the dimensions that influence lives of individuals, family sub-systems, and families: the exosystem, mesosystem, macrosystem, and chronosystem. The complex processes that transpire among embedded systems are not insulated events, but initiate, sustain, mediate, and terminate dynamic processes pertaining to development, health, and well-being.*

*In 1988, the Institute of Medicine provided a wake-up call to the nation when it declared the public health system was in disarray and characterized by poor organization, inadequate capacities to fulfill public's needs, and an inability to make or act on decisions to meet public*

*needs. The report suggested meeting population needs, strengthening the nation's public health capacities, and focusing on prevention and health promotion. According to the Institute of Medicine (2000), the "health of all people is profoundly affected by scientific, technical, economic, social, educational, and behavioral factors that are changing at an unprecedented rate as the world economy becomes increasingly interconnected" (p. 85). Boundaries between public health and medicine are being redefined, as more agree that health care must focus on individual treatment and also the health of populations. "We now recognize that each person's health and well-being are shaped by the interaction of genetic endowment, environmental exposures, lifestyle and food choices, income, and medical care" (Institute of Medicine, 2000, p. 59-60).*

*The 21<sup>st</sup> century brings changes in structures that affect societal changes, class, cultural contexts, politics, economics, communication, and international ideologies. These structures have the potential to affect the of individuals, families, and communities throughout the world. The chapter provides a way to understand the affects of contextual systems on families, communities, and populations.*

### **Chronosystem Characteristics**

The chronosystem provides ways to comprehend differences in time experienced by individuals and families. Lives are linked and families constituted by social interdependence (Elder, 1995), but personal choice, chance, and context affect members differently over time. For example, siblings live together in the family of origin and share many things, but as they reach maturity and become more independent some things will change and some will remain fairly constant over time. Individuals also experience imprinted moments of time that seem like anchors for ordering and giving meaning to some life aspects. For instance, the assassination of

President John F. Kennedy is a time recalled by many as a historical point for ordering other life events. Time shared with others at college, on a baseball team, or as a comrade in battle may unite individuals in unique ways that give special meanings and identity. Birth and death are times when family and friends are drawn together to celebrate traditions mark the lives of others in memorable ways and give them distinctive importance. Normal growth and development, life cycle transitions, and movement from place to place are events shared by most individuals, but the distinctiveness of these phenomena is experienced differently. Box 7.1 provides a list of chronosystem events that we commonly use to mark time. Chronosystems have to do with the timing of events, number of events in a given time, the length of time of events, and perceptions of time over time.

<<<<<<<INSERT Box 7.1>>>>>>>>>>

Chronosystems include normative and non-normative events (Bronfenbrenner, 1986). Normative events are times that developing persons and families anticipate and relate to things such as birth, marriage, school entrance, puberty, graduation from secondary school, joining the workforce, military service, retirement, episodic illness, and death in old age. Normative events are culturally bound within specific social contexts at given points in time. This means that those born in different generations, living in a diverse social settings, or members of different religions, races, ethnicities, and cultures identify what is normative in unique ways. Normative events often embrace shared meanings relevant to family identity and entail traditions or rituals. The timing of normative events is often a unifying one and while events sometimes include challenges; they are generally viewed positively. Families usually spend time preparing for normative events and have expectations about roles, responsibilities, and duties relevant to timing.



correlated with one another? What affects does the timing of a specific event have on development? Health? Well-being? How do we know the affects of time in relation to the duration of experiences? In what ways is the timing of societal events and health related? Why do persons sharing experiences over time interpret them and respond to them in dramatically opposed ways? Meaningful questions about the timing of events and the affects on linked lives need to be asked to gather evidence to guide practice. The implications of the chronosystem on contextual systems provide a unique way to ascertain and evaluate functional processes and interactions.

### **Unnumbered Box 7.1**

#### **Reflective Thinking**

Have you ever drawn a Healthgram? Draw a line to represent your life with the beginning point identifying your birth and the end representing your death. Should the line be straight, circular, or angular? Mark a place to designate where you presently see yourself and think about the age you might be when you eventually die.

On the top of the line, indicate important events, diseases, illnesses, exposure to risks, and times of support experienced thus far in your life course. Under the line indicate your age, where you lived, who you lived with, close friends, and associates.

You can make this very detailed. You may want to include employment, stresses, peak moments, etc. The exercise asks you to recall things in many realms of your past. After you have completed your Healthgram, see if you can identify any trends evolving over time. If you have completed this exercise independently, ask yourself whether your data could be more complete?

You may want to discuss it with some family members or others that might provide different perspectives.

Finally, based on your personal history and present health patterns, consider what you know about your family health history and genetics. What do you see in your health future? At what points in the past have changes occurred? What do you see for the future? What can you do now and/or in the future to enhance your health? After all students have had adequate time to complete the activity, a class discussion about time in relationship to development, health, and well-being could enhance learning about chronosystems.

## **ASPECTS OF THE MESOSYSTEM**

Individuals do not develop alone or within vacuums, but in the context of others; the social environment of individuals exerts both negative and positive potentials on the life course. The mesosystem refers to the multiple influences experienced by developing individuals as they interact with family sub-systems and family within the household niche (Box 7.3). A family may have several members, but each one encounters a somewhat different life experience depending upon things such as age, maturity, abilities, choice, and chance. Extended kin relationships, peers, school, play, work, special interests are all factors that influence member interactions and functional processes that impact development, health, and well-being. Although the household is usually the principle context for interactions, these expand as the members get older, mature, and establish more extra-household linkages. Members may spend more time away from the household, increase time with outsiders, and expand social networks.

<<<<<<<<<<INSERT Box 7.3>>>>>>>>



outcomes are considered, questions sometimes center on whether it is a good for mothers to work. Less discussion surrounds issues such as the type of employment, wages earned, ways income is spent, caregiver issues, quality of mother-child interaction, or impact on the child's development, health, or well-being. This Family Health Model forces nurses to across a variety of sectors related to individual health and examine variations in impact, outcomes, and effects of systemic processes. While much is known about how parenting affects children, less is known about the ways children affect parents or how school and child-care affect household niches. Family-focused care implies a need to ask questions that have not usually been asked and consider relationships in broader ways.

