How Will Family Physicians Care for the Patient in the Context of Family and Community?

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Difficulties caring for patients in the context of family and community stem from problems of power and vulnerability. Patients are disempowered in relation to physicians and to the medical care system. Physicians are disempowered in their ability to provide comprehensive relationship-centered care to individuals and families because of economic constraints on medical care and limits on continuity of care. Individual patients are also vulnerable to abuses of power within their families because of physical and sexual abuse; the recognition of such abuses and appropriate interventions for them requires awareness of the gender ideology that underlies interpersonal abuses of power. Families and communities can be disempowered because of vulnerabilities related to race, ethnicity, poverty, and homelessness. The additive effects of these vulnerabilities have created health disparities that are a hallmark of inequities in our country's medical system. Opportunities to teach students to recognize and address these disparities abound within medical education. Participatory training and educational action projects can prepare learners to lead us toward a more just and egalitarian medical system with the potential to change the context of family and community in which we care for patients. However, systematic commitment from educational programs is necessary to produce activated clinicians, teachers, and researchers to achieve these changes.

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How should family physicians do the work of caring for patients in the context of family and community? Whether the doctor-patient relationship is with the individual patient or with an entire family, this relationship occurs in multiple overlapping contexts that are subject to the forces of the larger society. Family practice likewise exists within these multiple contexts, such as the political, economic, and social contexts of medicine in general, as well as regional, community, and academic settings.

The role that family practice should play in these various settings is unclear, and the uncertainty is demonstrated by the long-term tension in family practice, noted by Stein, between being a reform movement and wanting to be mainstream.¹ One solution to this dilemma is to become a leader of all the fields in medicine by beginning a reform movement, with the goal of changing medicine for the better. The drawback of this strategy, Stein points out, is that the tensions within family medicine represent and reflect the tensions within our society in general. That is, the problems "out there" in society are "in here" within our discipline.

In the spirit of that understanding, we will show that the difficulties of caring for patients in the context of family and community have to do with the presence within family medicine, the doctor-patient relationship, the family, and medical institutions of exactly the problems that face American society. Insofar as we have not addressed those as a society, they remain a problem for family medicine. These problems are not the concerns of extremists within our discipline. Rather, these problems are the central problems of our society. And, insofar as we, as citizens, disagree on how best to address these problems, we will not find consensus within family practice on what the problems are nor how to work on them.

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Contexts

Care involves relationships. When we talk about caring in context, we refer to the various relationships involved in caring: between doctor and patient, between patient and family, and between patients and society. We also need to examine how we, as physicians, engage with that broader social context. In particular, we need to focus on how these relational contexts are *not* working, compared with our ideal images and preferences.

For instance, in the doctor-patient relationship, many of us have idealized the long-term cradle-to-grave relationship with four generations of families over a lifetime of practice, yet, increasingly, neither we nor our trainees approach that ideal. Likewise, we have idealized a vision of family life in which confident and loving adults maintain a long-term relationship, raise children, and remain connected to and care for the older generation, yet so many of the families we care for are fractured by drugs, alcohol, abuse, violence, and irreconcilable conflict. At the community level, we share an ideal of civic and community life in which patients and families have adequate resources to feed, clothe, house, and educate their members, as well as to obtain available, affordable health care and medications. Yet, we live in a society where, without hyperbole, millions of families do not have access to food, shelter, and health care. Each of these ideals—of the doctor-patient relationship, the patient in the family, and the patient in the community-is currently constrained, limited, or made impossible because of huge forces at work in the society-forces based on inequality and abuses of power.

Constraints on the Doctor-Patient Relationship

Our residents are not being trained to stay in one place or to have long-term connections. If they enter long-term continuity practice after they graduate, we congratulate them, but it is not something we helped to make happen. Faculty, in turn, tend not to have longterm commitments to one location. In fact, in academic family medicine, moving to a better position is almost de riguer. Although McWhinney admonished us in 1975 not to let the demands of academic life-teaching, research, and administration—conflict with the task of being a family doctor, we have done just that. We have "raised a generation of academic physicians who [are] superb teachers and scholarly writers but [have] ceased to be family doctors in any genuine sense." As McWhinney recognized so early on, "Primacy of the person may be incompatible with the primacy of publication."2

Second, and more importantly, our health care system is increasingly designed to destroy continuity of care. For the some 40 million uninsured patients, no continuous source of care is guaranteed. For insured patients, we are often prevented from maintaining longterm relationships with them by so-called "market forces," which dictate that employers change insurance systems to get a cheaper "product." The result is that thousands of families regularly have to change physicians. In northeastern Ohio, for example, in 1995, about 25% of the population with managed care health insurance coverage had undergone a forced change in their source of health care during the previous 2 years,³ a situation that has likely worsened in subsequent years.

These ruptures in continuity destroy critical connections in the doctor-patient relationship. They affect the child whose growth and development is abnormal, the teenager who needs to discuss birth control with a trustworthy figure, and the woman with multiple symptoms whose family doctor has provided extensive listening. They also affect the older adult who faces retirement and now has a doctor the age of his grandchild and the elderly woman who has outlived her last 10 doctors and who would like someone to really understand what it means for her to be 85.

Patients forced to change physicians report poorer interpersonal communication with their physicians, less knowledge by their physician of them and their family, less coordination of care, decreased continuity with the new provider, and less preference to see their regular physician. Longer-term relationships, in contrast, are characterized by more familiarity with one's physician, better physician knowledge of the patient, more patient satisfaction with care, and more patient confidence in the physician.³⁻⁶ Studies of continuity of care show that older patients whose relationship with their physician has been for 1 year or less are more likely to be hospitalized and incur higher Medicare costs than patients with ties of more than 10 years. For Medicaid patients, greater continuity with one provider over the course of 1 year is associated with decreased hospitalization during the second year.

As family physicians, we develop knowledge about patients either through long-term relationships or through relationships with greater intensity (more visits per year), and this intensity of care enhances our sense of responsibility toward the patients.⁷ When we know patients better, we are less likely to use diagnostic tests and more likely to use expectant management.⁸

When our relationships with these individuals are "traded in the marketplace" of managed care, we and our patients are the losers, while corporate stockholders are likely beneficiaries. We and our patients do not have the power to control whether we will maintain our relationships. Power is not shared equally in society, and the inequality of power is reflected here in the inability of both doctors and patients to maintain longterm relationships in an economic environment they cannot control.

Patients, of course, also change jobs and homes to make better lives for themselves, but that migration is part of normal growth and development and is not a health insurance issue. While patients' mobility may

affect their continuity with their family physician,⁹ many of these moves are within the same community, and most occur to young families. For these young families, however, even those who remain with the same community, those with employment who are fortunate enough to leave Medicaid and obtain a job with insurance benefits often find that they must change their health insurance. The family physician who cares for Medicaid-enrolled patients through various medical family crises is now left behind when the patient gets a job and moves on to "real" insurance. For some patients, the change in insurance means having the choice of the supposed superiority of more prestigious specialists, rather than lowly family doctors. In this instance, "making it" results in leaving behind many of the essential sources of support and connection, like the family, community, or family doctor, in pursuit of status or prestige. Thus, priorities at work in the larger society affect even so personal a choice as one's physician.

Problems of Power

Power in the Doctor-Patient Relationship

Within the doctor-patient relationship itself, we find internal inequalities and both potential and real abuses of power. By virtue of class, often race, often gender, as well as income, education, and technical expertise, the doctor has more formal power than the patient. In the mechanics of the relationship, the doctor is in control of the timing, location, length, and conditions of doctor-patient interactions and remains clothed, sometimes standing, and definitely in charge of the relationship.¹⁰ Medical students and young trainees who have not yet been socialized to dominate interactions with patients may find themselves uncomfortable with these power relations and may choose a more egalitarian style, at least until the pressures of training force them into controlling the interactions. It is not surprising that many of our patients appreciate our trainees not only for their youthful enthusiasm but also for their willingness to allow the patients to participate more as equals.

Given the power imbalances between doctors and patients, it would seem that we should attempt to offset this inequality and establish relationships with patients that are relationships between equals, in which we attempt to empower the less powerful. Such a goal is congruent with our discipline's spirit-in which a personal relationship takes priority over a technical oneand matches our ideal of a democratic society. Instead, however, we are exhorted by our supervisors to better manage time with the patient in an effort to maximize efficiency and income. This industrial model of the doctor-patient exchange as a "product" to be manufactured with minimal inefficiency has superceded the concept of a relationship, in which growth and connection would have been present. No wonder that we and our patients feel out of control. The corporate model

has taken over the personal model, providing family medicine with yet another conflict with society.

As individuals in family practice, we are, of course, not immune to abuses of power. Regardless of how we think we practice medicine, we practice in a system that many perceive as prejudiced. Through our medical system, we limit patients' access to a variety of medical resources. HIV treatment,¹¹ cardiac reperfusion procedure,¹² and opioid therapy for cancer pain¹³ and fractures¹⁴ are but a few examples of treatments to which people of color have less access than the remainder of the population.

Abuses of power, of course, also occur at a personal level. At an extreme level, a small percentage of physicians actively take advantage of patients' vulnerability to abuse them sexually^{15,16} or do them active harm (eg, the recent case of a general practitioner in England who systematically killed his elderly patients).¹⁷ It is our responsibility to safeguard patients from such abuse, but it is also our responsibility to protect them against all abuses of power. However, we are so uncomfortable with the notion that power affects our doctorpatient relationships that we pretend it is not there, and the result is that some of us are frankly abusive. Chatting with a colleague while we know that a nurse or a patient is waiting for us or ordering a test with ethical implications (like alpha-fetoprotein during pregnancy) without discussing the test with the patient are examples of ordinary day-to-day abuse of power. The tension between the denial that power exists (ie, an ideology of equality) and the practice of oppressive power dates back in this country at least to the Declaration of Independence, when the statement of equality was belied by the brutal fact of slavery and the denial of the vote to women. Within family medicine, we have not systematically addressed this concern any more than society has systematically addressed abuses of power. Again, family practice mirrors society.

Power Within the Family

Let us turn now to issues of power within the family. Historically, in family medicine, when we have talked about caring for the patient within the family context, we have referred to extended families and the family life cycle. Family medicine tended to focus on the strengths offered by the family context, rather than on the vulnerabilities. Power and vulnerability were not central metaphors for what was going on. A more honest vision of families requires that we balance our contextual understanding of the family life cycle with the recognition that while families can be nurturing, they can also be dangerous places for the vulnerable. Unfortunately, our own romantic vision of the family as a safe haven, a source of love and comfort, protection from the rough and tumble of the world outside, is belied for many by the realities of family life.

Abuse of Children. Powerful adults abuse vulnerable children within families in physical, psychological, and sexual ways. A third of girls experience some kind of sexual abuse within their families of origin, and most never reveal it until adulthood. The vast majority of this abuse of power is perpetrated by men and older boys on vulnerable girls (and sometimes on boys) who lack a strong maternal figure to protect them. Stepfathers, mothers' boyfriends, uncles, older cousins, grandfathers, and at times biological fathers, all may be perpetrators.¹⁸ For many girls, the family is not a safe place to live.

While we all abhor child abuse and want removal and punishment of hideous offenders, we are not looking closely at our own experience. Family medicine, like the wider society, has a historical reluctance to recognize and address this abuse because it would mean taking on the nature of male power in families.¹⁰ It would, at times, mean accusing powerful male figures within communities who can use their resources to protect themselves and discredit the victims.

Sexual abuse of girls is not only a catastrophe in itself; it also leaves a legacy of symptoms that family physicians confront every day yet may never recognize. Sexual abuse is not limited to low-income families; it also occurs among middle-class women professionals, of whom more than a quarter have been sexually abused as children by the men in their families.¹⁹ Disproportionately, women who were sexually abused as children fill the ranks of the patients that carry diagnoses of somatization,²⁰ psychiatric illness,²¹ irritable bowel disorder,²² chronic pelvic pain,²³ obesity,²⁴ fibromyalgia,²⁵ and any illness with a substantial functional component.²⁶

Beginning in adolescence, teens who acknowledge having been sexually abused engage in riskier behaviors than do controls.²⁷ Sexual abuse survivors are less able to take care of themselves as adults and are more likely to smoke, drink, and overeat and less likely to get pap smears and mammograms or to use seatbelts and condoms.^{26,28,29} Thus, they are more at risk for a variety of later diseases like HIV and chronic lung disease, and they are more likely to have diseases detected later. Their inability to protect themselves and take care of their bodies may result from not valuing themselves, not recognizing danger, and feeling disempowered and afraid. As Russell said about incest survivors, "Their self-esteem may be so damaged they don't feel they deserve their own loving self-protection."¹⁸

Thus, abuse of power in families creates symptoms, and ultimately diseases, among our patients, but we often find ourselves blaming the patient and not the power abuses that shaped the patients' childhood and self-esteem. Caring for these patients in the context of their families requires recognizing that the family of origin may be toxic for its members. We need to learn to be critical of the harms that happen in families and familiar with identifying the resulting scars and injuries that influence their victims for decades. By not recognizing the origins of powerlessness over their own bodies that these patients experienced as girls and young women, we have little more than strategies of managing them, as we are advised to do with patients with somatization.