### **Work, Employment, and Underemployment**

When health and mortality are considered, it is common to see reports that include relationships to parent education and socioeconomic background. Most commonly accept that if education and socio-economics are improved then health improves and mortality is reduced. Unfortunately, knowing these facts could result in a failure to acknowledge other risks that might be even more significant. For example, a nationally representative sample of adult women and men participated in a longitudinal study to investigate the degree to which four risk factors (i.e., cigarette smoking, alcohol drinking, sedentary lifestyle, relative body weight) explained relationships between socioeconomic conditions and mortality (Lantz PM, House JS, Lepkowski, Williams, Mero, & Chen, 1999). The survey investigated the impact of education, income, and health behaviors on the risk of dying. Although education and income were identified as indicators of mortality and significantly influenced the risks of dying for the lowest-income group, the investigators concluded that mortality was actually due to a wide array of factors and would persist even with improved health behaviors. It appears that both early and current

circumstances cumulatively contribute to explain why people of lower socioeconomic status have worse health and lower psychological well-being (Marmot, Fuhrer, Ettner, Marks, Bumpass, & Ryff, 1998).

Too often the processes related to work and development, health, and well-being are overlooked. “Work is a big problem waiting to be solved: too much of it for some, not enough for others, and the need to provide good-quality childcare for all of the children on whom the future rests” (Carter & McGoldrick, 1999b, p. 15). Some work long hours in high stress environments for fat paychecks, fringe benefits, and prospects of a promising career. Others work equally as hard in equally stressful atmospheres for far less pay, fewer benefits, and uncertain futures. Still others work at trying to find work that pays adequately to meet family needs, but are continuously under-employed in service sector jobs that offer minimum wages, no benefits, and little promise of any future. There are those unable to find work because of a chronic condition, disability, or lack of skills and of course there are some who just plain do not want to work. Discussions of employment often discuss abilities of individuals, while ignoring facts that some businesses use people, love profits, and will sacrifice many for the good of a few. Costs of production often center on skills of laborers and expenditures for health benefits, but issues related to organizational inability to adopt technology, costs related to administrative tasks, or salaries paid to upper management are ignored. Inclusion of the concept of mesosystem in the Family Health Model implores us to look beyond worker skills, paycheck, and family incomes and question how the workplace affects development, health, and well-being. What are the interactions between employment context and the health of individuals, family sub-systems, and families? Family-focused care should cause the nurse to ask questions about these interactions.

Sometimes assumptions about relationships guide thinking inappropriately. For example, many might think that the life of farming would be healthier than working in urban environments. However, a Finnish study investigating differences in health and social patterns of older adults found that farm workers reported more functional disability and poorer health than did the white-collar class with even greater differences observed in men than women (Rahkonen & Takala, 1998). What about relationships between present health and effects of prior living conditions? An ambitious attempt to compare childhood living conditions with past and present socioeconomic status to adult health status found that childhood economic problems were significantly related to adult health, while past childhood social problems were weakly related (Rahkonen, Lahelma, Huuhka, 1997). Unless the context and processes associated with work are closely examined, one might erroneously conclude a situation far more deleterious or optimal than it actually is.

Family-focused care must target contextual factors that appear more obscure assessment and intervention areas and ask questions that address needs related to populations of workers in single industries rather than merely address needs of single individuals disassociated from the workplace. For instance, occupational health nurses that emphasize family rather than individual care may find contextual systems a way to burrow deeper into safety issues, risk reduction, rehabilitative issues, and health promotion for the family who the employer may also provide health benefits. Questions about long-term effects associated with employment is a concern for the world's people and one that infrequently taken into account.

**Play: Adult and Child**

Play, hobbies, and family fun are contextual areas pertinent to family health. Although the types of activities may be limited based upon finances, skills, availability, interest, and social

opportunity, most persons, adults and children, participate in play either with others or with family members. As a child, one might recall the horror of being the last one selected to play on a team. What effects does this have when repeated often over time? Suppose one enjoys golf, but the fees at the country club or local green are beyond what can be afforded? What if a college student desires to join a sorority that her roommates are considering, but realizes her family cannot afford the membership costs? Weekend play might consist of yard work, an afternoon of football watching and snacking, or a shopping trip to the mall. What do other families do for play? What happens when teenagers no longer want to participate in family activities as they did when they were younger? What does it mean when children always want to include friends in family activities? These are the kinds of questions that Family Health Model might cause a nurse to consider when thinking about the mesosystem and planning family-focused care.

### **Health Care Systems**

When health care systems are considered, great concerns are often voiced about the adequacy and availability of professionals to meet care needs. Although family members often seek services from the same providers, it is not unusual for some members to have different ones than other members. While most families may only see physicians infrequently and only for annual physicals, well-child care, or emergencies, families that have members with disabilities, chronic illnesses, or a child born prematurely may need multiple providers to address needs more frequently and over longer time periods. What affects do brief medical encounters have and how do they differ from extended interactions with multiple care providers? How does care needed by a single member affect others?

As family members age, likelihood of chronic illnesses and need for extensive services increases. Relationships with health care providers may have potential to alter family processes.

What happens when a member is faced with a hospitalization? How does a short stay for an acute episode differ from a long-repeated stay for a chronic situation? What happens to a family when one member needs health resources that the family cannot provide? How do family members support one another when a member acquires a chronic illness such as cancer, diabetes, or suffers from a cerebral vascular incident? Family-focused care implies asking assessment questions and planning interventions related to the contextual concerns and functional processes related to health and illness.

Nursing practices related to what is viewed as ‘good care’ continues to evolve and topics like the utility of family hospital visitation continue to occur. Not long ago, it was usual practice for families to be excluded from patient care activities, restricted in visiting times, and asked to leave the room whenever nurse-patient interaction occurred. Some thought it necessary to reduce interactions in order to allow the patient to heal and participated in imposing institutional policies that isolated patients and family. Patient records were viewed as belonging to the institution, basic information such as vital signs was kept from patients, and decisions about treatments were made without patient discussion or informed consent. Times have changed; interactions once viewed as detrimental are now seen as protective! More facilities have adopted policies of unrestricted visitation and involve members in care, discussions, and decisions. The Family Health Model encourages clinicians to not only consider individual’s needs, but also reflect on consequences of systemic processes on individual health and family needs.

**Unnumbered Box 7.2****Cooperative Learning**

Break the class up into pairs and allow 5 to 10 minutes for them to brainstorm and compose a list of benefits and risks associated with family involvement during hospital care of individuals.

Make sure the list compares things from the family perspective with the nurse viewpoint. When the pairs have finished, a member from each pair should place their items on a blackboard or some other place where the class can view them. Identify items that appear on more than one list! When all items are visible, have a class discussion about the various ideas. In what ways have ideas changed over time? Are changes still occurring? Are there better ways to involve families in patient care than we currently use? What will the future changes are needed?

### **Social Support Systems**

The Family Health Model advocates that the nurse should consider interactions between family and the social support systems available within the mesosystem. In other words, when a family requires assistance, what sources of assistance are available? According to Garbarino and Abramowitz (1992), a social support is defined as “a social arrangement that provides nurturance and feedback to individuals” (p. 65) and “serve as resources in times of physical and emotional need” (Garbarino, Galambos, Plantz, & Kostelny, 1992, p. 203). Caplan (1974) defined support systems as:

Continuing social aggregates that provide individuals with opportunities for feedback about themselves and for validations for their expectations about others, which may offset deficiencies in these communications within the larger community context. They tell the individual what is expected of him and guide him in what to do. They watch what he does and judge his performance. (p. 4-6)

Support systems can be formal (e.g., social service agencies, community centers, churches, volunteer organizations) or informal (e.g., neighbors, friends, extended family, co-workers).

Support usually transpires within the community or a geographic place where families live and interact. Social support can have powerful direct and indirect influences on the lives of families in social, economic, and health components. Community support to provide work-related activities; create mutually satisfactory relationships between teacher, parents, students, and school officials; provide safe and adequate child care; and reduce neighborhood risks are all forms of social support (Garbarino, Galambos, Plantz, & Kostelny, 1992).

Needs and interactions with social support systems vary based upon things such as age, maturity, geographic location, knowledge about availability of services, and abilities to maneuver through the bureaucracy. Infants and toddlers usually have few direct interactions with social support systems although many services are targeted to meet their needs. Rather than the support agency using case finding techniques to locate eligible recipients, systems rely upon the skills of parents to navigate the barriers to locating services. Understanding the concept of mesosystem helps one to see that the obstacles to obtaining needed help may be on the side of the provider or the recipient. While it may be true that you can lead a horse to water, but you cannot make it drink; it is also true that there is no possibility that the horse can drink if it cannot locate the watering hole! Agencies and institutions deemed to be support systems are often obstructed from those they intend to serve by policies, geographic locations, inept workers, or complex paperwork and procedures. For instance, a single parent finds herself unable to work and care for a child and seeks help from a local government agency. The immediate tone of the encounter set by the first person contacted could suggest the tone of further interactions. Mothers feeling supported by the agency may take the steps needed to obtain services and have positive feelings about the actions. Mothers with less supportive encounters may still pursue the services because of need, but may have their sense of self-worth compromised as a result of the

experience. How do social supports affect development, health, and well-being? Family-focused care might not only aim at support system referrals, but also at assisting families negotiate the organizational systems and cope with the stresses involved.

Focusing on the mesosystem also pertains to seeing that even available social supports can have both positive and negative effects. For instance, a working parent might need child-care services. While extended family may provide some assistance, services may need to be hired. What happens in the 8-to-10 hour day when others care for the child in an environment outside the household niche? Interactions in that social environment may affect the child's behavior, personality, development, safety, and health. The parent may have some sense of what is occurring in the child-care environment, but clues may not tell the entire story about what all occurs during the course of the day? How do parents respond to the child at the end of the day? Are interactions different on non-work days?

As children grow and mature they reach out to others in ever widening circles. Children may be introduced to wider social networks through the church or cultural traditions. Early interactions who may serve to reinforce family values, ideas, and attitudes, but as children get involved in activities such as scouts, 4-H groups, or sports they may meet others different from themselves. In what ways do these interactions enhance or threaten what is being taught at home? Do interactions support family values or contradict them? Do support systems strengthen family's identity? Social networks can instill new values, reinforce them, or bring them into question. For example, a child attends summer Bible school. Parents may notice the child singing new songs, playing pretend games that reflect religious content, or insisting on prayers at meals and bedtime. If the family values what the child is learning then the actions become more prized, but if the family does not usually attend church or holds other views the child might be ridiculed

for their activities. Congruency or discord between family values and identity and the larger societal support systems can be growth producing or conflictual for children. Family-focused care questions results of long-term or repeated conflicts or compatibility of supports.

Parents participate in social functions that affect the family. Mothers may have hobbies, professional groups, or regular conversations with friends. Fathers may fish, hunt, golf, view spectator sports, belong to civic groups, or stop regularly at a local bar. Parents may share activities or go separate ways! How do these activities or lack of them affect family processes? The mesosystem has far reaching effects on the family. The Family Health Model encourages clinicians and researchers to investigate implications of mesosystem relationships on development and health outcomes. Evaluations over time may enable nurses to better identify ways to intervene and assist members balance the inconsistencies between family needs and the impact of larger contextual systems.

### **Unnumbered Box 7.3**

#### **Reflective Thinking**

Recall your present nursing practice. Think about your day-to-day activities. Have you noticed things about family health that you believe might be related to something outside the family? For instance, in caring for a child diagnosed with attention deficit disorder, have you ever considered what other factors might contribute to the problem behaviors? Or in the case of a sexual abuse or rape case, do you consider what contextual factors might contribute to the episode? A man with a myocardial infarction is rushed into the emergency department, what possible contextual relationships might have contributed to his condition. An elderly woman is getting her annual mammogram and describes personal happiness, health, and a good life. What contextual factors might have contributed to her good health?