Instead, work with survivors of abuse in the family requires that we actually conduct the doctor-patient relationship in a different way. We need to be highly attuned to issues of shame surrounding the experiences of physical and sexual abuse and to change the way we conduct the physical examination. Because being touched by an authority figure is a "loaded" event for the patient, the dynamic of the physical exam needs to be a full partnership. Understanding what kind of abuse a woman experienced will clarify what parts of the examination will be the most difficult.³⁰ Whoever abused them as children, whatever violence they witnessed, whoever hit or controlled them as adults-never were they asked permission. The language of the clinician needs to put the patient back in control of the proceedings: "Is it OK for me to look in your mouth?" This seems like a silly question, but if a person had been forced to engage in oral sex, it would be an essential step for the patient to regain some sense of safety around opening her mouth and having an object poked into it. Likewise, patients need preparation before considering an invasive procedure, with the opportunity to refuse it if will be too traumatic. Subspecialty consultants likewise require education about how to conduct a procedure with a patient who has previously been abused.

Appropriate treatment of the abuse survivor moves the meaning of collaboration to another level: the family physician, mental health specialist, and medical specialist need to have clearly shared understandings about the absolute need for the patient to be in control before consultation can be effective and not harmful.³¹ This strategy of giving control back to the patient, step by step, rarely practiced by physicians, recognizes that the patient should be the one to decide when her body is touched, probed, manipulated. The patient needs to know that she can stop the process at any time.

Abuse of Women. Families are also physically dangerous for women. Women are vulnerable to physical violence within dating relationships, as members of a cohabiting couple, and within the marriage union. Although our discipline has amply documented the high rates of current and lifetime violence against women and the severe adverse health consequences, and although we have participated in developing various screening tools to detect it, we have not yet committed ourselves to detecting it or preventing it.³² At the community level, a Robert Wood Johnson study of five different communities³³ revealed that in no case did the health care system systematically address the problem of violence in families but instead, "champions" in the community were the ones responsible for any change. Frank prejudice-class elitism, racism, sexism, homophobia-toward both perpetrators and victims dominated the attitudes of individual providers and impeded progress. Health care workers who focused on this work felt marginalized by their colleagues. Just as our society is torn about whether women should be treated as respected equals or maintained through force and threat and tradition in submissive roles, family medicine has not taken a clear stance. Care for the patient in the context of family and community must recognize women's vulnerability to physical violence at the hands of intimates and must pledge to learn how to prevent it.

Male Violence. Our society is also ambivalent about violence and its relation to the definition of what it is to be male. On one level, we would like to think that it is manly to turn the other cheek, yet on the other hand, we believe at both personal and national levels that it is honorable to arm and defend oneself against real and perceived threats. On one hand, we believe in the idea that individuals should be safe in their homes and on the streets—ie, that this should be a safe society. Yet, on the other hand, major forces in the population believe that this safety can only be maintained through the right of individuals to bear weapons. On one side, we try to teach our children to be good sports (meaning to play fairly and to respect each other in the context of a competitive game). On the other, we have one father killing another father in a boys' ice hockey game in Massachusetts over how he called a play. With definitions of masculinity so tightly wrapped up in the need to fight, it is not surprising that 28.6% of male high school students carried a weapon within a 30-day period in 1999.34

Where do boys learn to fight? In a somewhat different way from how families are dangerous for women, families are harmful to men, as it is clearly the family that serves as the crucible in which manhood is tempered. Boys learn not to cry, not to acknowledge pain, not to talk about feelings, not to take care of their bodies, not to go to the doctor; they learn that to be "like a girl" is second worst to being a homosexual. The resulting misogyny and homophobia, tightly linked to definitions of manhood, cut men off from closeness with other men and from the tender parts of themselves.

As they grow up, men lose out in the family of procreation. They recognize the loss of a relationship with their own fathers, yet cannot attain the closeness they would like with their own children. Thus, while women may be victims of family violence, men are victims of the masculine ideology promoted by family values. Family practice is ambivalent about our role in preventing this violence done to both men and women; while we advocate detecting it once the damage is done, we are hesitant to consider discussion of what it means to be a man within our usual framework of anticipatory guidance.³²

Power and Vulnerability

Although rape is most commonly perpetrated by an intimate partner, fear of stranger rape dominates social thinking about women's vulnerability. Fear of rape constrains women's activities in ways of which men are unaware,³⁵ and women's vulnerability to rape puts men into more powerful positions: either as those who might take advantage or those who benefit by being protectors.¹⁰ In community samples, past experiences of sexual assault perpetrated both by intimates and by strangers are associated with poorer subjective health and a variety of chronic illnesses and somatic symptoms.^{36,37} Women who have been sexually victimized make more office visits and consume more medical care.³⁸

Some subgroups of women are particularly vulnerable to rape. Women who have been previously victimized in childhood are more at risk of rape in adolescence or adulthood.^{18,39} Broader social conditions such as lack of affordable housing have a direct effect on women fleeing violent relationships; they are more likely to become homeless, and homelessness itself is associated with a risk of physical and sexual assault.^{40,41}

Thus, the power inequities in society, such as low income, homelessness, and male domination, interact with personal vulnerabilities, such as being a sexual abuse survivor or a battered woman, to create very high-risk conditions. Even though we know these facts, and we are aware that upward of one third of women will experience sexual assault during their lifetime, these facts have not shaped how we conduct health care of women in the context of their family or their community. Not only are we not asking about rape, we are not working on changing the factors that lead up to it. Prevention would mean working with children, teenagers, and young men and women around issues of control and domination.⁴²

The Problem of Vulnerable Populations

Vulnerable populations experience more mental illness, substance abuse, violence and victimization (physical, sexual, emotional abuse), social isolation, competing needs (eg, for food, clothing, shelter, child care, elder care), and inadequate or overcrowded housing than do the remainder of the population.⁴³ These social problems may exacerbate their health care needs and limit their ability to obtain care. Aday further states, "To be vulnerable to others is to be in a position of being hurt or ignored, as well as helped by them."⁴³ Vulnerable populations include many segments of our population. Their health is affected by their vulnerability. For example, in our country, African-American males (in Harlem, for example) are dying at high rates from suicide, homicide, and other forms of violence.⁴⁴ Ethnic minorities are less likely to seek medical care, and their health is compromised by disparities in health care treatment.^{45,46} Immigrants and refugees likewise have unique childhood experiences and cultural backgrounds that affect their access to care and the quality of care that they receive.

Similarly, persons with mental illness, disabilities, and substance abuse have unique health problems and experience major obstacles in our system to receiving care for their multiple and complex health problems. While insured populations with such problems are often treated in private psychiatry offices and residential rehabilitation programs, poor populations are "treated" for these problems in underfunded state mental hospitals, jails or prisons, or they may become homeless.⁴³ Further, there is a gap in care for persons with the dual disorders of mental illness and substance abuse, in that persons with mental illness who are on psychotropic medications might not be eligible for entry into a drug rehabilitation program and vice versa.

Impoverished populations are at great risk for highrisk health behaviors and their consequent diseases. However, growing research suggests that socioeconomic status has a greater influence on an individual's and a community's health status than health behaviors or use of health services.⁴⁷⁻⁴⁹ For example, asthma rates are highly correlated with living in school districts close to centers of industrial pollution.⁵⁰ Further, the accumulated life stressors of African-American women have an adverse effect on birth outcomes.⁵¹ In the homeless population, such accumulated life stress has a greater effect on birth outcomes than does prenatal care.⁵²

Among homeless persons, the influence of lack of housing on health is pervasive, regardless of whether the homeless individual is newly homeless, long-term homeless, formerly homeless, or episodically homeless. Even relatively short bouts of homelessness expose individuals to severe deprivations (ie, hunger, lack of adequate hygiene) and victimization (ie, physical assault, robbery, rape).⁵³ Consequently, the homeless, adults and children, have a high prevalence of untreated acute and chronic medical, mental health, and substance abuse problems. Research has found that unstable housing-such as extreme overcrowding, substandard housing (eg, lack of heat), or loss of housing altogether contributes significantly to poor health outcomes and that stable housing plays a critical role in improving these health conditions.⁵⁴ Children born into homelessness result in a second generation that is at risk for homelessness and poverty.

The Cause of Vulnerability

The cause of vulnerable populations' vulnerability is often rooted in families and communities. Our society over time has put fewer and fewer material and nonmaterial resources and less social and human capital into our community's schools, jobs, family incomes, and housing. Further, there are fewer ties between vulnerable people and others who could help them in times of need, as evidenced by the declining number of people who live together in the same household (one quarter of the US population lives alone) and the growing number of single-parent families. Mental illness, substance abuse, and violence are affected by social ties, and persons who come from abusive and disrupted families or social environments are more likely to have these problems. Economic and social disadvantage continue to plague our minority communities, with resultant racial and ethnic disparities in health.⁴³

Obstacles to Care of Vulnerable Populations

Vulnerable populations face numerous problems in obtaining appropriate health care. These problems include financial barriers, transportation problems, competing needs, education and literacy, mental illness, social conditions, fear, lack of availability of health services, and medical provider bias.

Financial Barriers. Financial barriers occur even for low-income populations, because of difficulty in satisfying rigid and sometimes complex eligibility requirements for health insurance. Failure to satisfy eligibility requirements for insurance prevents access to care. Today, few health systems and physicians will treat patients who have no health insurance. In fact, many doctors are even refusing to treat persons who have insurance that is deemed less desirable because of compensation rates.

Transportation. Accessible transportation is often unavailable to vulnerable populations, making it difficult or impossible for members of these populations to travel to medical facilities for care. The problem is compounded by lack of medical facilities that are located in the neighborhoods in which these populations live.

Competing Needs. Vulnerable populations have competing needs. They may place a greater priority on fulfilling their needs for food, shelter, and income than on obtaining needed health services or following through with a prescribed treatment plan. Patients who are hungry may decide that buying food for their family must take priority over purchasing medicine for their diabetes.^{55,56}

Education and Literacy. Education, illiteracy, and language have a direct effect on health and health care. For example, patients may not be able to read their pill bottles and may be too proud to tell their doctors about this limitation. A physician may not realize that a patient cannot read the detailed instructions the physician has provided (ie, limited health literacy), even if the instructions were written in the patient's language. Lack of translators in medical clinics is a related barrier that is commonly encountered by patients who do not speak English.

Mental Illness. Vulnerable individuals who experience psychological distress as well as disabling mental illness may be in the greatest need of health services and yet may be the least able to obtain them. This inaccessibility may be due to the mental illness itself, manifested by paranoia, disorientation, unconventional health beliefs, lack of social supports, lack of organizational skills to gain access to needed services, or fear of authority figures and institutions as a result of previous institutionalization. Further, the mentally ill often require integrated services, largely unavailable today, to handle their multifaceted problems, including mental illness, substance abuse, physical illness, criminality, and such social service-related problems as housing and employment.

Social Conditions. Social conditions can affect compliance with medical care. These social conditions include homelessness; lack of proper sanitation; lack of a stable place to keep medications safe, intact, and refrigerated; and an inability to obtain the proper food for a medically indicated diet such as diabetes mellitus or hypertension.^{55,56} Lacking social support, some vulnerable population groups often do not have anyone who can transport them to a clinic or care for them at home if needed. While most marginally housed persons are long-term residents of their community, many are quite mobile within a city in their search for subsistence resources. This mobility makes continuity of care difficult.

Fear. Fear can be a barrier to care among vulnerable individuals. Because an exhibition of toughness is necessary to survive, disadvantaged populations may at times deny that they have health problems in an attempt to maintain a sense of their own endurance and to maintain a sense of control, however fragile. Yet, while attempting to present a tough façade, they actually may be afraid, because of neighborhood violence, to venture out of the immediate geographical area to which they have become somewhat acclimated and thus cannot seek medical services in another area. They may be too embarrassed to have medical professionals see them in a condition of poor personal hygiene or poor health. They may fear that their meager financial resources will be taken away to pay for the medical care they receive. Fear of authority figures can result in failure to seek medical care. For example, undocumented immigrants have reason to fear that medical providers will contact Immigration and Naturalization authorities, runaway teenagers and homeless women with children may fear child protective service workers, and drug abusers or former prison inmates may fear the police.

Lack of Health Care Facilities. As already mentioned, there is a lack of health care facilities to treat vulnerable populations. As a result, national health care reform and universal coverage are necessary, but may not be sufficient, to solve all of the access problems of special populations. For example, availability and accessibility of primary care for many homeless persons in Great Britain are quite limited despite the fact that there is no need for patients to pay for hospital care and medications.⁵⁷ Because of their great personal demands and lack of resources, many vulnerable populations end up seeking care in emergency rooms, but emergency rooms cannot provide the continuous comprehensive medical care that the complex problems of vulnerable populations require. At the same time, many primary care settings that were designed for the housed poor are not set up to treat the multiple complex problems associated with homelessness. Further, public health systems for the poor tend to target specific programs, such as family planning, prenatal care, tuberculosis testing and treatment, mental health and substance abuse treatment, or immunization, yet the multiple medical and social problems of vulnerable populations do not neatly fit into such types of services. Integration of mental health and substance abuse services with other service settings is infrequent and has also been declining.58 Thus, many vulnerable populations end up seeking medical care late in the course of their diseases or for traumatic or lifethreatening conditions.