Consider some clients with whom you have recently interacted as you completed health histories. What questions did you not ask that might provide greater insight into their present condition? Can you be certain about the contributing factors related to genetics, personal traits, or the household niche? What contextual variables might have also contributed to health risks?

## **EXOSYSTEM**

The exosystem is one or more settings that do not directly involve individuals as active participants, but one where events still affect the family (Box 7.5). The exosystem implores one to consider the dynamic exchanges between families and larger contextual systems where no direct interaction occurs. The exosystem is a reminder that health is not merely confined to family characteristics and processes or interactions of family members with outsiders. The exosystem informs us that although families may seem insulated from external forces, they are not. In fact, health is deeply affected by places where individual members are connected even when they are not present or is not involved in decisions or actions happening there.

<<<<<<<INSERT BOX 7.5>>>>>>>>

## **Peer Relationships**

Peer relationships are frequently discussed in terms of negative and positive benefits with less consideration given to the broader scope of these associations. While individuals are certainly accountable for many of their actions, underlying factors may greatly contribute to choices and behaviors. For instance, a child grows up in an urban area where gangs are prevalent; parents warn them about the risks of involvement with them and encourage avoidance. The child wants to heed his parents, but the gang's bullying, threats, and victimization create

feelings of social isolation and fear that seem of greater consequence than adherence to parental guidance. The desire for acceptance and need to belong to larger peer groups has tremendous potential to impact choice in children, youth, and adults. Peer factors impact the psychological, emotional, social, and even spiritual needs of individuals. A geographically isolated mother may want to participate in parenting classes, but may lack the transportation to get to the meetings. A community may have a wonderful senior group that welcomes new members, but an inability to drive excludes them from taking part in a potentially enjoyable peer experience. Family-focused care means understanding that decisions made by groups separate from individuals have potential impact on lives of those who do not participate in the decision-making. Care might imply facilitating individual actions, but may also entail collaboration with organizations or larger social systems to change policies or alter practices for the good of the community.

### **Educational Systems**

Decisions at the federal, state, and local level affect local school districts. Decisions about inclusion of children with disabilities, rules about universal precautions, and policies for distributing students' medications are often made outside local districts, but affect local families. The individuals residing within a local area create a potential pool of teachers from which to draw, but teacher abilities, quality of instruction materials, school levies, and values of the local school board are factors that affect child learning. Contextual factors beyond personal capacity to learn may affect grades and academic success. Families are affected by what happens in the classroom. Family-focused care could imply new roles for school nurses and community health nurses as they take more active roles in ascertaining what happens to the health of children as a result of the 12 to 13 years spent in a classroom. Questions about the impact of educational systems on individual health and ways to potentiate family health are rarely asked! How can

nurses better serve the health of families and communities through access to school age children?  
The Family Health Model would encourage nurses to ask questions and seek answers.

### **Work and Play**

Beginning in the 1970s and continuing to the present, communities have been affected by market changes as America transforms itself from an industrial nation to one more focused on technology and information. Past opportunities for manufacturing jobs with good pay for those with a high school education or less seem to have disappeared as industries closed or relocated. For example, one economically solid southern Ohio community faced the foreign competition in the mid 1970s as the shoe factories relocated and jobs in the steel industry were lost due to shutdowns. Some employees had options to relocate, but many faced unemployment, struggled with retraining, faced relocating to other areas, or took jobs that offered greatly reduced family incomes. Foreign trade and competition created similar scenarios across the nation. Decisions made in board rooms far removed from household niches, neighborhoods, and communities affected local families. The effects resulting from lost employment affected aspects of family lives of many across the nation.

Play is often tied to community economics. As communities prospers they develop common areas where people congregate to share activities or information. A ball field, a city park, a community garden area, a shopping mall, or local playgrounds are areas that affect opportunities for interaction with others. Many feel great pride when they wear a sweatshirt with a team logo, purchase a ring to symbolize association with a school or group, and participate in an activity that contributes to a local organization that meets community needs. Persons beyond the individual govern rules about who can join or participate in some play, but these decisions still affect those not having a say. For example, decisions about how a community spends its

money to support a youth center or library and a decision by the deacons of a local church to open its doors for after-school activities are made outside the family, but have potential to affect their development, health, and well-being. The Family Health Model encourages family-focused care that looks at community needs and population-based concerns that have potential to affect the health of individuals and families. Creative and innovative practices that see beyond immediate circumstances and visualize possibilities existing between community life and family health are needed.

### **Health Care Systems**

Whenever health care is mentioned, most people think of physicians, medical care, high costs, health insurance, and illness treatment. Health care systems are based upon Western views of allopathic medicine as the optimal care mode. Employers mostly pay for insurance and health care costs, but until the last decade most care was based on fee-for-service mechanism that directly paid physicians and other providers. In the old system, employers paid for insurance costs, insurance companies paid providers for services rendered, and service users paid nothing or little. By the late 1980s, employers strapped by continually rising health care costs turned to managed care organizations and the nation experienced a transition aimed at controlling rising costs. In 1999, 91% of the nation's employees with health insurance were enrolled in managed care plans, a major change from the 27% in 1988 (Institute of Medicine, 2000). The new system instituted capitation; co-pays; pre-approvals for specialists, surgeries, and expensive treatments; and emphasized appropriate use of emergency services. As Americans faced these changes, lobbyists representing specialized medical interests, media messages from consumer groups, and local and national politics created fears and anxieties about the changes. Managed care organizations encouraged medical providers and health care agencies to be more business-like in

their operations. They restricted specialist care, but encouraged some preventive care. Some physicians, medical organizations, and others raised questions about ethics and inadequacies of the new systems. Largely uninformed employee groups were unprepared to advocate for their own best interests. As a result of political and economic decisions, the health care has had some radical changes with shifts bringing opportunities and problems for providers and consumers.

A recent report about changes in primary care physicians and specialists scope of care identified that 30% of primary care physicians and 50% of specialists felt that the level of care they were expected to provide under managed care was more than it should be (St. Peter, Reed, Kemper, & Blumenthal, 1999). The investigators concluded that reports that the scope of care was greater than it should be arouses concerns about the impact of changes provided through managed care. Bodenheimer, Lo, and Casalino (1999) suggest that while physicians, as primary gatekeepers may not provide an optimal care environment, the system should not return to the pre-managed care model of open access to specialists. The authors advised that primary care physicians should devise financial incentives for physicians who coordinate care that manage complex cases, discourages over or under-referral to specialists, and improves care quality.