Medical Provider Bias. Homeless and other vulnerable populations may find the medical profession itself a barrier to obtaining needed medical care. For example, medical providers may consider homeless persons to be undesirable patients because of their poor hygiene, their mental illness, or because of assumptions that they come to hospitals for shelter and not for a medical problem.⁵⁹ Providers may not understand how the priorities of disadvantaged patients differ from their own in adhering to schedules and keeping appointments, setting up the possibility of conflict and failure. Treatment plans are often automatically based on the assumption that the patient has a reliable source of food, social support, and a home.⁶⁰ Availability of clinicians may itself be an issue: physician recruitment for clinics that serve the underserved may be hampered by poor working conditions, inadequate salaries, physician biases against working with such populations, and the lack of respect this work receives from the medical profession.⁶¹

Further, providers may be afraid to care for vulnerable populations because of fears of malpractice suits or of contracting AIDS.⁴³ Finally, some HMOs today actually bar physicians from providing *pro bono* work; physicians who previously gave of themselves freely to provide care to the uninsured are no longer able, under their contract, to give away medical services.

Understanding Vulnerable Populations' Use of Health Services and Health Outcomes

As we think of the role that family physicians can play in community, it is important to understand how vulnerability affects access to care and health outcomes. The Behavioral Model for Vulnerable Populations⁶² can help structure our thinking around the various aspects of health in which family physicians can become involved. In this model, health outcomes are explained by three groups of factors: predisposing factors, enabling factors, and need factors (Table 1), each of which interacts with health behaviors. This model shows how multiple factors besides the medical care that we provide can affect the health outcomes for vulnerable populations in our communities.

Predisposing Factors

Predisposing factors, such as demographic characteristics, social structure, and health beliefs explain people's predisposition to use or not to use health services. For vulnerable populations, predisposing factors include mental health, substance abuse, criminal behavior, housing status, victimization, immigration status, and acculturation in this domain.

Enabling Factors

Enabling factors, such as income and health insurance, measure the available social, economic, and health care resources that could encourage health care use. For vulnerable populations, we would also consider receipt of public benefits and access to information resources. Community-level enabling factors include the structuring of care at medical facilities to provide for the unique needs of communities, community crime rates, and the level of social services in the community. Recently, the "human capital" and "social capital" of the surrounding communities (eg, civic participation and voting rates) have also been found to affect access to care for vulnerable populations. Further, the overall socioeconomic status of vulnerable populations affects their health outcomes, perhaps to an even greater degree than the medical care that we provide. For example, studies subtantiating the "weathering hypothesis" have shown that the accumulated life stressors experienced by vulnerable populations affect their health (ie, neonatal mortality).⁵¹

Need Factors

Need factors assess health or illness as perceived by the individual and, if available, objective measures as evaluated by a health professional. Clinicians' evaluation of patients may be affected by the patients' vulnerable status, and patients' perceptions of their health may be related to their vulnerable status. In addition, particular conditions are more common among vulnerable populations: mental illness, substance abuse, tuberculosis, HIV, hepatitis C, asthma, sexually transmitted infections, violence, and premature and low birth weight newborns.

Health behaviors include personal health practices, such as diet, tobacco use, exercise, hygiene, contraception, and sexual practices. They also include health services utilization and the process of care provided in health care facilities (ie, care that is appropriate to the needs of vulnerable populations).

The Role of Family Physicians in the Community

The health problems of individual patients result from community-level problems, such as socioeconomic status, violence, pollution, racial and ethnic disparities, and lack of housing. Further, many health problems are related to national health policies concerning housing, illegal drugs, substance abuse treatment, welfare, mental health, and prisons. These community-level problems are

Factors and Behaviors That Contribute to Health Outcomes				
Factors	Factors	Factors	Behaviors	Outcomes
Demographic	Personal and	Perceived	Personal health	Health
characteristics	family resources	health	practices	status
Social	Community	Evaluated	Use of health	Satisfaction
structure	resources	health	services	with care

important not only to impoverished communities but to our general communities as well.

So, what is a community? "The term *community* delineates a wide variety of human associations, from tribes to municipalities to religious denominations."⁶³ In fact, communities are said to include seven types: aboriginal, geographic/political, religious, disease, ethnic/racial, occupational, and virtual.⁶³ "A single set of regulations to fit all types of communities is doomed to failure."⁶³

Family physicians have a key role in improving the health of their communities.⁶⁴ In the course of providing continuous comprehensive care to individuals and families, we will find that our patients will guide us in the community issues that are salient to them. Our involvement in the health of the community can take place at different levels: as a clinician, educator, researcher, and community change agent. A physician who assumes these roles is an activated family physician. Such individuals are in a unique position to help our communities, not only because of our expertise in medicine but because, despite recent issues of breakdown in trust and communication between patients and doctors, physicians are still in an honored place in society. Our words and actions are carefully listened to and observed.

As we shape the family physician of the future, we must remember our roots: the founders of family practice held a strong belief in the importance of our role as family doctors for our communities. Today, family physicians' job satisfaction is most strongly affected by their sense of community involvement (John Frey, MD, personal communication, October 7, 2000).

Family Physician-Clinician Role in the Community

Leaders of medical organizations are considering how their organization's work can be enhanced by focusing on community.^{65,66} This approach suggests that

Table 2

Community Medicine Research Skills

- Conducting focus groups to identify community members' ideas, beliefs, values, and expectations
- Conducting needs assessments
- · Conducting population-based surveys
- · Incorporating population data into practice
- · Identifying, interacting, and negotiating with community leaders
- · Establishing a community-based network of advisors
- · Creating and working in multidisciplinary teams
- · Conducting interventions in our communities
- Working with the community—to disseminate the information generated from the family physician-community partnership

And most of all,

• creating sustainable change—implementing changes that will continue after the initial project is completed

our traditional obligation of treating one patient at a time should be expanded. It should include a set of physician community obligations with a focus on epidemiology (eg, distribution of, and risk factors for, disease in our communities), population members who are not regular attenders of medical care, and allocation of resources among the population.⁶⁷ While this approach is desirable, many family physicians are currently struggling just to get through each demanding day of one-on-one patient care activities.