Although nurses play important roles in the health care systems, forms of reimbursement for nursing care have rarely been separated out from other medical costs. The present scarcity of nurses could be a time for rethinking about the kinds of services individuals and families really need to increase years of healthy life and reduce the health disparities for some population groups. Nurses mostly work in hospitals or other health agencies with fewer employed in community or public health settings. The Family Health Model encourages rethinking health delivery and envisioning what is needed to meet society's wellness and illness needs. Family-

focused care related to the exosystem and health care systems suggests that becoming consumer advocates involved in health policy development are as pertinent as clinical practice.

### **Social Support Systems**

Being disconnected from the larger society is related to mortality risk and almost every cause of death. “Social connectedness is loosely defined as the amount and quality of interaction an individual has with family, community, school, and workplace, as well as individual perceptions of how much support they have and how much influence they have over their environment” (Larkin, 2000, p. 3). Social isolation has been associated with many diseases, illnesses, and mortality.

A big challenge in combating isolation is the scope and complexity of the problem. The causes, characteristics, and outcomes of isolation vary widely from group to group and from individual to individual. For a young mother, the isolation brought on by a lack of transportation and childcare may result in depression and child neglect. For an adolescent, a lack of a nurturing school and positive after-school environment may lead to delinquency, substance abuse, and early sexual activity. (Larkin, p. 3)

A study about women with breast cancer and arthritis found that women with more positive social systems and more extensive social networks had higher levels of psychological well-being, regardless of physical health problems (Heidrich, 1996).

We now know that a number of pathways link social networks to health outcomes. One is health behaviors: People who are isolated tend to smoke more and be more overweight and less physically active. It now appears that social isolation-the feeling of

disconnection, of not belonging-is a chronically stressful experience that has a direct biological effect on the body. (Berkman, 2000, p. 4)

Studies of health inequalities based upon a life history approach should include biological and social beginnings (Wadsworth, 1997). Social support comes from many different directions, persons, systems, agencies, and institutions over the life course. Products of social support can be things like a sense of community, attachment, connectedness, hardiness, resilience, cohesiveness, tolerance, and civility.

In many ways, it seems as if the opposite of social support is isolation. We often lack consensus about the meaning of social isolation, but agree that it is clearly an important construct impacting many aspects of youth and families (Coohey, 1996). What forms does isolation take? The types of isolation are many; for example social, emotional, physical, geographical, cultural, economic, and technological forms exist. Isolation may result in loneliness, inadequate supports, lack of attachment outside the household niche, marginalization, a sense of being unacceptable, and feelings of alienation, apathy, and abandonment. Consequences of isolation may be an inability to express their feelings, secrecy that increases levels of differences, and disassociation from the larger community. Things such as learned helplessness, somatization, substance abuse problems, mental health issues, intergenerational transmission, and social disability may characterize lives affected by isolation.

Society often purposely isolates some groups. For instance, criminals and the sociopaths are often isolated for the good of society. Although not institutionalized, society also isolates other groups such as the physically or terminally ill, disabled, special education students, immigrants, and the elderly. In fact, societies frequently isolate persons by gender, social class,

economics, economic status, education, religion, color, and sexuality. The chronically ill, caregivers, emotionally disabled, single parents, lesbian and gay youth, abused persons, and the homeless also experience isolation. What are the causes of isolation? Reasons might include fear, lack of self-confidence, anxieties, but societal groups may isolate others because of morality, ethics, laws, traditions, behaviors, environmental pressures, greed or selfishness, and lack of understanding.

The literature widely discusses social isolation related to a variety of issues. Social isolation has been noted to have implications related to abuse and violence (Gelles & Straus, 1979; Maden, & Wrench, 1977), a factor in the development of sexual abuse of youth (Fleming, Mullen, & Bammer, 1997), sexually abused women (Gibson & Hartshorne, 1996), battered women (Fiene, 1995; Forte, Franks, Forte, & Rigsby, 1996); school violence (Dupper, 1995); grandparent's care taking of their grandchildren (Kelley, Yorker, & Whitley, 1997); women in migrant farm families (Rodriquez, 1993); poor Puerto Rican children who migrated with their families (Fontes, 1993); and mothers with low birth weight children (Sachs, Hall, Lutenbacher, & Rayens, 1999). Findings indicate that social isolation is a primary characteristic of victims of youthful abuse connected to increased likelihood of performing life threatening acts (Hazler, Carney, Green, Powell, & Jolly, 1997). Early work of Garbarino (1978) described the roles of the school in causing, preventing, and treating child maltreatment based upon whether the environment encourages an individualistic ethos and isolation from potent family or individual support systems. Students who are isolated and without 'best friends' are much more likely to become victims than those who do have 'best friends' (Boulton, Trueman, Chau, Whithand, & Amatya, 1999).

The Family Health Model suggests that when social support is considered from exosystem perspectives, issues should not only be examined from the positive perspectives of availability, but also determine what happens when it is not available. Many of today's risks associated with morbidity and mortality are closely correlated with social and environmental hazards. Americans value self-reliance and independence while some other cultures value shared responsibility for the care of one another. Family-focused care aimed at reducing social isolation might focus on strategies to strengthen social competence, facilitate connections among family and others, build upon individual and family strengths, and increase the sense of community.

**Unnumbered Box 7.4****Cooperative Learning**

Choose a particular community on which to focus and divide the class in half. Half the students should focus on family violence and the other half on families with children that have physical disabilities. Each group should identify the agencies in the community that provide services applicable to the problems. Group members should gather specific information about who the programs serve, the types of services provided, costs of services, and the ability of the services to meet needs. What are the strengths of the services? What are the gaps in services? Where do services overlap? What needs to change and what needs to stay the same to enhance the quality of support? Do the available services increase development, health, and well-being? Describe the contributions in each area.