To make family practice more proactive in focusing on community and an epidemiological approach, family practice groups might be given the resources and responsibility for health planning for the entire community in their practice area, as is currently the practice in the United Kingdom (Kevin Grumbach, MD, personal communication, October 18, 2000). For example, we might design our practices as a "comprehensive family practice model involving community," with community input to help identify community needs. In this model, family physicians would provide integrated care, including primary care, women's health, mental health, substance abuse treatment, and social services for individuals and families with a focus on community-identified needs.

We could also do better in assuring that the information technology revolution enhances our role in providing for the health of our communities. Electronic medical record systems have not yet progressed to the point of being able to conduct health assessments at the level of a family or a community. This is an area ripe for development with the leadership of family physicians. Further, we need a practical health assessment tool for our residents and practitioners to use in assessing the health of their communities, as well as a guidebook for potential actions they can take to resolve community health problems they identify. Maybe we could start with a "family practice short-form 36" (SF-36) for communities.

Although we have busy professional and personal lives outside of our paid work as clinicians, we can volunteer to serve communities that do not have access to quality medical care at sites such as community health fairs, community health centers, immigrant/refugee clinics, or shelter-based clinics. We can meet with students and families in schools, faith communities, and other community-based organizations to work on prevention of injury and violence, substance abuse, behavioral problems, school dropout, sexually transmitted diseases, and unplanned pregnancies.⁶⁸

Family Physician Educator Role in the Community

Students. As educators, we can teach our students about caring for our communities at all levels. But first, we need to revise our admissions policies to recruit students who have a concern about communities and a

passion for working with them. Once these students are enrolled in our medical schools, we will find them teaching us about how to provide service to our communities! We, in turn, can help them learn about their communities and encourage them to document the assets and problems of the community. We can help them learn the resources of the community and strengthen those resources for solving community problems. We can encourage them to ask questions about the community. What is the status of its schools, religious institutions, and outdoor areas and other gathering places? Where are the poverty areas located, and what are the greatest needs of the poverty areas? What health interventions are already ongoing at the community level, and who are the community leaders? What does it mean to be a part of a community? What does it mean to advocate for the health of our communities?69,70

Through direct medical care of vulnerable populations, we can break down stereotypes and stimulate the satisfaction and excitement that results from working to help our communities. In fact, medical students are clamoring for such experience, shown by their heroic efforts to set up school-based health programs, shelterbased clinics, clinics in churches, and health fairs.

Residents. The education begins with medical students, but it also includes residents and other trainees. At the residency level, the Residency Review Committee requirements for community medicine are unstructured and poorly defined, especially when compared to those for clinical rotations such as surgery. We suggest establishing a task force to set clear requirements for our curriculum in community medicine, which should include a required rotation that would focus on improving the health status, access to care, and quality of care within communities and in community-based settings and organizations. Some options to consider would be a full-month rotation, or perhaps 1 half day per week longitudinally during the second and third years of residency. Such a community medicine curriculum task force could establish a standardized curriculum, educational materials, and faculty development training materials to actualize such a curriculum.

On a local level, a residency program's curriculum committee could bring in community clinicians and community members as full members of our clinical faculty to collaborate with key organizations and legislators within communities. These community members will ensure that we focus residents' training on the current issues of our communities in a way that is relevant and acceptable. Their role will be valuable for building and maintaining trusting relationships with our community and its leaders and for enhancing the likelihood that our initiatives will be adopted and sustained.⁶⁹

A model curriculum of this type was developed by Ellen Beck during her fellowship at the University of California, San Diego. Titled "Making a Difference in the Community, Addressing the Health Needs of the Underserved: A Faculty Development Program for Family Physicians,"⁷¹ the program is designed to educate residents and raise the levels of faculty knowledge by including faculty in the educational process. Such a curriculum could include sessions and experiences on homelessness, community-based medical care, occupational medicine, methods of conducting needs assessments of our communities, and research skills unique to community-based medicine. The curriculum would also include skills in how to be an activated clinician, how to be a community change agent, and how to implement community-based change in health and health services.

Family practice residents should be encouraged to conduct a community-based project. The key elements for a successful resident community project include a long-term commitment, supportive faculty, didactic sessions on community health issues, close contact and good communication with community members, work in pairs or teams, and discussion and reflection.⁷² In 1 year, the residents could be encouraged to do a community-based needs assessment of the area of their community that has the highest poverty rates (H. Enubuzor, University of California, San Diego, unpublished data, 1998). When they get to know their community, they could then identify an addressable problem and propose a solution for implementation. The next cohort of residents could develop and implement an intervention based on the needs assessment. This longitudinal approach thus builds on the work of subsequent generations of residents to solve a community problem and makes the projects seem feasible, rather than unattainable. In this way, the residency will gain an understanding of its community, develop relationships within the community, and the community will begin to gain trust in the residency program.

These community medicine educational programs for residents and medical students require resources. They cannot depend on one dedicated faculty-researcher. They require enough faculty with expertise in medical and social sciences, along with protected time for those faculty to implement such a curriculum. This work cannot be limited to classroom didactic sessions but must be experiential in community settings.

Family Physician-Researcher Role in the Community

Family medicine research and training programs can adapt elements from the program on "Understanding and Changing Communities" developed by the University of California, Los Angeles (UCLA) Clinical Scholars Program.⁷³ Skills acquired in such programs might include those listed in Table 2.

In programs such as the UCLA program, residents learn how to create coalitions and partnerships with community organizations, how to "play well with others," and how to develop a community-based project. They also learn how to prepare and deliver a 20-second sound byte, how to present to a legislative or governmental entity, and they develop cross-cultural skills, community data collection skills, and learn to translate clinical experiences and research into changes in policy. In programs of this type, community leaders can be invited to review residents' projects; these leaders can include local and national community activists such as public health officials, advocacy groups, and community service groups.

Family Physician-Change Agent Role in the Community

Family physician researchers and research fellowship directors can choose to focus on studies and interventions that will directly improve the health of our communities, and as clinician-activists we can do the same. We can become involved in activities that directly improve the health of our communities. Such work is most effective if we work collaboratively with the community's citizens to solve the issues they face. We can also serve as a resource for community leaders, who are often better equipped to develop effective solutions to the health-related programs we identify (Denise Rodgers, MD, personal communication, October 5, 2000). For example, a family physician might help a community make the connection between the escalating rates of asthma and local air pollution due to heavy motor vehicle traffic. Community leaders can assist in effecting changes that will have greater influence on the program than clinicians will have in their one-on-one work with patients.

Family physicians can work at the local and national levels to change policies on low-income housing, economics, family preservation, illegal drugs, tobacco, alcohol, and gun violence, the major causes of health problems in our country. We can work to build trust and communication between health and social "sectors" to coordinate services for the multiple complex medical needs of our vulnerable populations.⁴³ Social sectors with which we might work effectively include schools, religious institutions, child welfare agencies, adult protective services, mental health treatment facilities, substance abuse treatment programs, and prison systems.

We can work toward national health reform so that our uninsured patients are cared for, and our fragmented disjointed service delivery systems can come together. And, given that the overall social and economic health of our communities has been shown to have a major effect on health, it is imperative that we invest in our communities and families to bolster the developmental trajectories of our children and build the human potential of the next generations.⁷⁴ Thus, the problems may present to us at the level of caring for a patient, but our response does not have to end at the level of the patient; it can and should proceed to the community level. We do not have to spearhead such efforts, but we do need to be involved. An ancient saying states, "You are not obliged to finish the task but neither are you free to neglect it."

Conclusions

Care of patients in the context of family and community requires that family practice address the issues of power and vulnerability within the doctor-patient relationship, the family itself, and issues within our communities. As a society, we have not been able to address squarely the inequities that abound in the areas of gender, race, class, education, and income, so it is not surprising that these same disparities frame the context in which we try to practice family medicine. We have shown how these same inequalities are detrimental to the health of individuals within families and communities, as well as the health of families and communities themselves.

To make a difference in the health and well-being of those most vulnerable and out of power, family practice must address the same forces that maintain and benefit from the power inequalities. We must again take up our reform banner and join with individuals, families, and communities to change the context of our communities and our country. Indeed, if family practice fails to take a stand on changing the underlying power inequities and preventing further erosion of the health of the most vulnerable, we run the risk, by seeking the mainstream, of perpetuating the status quo. Hopefully, it is not too late to make the correct choice.

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REFERENCES

- Stein H. Culture and identity in family medicine: from counterculture to brave new world. High Plains Applied Anthropologist 2000;20:6-23.
- McWhinney I. Family medicine in perspective. N Engl J Med 1975;293:176-81.
- Flocke S, Stange K, Zyzanski S. The impact of insurance type and forced discontinuity on the delivery of primary care. J Fam Pract 1997;45:129-35.
- Weill L, Blustein J. Faithful patients: the effect of long-term physicianpatient relationships on the costs and use of health care by older Americans. Am J Public Health 1996;86:1742-7.
- Gill J, Mainous A. The role of provider continuity in preventing hospitalizations. Arch Fam Med 1998;7:352-7.

- Gabel L, Lucas J, Westbury R. Why do patients continue to see the same physician? Fam Pract Res J 1993;13:133-47.
- Hjortdahl P. Continuity of care: general practitioners' knowledge about and sense of responsibility toward their patients. Fam Pract 1992;9: 3-8.
- Hjortdahl P, Borchgrevink C. Continuity of care: influence of general practitioners' knowledge about their patients on use of resources in consultations. BMJ 1991;303:1181-4.
- 9. McWhinney I. Continuity of care. J Fam Pract 1982;15:847-8.
- 10. Candib L. Medicine and the family: a feminist perspective. New York: Basic Books, 1995.
- Moore RD, Stanton D, Gopalan R, Chaisson RE. Racial differences in the use of drug therapy for HIV disease in an urban community. N Engl J Med 1994;330:763-8.
- Canto J, Allison J, Kiefe C, et al. Relation of race and sex to the use of reperfusion therapy in Medicare beneficiaries with acute myocardial infarction. N Engl J Med 2000;342:1094-100.
- Bernabei R, Gambassi G, Lapane K, et al. Management of pain in elderly patients with cancer. SAGE Study Group. Systematic assessment of geriatric drug use via epidemiology. JAMA 1998;279:1877-82.
- Todd KH, Samaroo N, Hoffman JR. Ethnicity as a risk factor for inadequate emergency department analgesia [see comments]. JAMA 1993;269:1537-9.
- Kluft R. Incest and subsequent victimization: the case of therapist-patient sexual exploitation, with a description of the sitting duck syndrome. In: Kluft RP, ed. Incest-related syndromes of adult psychopathology. Washington, DC: American Psychiatric Press, 1990:263-87.
- Enbom JA, Thomas CD. Evaluation of sexual misconduct complaints: the Oregon Board of Medical Examiners, 1991 to 1995. Am J Obstet Gynecol 1997;176:1340-6.
- 17. O'Neill B. Doctor as murderer. BMJ 2000;320:329-30.
- Russell D. The secret trauma: incest in the lives of girls and women. New York: Basic Books, 1986.
- Elliott D, Briere J. Sexual abuse trauma among professional women: validating the trauma symptom checklist-40 (TSC-40). Child Abuse Negl 1992;16:391-8.
- Dickinson LM, deGruy FV, Dickinson WP, Candib LM. Health-related quality of life and symptom profiles of female survivors of sexual abuse in primary care. Arch Fam Med 1999;8:35-43.
- Bryer J, Nelson B, Miller J, Krol P. Childhood physical and sexual abuse as factors in adult psychiatric illness. Am J Psychol 1987; 144:1426-30.
- Drossman DA, Lesserman J, Nachman G, et al. Sexual and physical abuse in women with functional or organic gastrointestinal disorders. Ann Intern Med 1990;113:828-33.
- Walker E, Katon W, Harrop-Griffiths J, Holm L, Russo J, Hickok LR. Relationship of chronic pelvic pain to psychiatric diagnoses and childhood sexual abuse. Am J Psychol 1988;145:75-80.
- Felitti VJ. Childhood sexual abuse, depression, and family dysfunction in adult obese patients: a case-control study. South Med J 1994;86: 732-6.
- Walker EA, Keegan D, Gardner G, Sullivan M, Bernstein D, Katon WJ. Psychosocial factors in fibromyalgia compared with rheumatoid arthritis: II. Sexual, physical, and emotional abuse and neglect. Psychosom Med 1997;59:572-7.
- Laws A. Does a history of sexual abuse in childhood play a role in women's health problems? A review. J Womens Health 1993;2:165-72.
- Nagy S, Adcock A, Nagy M. A comparison of risky health behaviors of sexually active, sexually abused, and abstaining adolescents. Pediatrics 1994;93:570-5.
- Springs F, Friedrich W. Health risk behaviors and medical sequelae of childhood sexual abuse. Mayo Clin Proc 1992;67:527-32.
- Klein H, Chao B. Sexual abuse during childhood and adolescence as predictors of HIV-related sexual risk during adulthood among female sexual partners of injection drug users. Violence Against Women 1995;1:55-76.
- Roberts S. The sequelae of childhood sexual abuse: a primary care focus for adult female survivors. Nurse Pract 1996;21:42-52.
- Ruddy N (with commentaries by Farley T, Hayden K). Multiple personality disorder in primary care: a collaboration. Fam Syst Med 1994;12:327-38.
- Candib L. Primary prevention: taking a deeper look. J Fam Pract 2000;49:904-6.