Groups should also investigate to see what roles nurses have in providing care to these families. Do the community programs employ nurses? If so, what services do they provide? What is the knowledge and skills need to address the needs? How does nurses' pay equate with other nursing

jobs in the community? Each group should identify ways nursing might be included in agency programs to enhance care.

Groups should prepare a written summary to share with the entire class. A class discussion can compare and contrast the findings about the support services and family-focused care for the two family groups.

## **MACROSYSTEM**

The macrosystem is the overarching embedded systems affecting development, health, and well-being over the life course. The macrosystem includes ideologies, social expectations, legal and moral perspectives, and cultural or sub-cultural traditions and affects the reciprocal ways individuals treat and are treated by others (Box 7.6). For instance, embedded views about race, ethnicity, religion, sex, class, and age may alter the ways individuals and families view themselves and others. The macrosystem provides a social paradigm that has subliminal affects values, attitudes, and behaviors. For example, in the early frontier days of American history, it was usual for women to marry in their teens, bare 6 to 12 children or more, lose several children in either the birth process or to disease, and die before the age of 50. While these facts may seem appalling today; they represent an accepted life-way in an earlier historical period. Extrapolating information without exploring its historical significance sometimes allows things to appear as if they were independent choices rather than imposed by the time and context. While judgment of rightness or wrongness of behaviors may have moral implications, the appraisal seems fairer if it is underscored with related facts that initially seem less obvious. Most of us are oblivious to the insidious macrosystem influences and ways it compels us to believe and act. The tendency is

often to ignore what is less visible and over-look the covert or subtle ways that we are influenced. The Family Health Model encourages conceptualizations related to health to include the power and pressures of larger embedded contextual systems across the life course.

<<<<<<<<<INSERT BOX 7.6>>>>>>>>

### **Unnumbered Box 7.5**

#### **Critical Thinking Activity**

Nurses often give lip service about the importance of cultural competence in clinical practice, but remain naive about cultural differences. For instance we may group all Blacks, Hispanics or Asians together as if they were a single homogenous groups. In America, all three of these groups are increasing in numbers and some say that by 2010 one-third of the U.S. population will be ethnic and racial minorities and by the year 2030 the minority population will reach 140 million or 40% of the population (Institute of Medicine, 2000).

Choose Blacks, Hispanics or Asians. If you identify with one of these groups, then choose another. You are going to make two lists. The first list should identify everything you know for sure about this group. The second list should identify those things that you are less certain about, but often hear about the group. The list can include things like, traditions, diet, health behaviors, personal characteristics, etc. See how comprehensive you can make your list.

After you complete your lists, go to the Internet and choose a good search engine to investigate the group you have selected. Spend 30 to 45 minutes searching. As you search, make a third list that contains new information or things to support or dispute things you previously listed. Bring

the lists to class on the assigned date. In class, meet with others who reflected about the same group you did. Discuss what you have learned from the experience.

What do you know for sure? What do you need more information about? Where can you find the information you need? What would happen if you moved to a community where your daily work involved interactions with persons from this minority group? Are you prepared to address the individual and family needs? What do you need to do to enhance your knowledge and skills to better meet needs of this group?

### **Social Policy**

Many deaths and disabilities in the United States have behavioral linkages. For instance behaviors directly linked to choice such as smoking, alcohol use, diet, and lifestyles have linkages to morbidity and mortality. Detrimental effects of poverty and threats associated with environmental conditions have also been identified. While risks associated with behavior and environment are amenable to change, they take large investments of human and social capital. Approximately \$1 trillion is annually spent on health care nationwide, but less than 5% of the total is used to address the behavioral and social causes of disease, disabilities, morbidity, and mortality (Institute of Medicine, 2000). Discussions about differences in illness and life expectancy have largely focused on individual differences such as economic status and behavior. Less discussion about the effects of social or public policy on disease prevention, influences of the socioeconomic environment on health, or directions of budget allocations have transpired. A recent report by the Institute of Medicine (2000) entitled *Promoting Health: Intervention Strategies from Social and Behavioral Research* acknowledges that health, disease and well-

being are complex states that develop and change over the life course. Mounting evidence indicates that inequalities are likely to have adverse effects on health and no single intervention or set of interventions will affect all implicated factors. Although social inequalities associated with mortality are largely due to a high prevalence of risk behaviors among those with less education and income, a random national sample indicated that socioeconomic differences in mortality are due to a wider array of factors that would persist even if the disadvantaged had improved health behaviors (Lantz, House, Lepkowski, Williams, Mero, & Chen, 1998). The cumulative effect of a life course perspective that considers relationships among biological factors, socio-economic status, and psychosocial conditions that impact health is needed (Hertzman, 1998).

Models that include relationships between the socio-economic and psychosocial conditions of a society identify much about health determinants germane to persons and populations. Bartley, Blane, and Montgomery (1997) argue that a life course approach is needed to understand social variations in health and the ways policies contribute to high health standards. An English study of a 1958 birth cohort concluded that lifetime socioeconomic circumstances accounted for inequalities in self-reported health at age 33 (Power, Matthews, & Manor, 1996). A study of ill-health among British women compared patterns of social advantage versus disadvantage and found persons with psychological symptoms showed the greatest health variations and single mothers with dependent children largely represented in this group (Macran, Clarke, & Joshi, 1996).

However, Kohn (1995) suggested a question of how we can, “be certain that what we believe to be social structural regularities are not merely particularities, the product of some limited set of historical, cultural, or political circumstances” (p. 153). Multiple approaches that

include broad sectors of society are needed to address complex factors associated with behavioral and environmental risks. The Family Health Model suggests that factors related to biology, development, psychology, economics, environment, policy, and cumulative life events must all be included. While some determinants imply that appropriately timed interventions are needed, cumulative effects require focus on prevention and risk reduction. Federal, state, and local revenue streams must support the financial appropriations needed for broad contextual interventions. Philanthropic groups, corporate businesses, private and public sectors, institutions, professional practitioners, policy makers and others will need to merge resources if the nation is to address risks from these broad perspectives and create models of care that touch individuals where they live, work, and play. The macrosystem us a reminder that health is more than individual behaviors and family health is affected by social and environmental factors. Family-focused care to address macrosystem issues must include team approaches that address multi-level health needs, coordinate of care across time and settings, include inter-sectorial collaboration, and foster policy development.