- Cohen S, De Vos E, Newberger E. Barriers to physician identification and treatment of family violence: lessons from five communities. Acad Med 1997;72:S19-S25.
- Kann L, Kinchen S, Williams B, et al. Youth risk behavior surveillance— United States, 1999. CDC surveillance summaries, June 9, 2000. MMWR Morb Mortal Wkly Rep 2000;49(no.SS-5):1-94.
- Furby L, Fischhoff B, Morgan M. Rape prevention and self-defense: at what price? Women's Studies International Forum 1991;14:49-62.
- Golding J. Sexual assault history and physical health in randomly selected Los Angeles women. Health Psychol 1994;13:130-8.
- Golding J, Cooper M, George L. Sexual assault history and health perceptions: seven general population studies. Health Psychol 1997;16:417-25.
- Koss M, Koss P, Woodruff J. Deleterious effects of criminal victimization on women's health and medical utilization. Arch Intern Med 1991;151:342-7.
- Gidycz C, Coble C, Latham L, Layman M. Sexual assault experience in adulthood and prior victimization experiences. Psychology of Women Quarterly 1993;17:151-68.
- Bassuk EL, Weinreb L, Buckner JC, Browne A, Salomon A, Bassuk S. The characteristics and needs of sheltered homeless and low-income housed mothers. JAMA 1996;276:640-6.
- Wenzel S, Koegel P, Leake B, Gelberg L. Antecedents of physical and sexual victimization among homeless women: a comparison to homeless men. Am J Community Psychol 2000;28(3):367-90.
- Stringham P. Violence anticipatory guidance. Pediatr Clin North Am 1998;45:439-48.
- Aday L. At risk in America: the health and health care needs of vulnerable populations in the United States. San Francisco: Jossey-Bass Publishers, 1993.
- 44. Geronimus AT, Bound J, Waidmann TA, Hillemeier MM, Burns PB. Excess mortality among blacks and whites in the United States. N Engl J Med 1996;335:1552-8.
- Satcher D. Eliminating racial and ethnic disparities in health: the role of the 10 leading health indicators. J Natl Med Assoc 2000;92:315-8.
- Fiscella K, Franks P, Gold M, Clancy CM. Inequality in quality: addressing socioeconomic, racial, and ethnic disparities in health care. JAMA 2000;283:2579-84.
- Lynch J, Kaplan G, Shema S. Cumulative impact of sustained economic hardship on physical, cognitive, psychological, and social functioning. N Engl J Med 1997;337:1889-95.
- Kawachi I, Kennedy BP, Lochner K, Prothrow-Stith D. Social capital, income inequality, and mortality. Am J Public Health 1997;87:1491-8.
- Williams RB. Lower socioeconomic status and increased mortality: early childhood roots and the potential for successful interventions. JAMA 1998;279:1745-6.
- van Vliet P, Knape M, de Hartog J, Janssen N, Harssema H, Brunekreef B. Motor vehicle exhaust and chronic respiratory symptoms in children living near freeways. Environ Res 1997;74:122-32.
- Geronimus A. The weathering hypothesis and the health of African-American women and infants: evidence and speculations. Ethn Dis 1992;2:207-21.
- Stein JA, Lu M, Gelberg L. Homelessness history and adverse birth outcomes associations with prenatal care, dysfunctional behaviors, medical risk, and ethnicity. Health Psychol 2000;19:524-34.
- Link B, Susser E, Stueve A, Phelan J, Moore R, Struening E. Lifetime and 5-year prevalence of homelessness in the United States. Am J Public Health 1994;84:1907-12.
- Bauman K. Shifting family definitions: the effect of cohabitation and other nonfamily household relationships on measures of poverty. Demography 1999;36:315-25.
- Kersey MA, Beran MS, McGovern PG, Biros MH, Lurie N. The prevalence and effects of hunger in an emergency department patient population. Acad Emerg Med 1999;6:1109-14.
- Nelson K, Brown M, Lurie N. Hunger in an adult patient population. JAMA 1998;279:1211-4.
- 57. Reuler J. Health care for the homeless in a national health program. Am J Public Health 1989;79:1033-5.
- Calloway M, Topping S, Morrissey J. Trends in linkage behavior among providers of homeless persons who are seriously and persistently mentally ill [abstract]. Association for Health Services 1998;15:54-5.
- Baxter E, Hopper K. Private lives/public spaces: homeless adults on the streets of New York. New York: Institute for Social Welfare Research, 1981.

- 60. Koegel P, Gelberg L. Patient-oriented approach to providing care to homeless persons. In: Wood D, ed. Delivering health care to homeless persons: a guide to the diagnosis and management of medical and mental health conditions. New York: Springer Publishing Company, 1992:16-29.
- Doblin B, Gelberg L, Freeman H. Patient care and professional staffing patterns in McKinney Act clinics providing primary care to the homeless. JAMA 1992;267:698-701.
- Gelberg L, Andersen R, Leake B. The behavioral model for vulnerable populations: application to medical care use and outcomes. Health Serv Res 2000;34:1273-302.
- Weijer C, Emanuel EJ. Protecting communities in biomedical research. Science 2000;289:1142-4.
- Foreman S. Social responsibility and the academic medical center: building community-based systems for the nation's health. Acad Med 1994;69:97-102.
- 65. Wright RA. Community-oriented primary care. JAMA 1993;269: 2544-7.
- Pathman DE, Steiner BD, Williams E, Riggins T. The four community dimensions of primary care practice. J Fam Pract 1998;46:293-303.

- Greenlick MR. Educating physicians for population-based clinical practice. JAMA 1992;267:1645-8.
- 68. Haggerty R. Community pediatrics: can it be taught? Can it be practiced? Pediatrics 1999;104:111-2.
- Charney E. Pediatric education in community settings: where do we go from here? Pediatrics 1996;98:1293-5.
- Christoffel KK. Public health advocacy: process and product. Am J Public Health 2000;90:722-6.
- Beck E. Addressing the health needs of the underserved. Bioethics Forum 1999;15:31-5.
- Miller FA, Melton WD, Waitzkin H. An innovative community medicine curriculum: the La Mesa housecleaning cooperative. West J Med 2000;172:337-9.
- Brook R, Shapiro M, Wells K, Shekelle P. Renewal application July 1, 2001–June 30, 2005. Los Angeles: Robert Wood Johnson Foundation Clinical Scholars Program, University of California at Los Angeles, 2000.
- McCain M, Mustard J. Reversing the real brain drain: early years study, final report. Toronto: Publications Ontario, 1999.