### **Health and Public Policy**

Citizens in a community are all affected by service availability and quality in the locale. While some communities may have many choices available, others may have limited or no services. Although federal or state funding for services or programs exists, the lack of experts or professional providers may limit availability. Legislators may vote to increase spending to meet specific needs, but wide disparities may still exist in the way these funds are actually used. For example, in the early 1980s federal legislation was passed to enhance the care of dying persons during their terminal stage. The Hospice Medicare Benefit provides a more optimal way to meet care needs for terminally ill persons during the last six months of life. In the early 1980s, a

grassroots movement embraced the hospice philosophy and a variety of programs sprung up around the nation. Ideas from St. Christopher's in London, England and palliative care practices in Canada were blended with American ideas to create a unique form of hospice care acceptable to reimbursement systems, professional providers, and families.

Although the funding for programs existed, locations of households affected whether a program to provide care was actually available. While persons in urban areas were likely to have access, programs in rural areas were less accessible. Limited leadership, availability of health care professionals, start-up funds, community or physician support, or misunderstandings about reimbursement mechanisms thwarted some efforts. An unwillingness of some physicians to identify a patient as terminal, an uncertainty about the best time to refer, a distrust of a system not fully proven, concerns about pain and symptom management, and uncertainties about relinquishing care management to a team were also reasons for the slowness of hospice development in some communities. Also, Medicare provided payment for services for the elderly, but hospice care was not covered in many younger persons' insurance plans. A legislative decision provided a mechanism to fund hospice care, but many hurdles had to be overcome to actually make the services available across the nation.

Health policy is an area where ideas about health behaviors and biological development are likely to become an even more important focus on the interplay between social status and specific diseases (Higgs & Jones, 1999). Future challenges include identification of the ways revered ideas actually mesh with health promotion needs, whether current health policy addresses these needs, and if health inequalities mainly result from unequal distribution of societal income or are just natural phenomena. Although the national concern about chronic disease is growing, health policies and reimbursement systems continue to focus on episodic

needs of individuals. Prevention of chronic illness, care-giving needs of a growing elderly population, and the likelihood that most Americans will live with one or two chronic illnesses during their final decades of life is largely ignored by current health care systems. A life course approach to understand the complex ways biological risk interacts with economic, social, and psychological factors in the development of chronic disease is needed (Bartley, Blane, & Montgomery, 1997). What is the responsibility of government in the health of its people? What is needed to improve the years of healthy life for all people? A large disconnect between health care needs and market outcomes seems to exist. Are the American people willing to pay higher taxes to cover costs associated with chronic illnesses or is the need merely for redistribution of present funds to cover health care needs differently? What roles should nurses play in policy development? The Family Health Model implores one to not merely evaluate health services as they appear, but to identify the contextual ideologies that are driving forces in policy development. Family-focused care emphasizes the necessity to compare relationships between current health policy, systemic programs, and economic funnels for current services with trends related to future needs. Nurses' practice roles could involve partnering with consumer or family groups to identify population-based health needs and then collaborate with other health professionals, lobbyists, and policy-makers to create legislation that addresses needs more appropriately. Roles might also involve model projects to test the effectiveness of comprehensive forms of family practice that tackle a broad scope of family needs.

**Unnumbered Box 7.6****Cooperative Learning**

Take 5 minutes for students to pair off and create lists of the ways the media and societal messages influence alcohol use. How are individuals encouraged to drink or refrain from alcohol

use? Then have two pairs combine and choose a note taker. Spend 5 to 10 minutes talking together about ways these messages might affect school age children. Then spend another 5 minutes discussing ways media and societal messages affect parents. Finally, spend the last 5 minutes identifying ways a family nurse might use this information in clinical practice. Each group should provide the class with a summary of their ideas.

### **Larger Environments**

The macrosystem context introduces, affirms, and negates health beliefs, knowledge, and behaviors representing perspectives and paradigms of the larger society. Initially, the larger environment begins in the family of origin as the daily events that occur within the household niche among family members and significant closely related others. However, as time goes by and individuals mature, the larger environment expands to include interactions between the family, mesosystem, exosystem, and the macrosystem. Carter and McGoldrick (1999b) described the larger society in peacetime as “as a whole with its laws, norms, traditions, and way of life” and in wartime or in terms of global markets as larger than a single nation or as “spaceship earth” (p.12). For centuries isolated societies were able to maintain primitive ways, distinct languages, and cultural traditions. Technological advances, information sharing capacities, and globalization has created an avalanche of change that cannot be reversed. Prior to the 1960s the human race was constrained to the earth, but Neal Armstrong’s walk on the moon forever changed the face of space. While at one time we were limited to hand-transcribed books, the printing press revolutionized the way knowledge could be shared. When Marshall McLuan said the “media was the message,” he spoke of television’s ability to alter individual lives in private homes. While the larger environment may have once been the neighborhood or community, today it is the world

and its inter-spatial attributes. In the last decade or so, computers and information technologies have revolutionized communication and have extended horizons of understanding worldwide. Changes that took centuries to evolve can now occur in brief times and are bringing alterations that will forever remodel contextual perspectives.

The larger environment where we live affects the whole of life and health. When individuals' lives are considered, they must be viewed as embedded in larger contextual systems. Development, health, and well-being are not only affected by genetics, education, and family income, but also by larger environments that affect life processes, resilience, cohesiveness, and self-individuation. Health is not just a series of isolated events merely related to individual members, but includes family members' interactive responses as they engage their contexts from household niche perspective. The Family Health Model encourages nurses to identify ways that the larger environment supports continuance of present patterns or mediates change. Family-focused care entails practices that must respond to causes and effects related to larger environments and their interactions with individual and family health processes.

## **SUMMARY**

This chapter provides an overview of about the wide-ranging and complex variables related to the embedded context and health. Focus is too often on the immediacy of the case-at-hand while ignoring the impact imposed by the macrosystem context. Snapshots of the present appear more important than landscape perspectives over the life course. The Family Health Model from a macrosystem perspective entreats understanding the implications of embedded individuals, family sub-systems, and family household niches over the life course. Many challenges confront practitioners in clinical practice as well as researchers (Box 7.7).

<<<<<INSERT BOX 7.7>>>>>>>>

Health research has focused on controlling for extraneous variables for more rigorous investigative processes. It may be possible that some contextual variables cannot be controlled, but can be taken into account. The Family Health Model provides many propositions related to embedded context still need to be investigated and tested (Box 7.8). A body of knowledge that furthers understandings about the embedded context and health is needed.

<<<<<INSERT BOX 7.8>>>>

### **Test Your Knowledge**

1. Define the term chronosystem.
2. Explain and give an example of how the chronosystem affects family health.
3. Define the term mesosystem.
4. Explain and give an example of how the mesosystem affects family health.
5. Define the term exosystem.
6. Explain and give an example of how the exosystem affects family health.
7. Define the term macrosystem.
8. Explain and give an example of how the macrosystem affects family health.
9. Describe a way that a family nurse might use the conceptual ideas about the chronosystem in clinical practice to assess, plan, and evaluate care some form of care targeted at family health.
10. Compare and contrast the different ways a family nurse might consider the mesosystem and exosystem when addressing family health.

**Box 7.1**

**Concepts related to chronosystem**

- Actual time passage
- Special moments in time
- Age differences
- Intergenerational transmission
- Historical past
- Experienced and unexperienced present
- Desired futures

## **Box 7.2**

### **Effects of chronosystems on development, health, and well-being**

#### **Social life course:**

Interwoven age-graded trajectories are subject to change, future options, and short-term transitions from birth to death. Each trajectory has a series of linked states; thus a change in state results in a transition embedded in the trajectory. Change has the potential to create complex interplay between context and health.

#### **Time and place:**

Developmental processes are shaped by sociocultural trajectories. Historical time and place present restraints, opportunities, priorities, and values reflected in life course behaviors.

Historical change is never uniform across communities, thus variations in context have potential to enhance or threaten development, health, and well-being.

#### **Human agency:**

Individual choices among situational and perceptual options form foundations for outcomes.

Persons are agents who can contribute to their health, but contexts outside their agency enhance or restrain actions.

#### **Timing of lives:**

Age is not the only measure of time; sequence, pace, incident types, duration of situations, availability of options, and presence of constraints also mediate choices.

**Interdependent lives:**

Lives are linked to one another, specific contexts, timing of historical events, and choices based on situational and perceptual options. Actions have domino-like affects on the lives of others presently and over time. Linked lives such as family sub-systems, family, kin networks, friendships, and colleagues provide opportunities and threats to development, health, and well-being.

**\*\*\* Ideas based upon Elder (1995)**

### **Box 7.3**

#### **Aspects of the mesosystem**

- Peer relationships (e.g., dyads, triads, close kin, friendships)
- Preschool, school, and child-care processes
- Work (e.g., unemployment, underemployment)
- Play: Adult and child (e.g., sports, social activities, personal hobbies, vacations)
- Healthcare systems (e.g., services used, relationships with providers)
- Social support systems (e.g., club memberships, church affiliations, support groups)

## **Box 7.4**

### **Interactions relevant to development, health, and well-being**

- **Perception:**

The world extends beyond the immediate situation and includes other settings, activities that occur in those settings, relationships among the settings, influences of contexts where face-to-face contact does not occur, patterned beliefs, lifestyles, cultural traditions, and spirituality. Perception has to do with the ways individuals, family sub-systems, and families view, interpret, value, and give meaning to contextual events.

- **Action:**

Individual capacities to accurately interpret interactions that occur in diverse systems and settings, use the systems and settings available, and reconstitute systems and settings.

- **Development-in-context:**

Development-in-context is a dynamic feedback system that includes multiple systems and contexts. Development, health, and well-being of individuals, family-systems, and families are impacted differently which affects other interactions across the life course.

- **Ecological Validity:**

Ecological validity includes practice and research perspectives pertaining to developmental, health, and well-being of individuals, family sub-systems, and families in multiple contextual settings over time. The goal is not hypotheses testing, but discovery of whether changes have been produced in perceptions and behaviors in diverse contexts at different points in time.

**\*\*\* Ideas modified from the writings of Bronfenbrenner (1979)**

## **Box 7.5**

### **Exosystem factors**

- Peer relationships
- Preschool/School
- Work
- Play
- Healthcare systems
- Social support systems

**Box 7.6**

**Macrosystem factors**

- Social Policy
- Health Policy
- Public Policy
- Larger Environments

**Box 7.7**

**Challenges confronting clinical practice and research**

- Identify ways to obtain information about individuals in context rather than merely obtaining information about the individual and the context.
- Determine what contexts affect individuals, family sub-systems, and family at specific time points versus enduring influences of contexts over the life course.
- Decide what factors across contexts and time are most amenable to interventions and result in the most optimal health outcomes.
- Differentiate the dose (e.g., timing, amount, length of time) of the interventions targeted at specific contextual targets.
- Evaluate differences of the individual as the source of health or disease versus the embedded household niche as the source of health or disease.

**Box7.8**

**Propositions Related to the Family Context:**

- Positive interactions occurring within the family microsystem and between the family subsystem, the household niche, and diverse external contexts have the potential to enhance individual and family health over the life course.
- Negative interactions occurring within the family microsystem and between the family subsystems, the household niche, and diverse external contexts have the potential to threaten individual and family health over the life course.
- Interventions aimed to potentiate individual and family health produce more meaningful family outcomes when contextual perspectives are included.
- Outcomes relevant to individual are enhanced when interventions also include family subsystems and the household niche.
- Interventions aimed at individual and family health are enhanced when the dyadic and triadic processes and interactions are the target rather than merely individuals.
- Interventions aimed at individual and family health have more positive outcomes when they affect multiple aspects of the family context and continue over time rather than being single unrelated episodic events.
- Interventions aimed at person-process-context will produce more effective health outcomes than interventions aimed solely at singular targets.