Pediatricians and their colleagues in the social and behavioral sciences seek better understandings of how to keep children healthy. Some of the most basic and essential understandings of the processes of health and illness have emerged from the study of families. More than 25 years ago, Litman⁷ asserted that “the family constitutes perhaps the most important social context within which illness occurs and is resolved. It consequently serves as a primary unit in health and medical care.” More recently, progressive health care professionals and organizations have moved toward family-centered care,⁸ and family-focused care,⁹ reflecting philosophic, practical, and evidence-based commitments to the understanding of children’s health outcomes as a function of family characteristics. This article reviews these recent trends in pediatrics and in the social and behavioral sciences to document the opportunities and challenges faced by pediatricians and other health care professionals as they pursue basic commitments to healthy children and successful families. These emergent mutual concerns of pediatricians and social and behavioral scientists generate many of the implications for training, practice, policy, and research promulgated by the accompanying report of the American Academy of Pediatrics (AAP) Task Force on the Family.⁵

We begin with consideration of contemporary pediatrics’ embrace of biopsychosocial analyses⁶ and the adoption of child development as a basic science⁷ as a means of diagnosing and treating within the “new morbidity.”⁸ Family-centered care and family-focused care evolve simultaneously with these advances in pediatrics. In the social and behavioral sciences, research themes describing successful families, incorporating cultural diversity and sensitivity, and seeking avenues to contribute to societal needs converge such that child health is a unifying concern. The venues in which such mutual interests of pediatricians and social and behavioral scientists evolve will be described. The manner in which contemporary research on families can guide or enhance pediatric practice will be elaborated on with attention to health maintenance, primary care, chronic care, and community and policy applications.

**PEDIATRICS AT THE DAWN OF THE 21ST CENTURY**

Empirical data and conceptual advances fuel the embrace of biopsychosocial frameworks as pediatricians strive to serve today’s children. Serving today’s children means serving today’s families. In his address on child health in the year 2000, Haggerty⁸ revisits the discovery of the new morbidity 2 decades earlier as well as enduring epidemiologic data, such as the finding that up to 25% of pediatric office visits are associated with psychosomatic, social, or behavioral pathology.⁹ Newer morbidity adds to the challenges faced by pediatricians, for instance, as the care of children with human immunodeficiency virus¹⁰ or new transplantation procedures¹¹ become part of policy and practice.

From the other end of the developmental spectrum—adulthood—recent data have demonstrated higher levels of adult health risk behavior, morbidity, and mortality to be associated in a strong, graded manner with adverse childhood experiences.¹² More than half of a sample of more than 8000 adult health maintenance organization patients reported exposure to some of 7 categories of adverse childhood experiences, such as household dysfunction, domestic violence, or living with substance-abusing or mentally ill adults. Individuals with experience in 4 or more categories of childhood adversity “had 4-fold to 12-fold increased risk for alcoholism, drug abuse, depression, and suicide attempt” as well as increased incidence of obesity, heart disease, cancer, lung disease, liver disease, and skeletal fracture. Thus, in addition to pediatricians encountering new and newer morbidities in childhood, they are at the front line for prevention efforts for significant adult morbidity and mortality.

Numerous sources confirm the mission of pediatrics to treat illness and maintain health in the context of family. Most recently, the Public Health Policy Advisory Board, a new organization chaired by former US Department of Health and Human Services Secretary Louis Sullivan, MD, proffered as its foremost recommendation the need to “emphasize the central role of families and communities” in its report *Health and the American Child: Risks, Trends, and Priorities for the Twenty-First Century.*¹³ As early as 1988, the AAP Committee on Psychosocial Aspects of
Child and Family Health lamented that the “powerful therapeutic potential of pediatricians’ interactions with families is not always sufficiently realized. Effective cooperation between physician, family, and associated health professionals is needed to achieve optimal function and adaptation for child and family, both biologically and socially.”

Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, a key set of practice standards, explicitly asserted that “health supervision goals include enhancing families’ strengths, addressing families’ problems, promoting resilience, building parental competence, and helping families share in responsibility for preventing illness or disability and promoting health.”

Recent years have seen amplification and clarification of the pediatrician’s mission and obligation in a variety of statements and articles, such as “Care Coordination: Integrating Health and Related Systems of Care for Children With Special Health Care Needs,” “The Role of the Pediatrician in Recognizing and Intervening on Behalf of Abused Women,” “Children in Diverse Family Constellations,” and “Pediatric Care for Children Whose Parents Are Gay or Lesbian.”

The book, The Family Is the Patient: Using Family Interviews in Children’s Medical Care, emphasized family interviewing in children’s medical care. Another book, Health and Welfare for Families in the 21st Century, documented social and political forces in family health and health promotion. Pediatricians and behavioral and social scientists have collaborated to describe and integrate the scientific and empirical bases for this appropriately enlarging focus of pediatric policy and practice.

Contemporaneous with these developments in pediatrics have been significant trends in the social and behavioral sciences, which are increasingly ready for further integration and application in pediatrics.

**SOCIAL AND BEHAVIORAL SCIENCE AT THE DAWN OF THE 21ST CENTURY**

The fields of family research broadened and deepened in recent years with 2 separate but related trends, especially relevant for the interests and needs of pediatricians as they pursue enhanced health for children. One trend involves attention to describing and understanding “successful families,” an important advance over earlier preoccupations with dysfunctional or pathologic families. A second trend involves attention to family diversity, cultural diversity, and generation of understandings basic to the delivery of culturally sensitive or culturally competent services by health care professionals.

Family researchers have had a longstanding interest in the associations between a variety of family structure and process variables and outcomes in terms of family members’ health. Traditionally, there has been more interest in relatively narrow mental health outcomes, though contemporary studies are more apt to assess health in a multidimensional biopsychosocial framework considering physical and mental health variables. Also traditionally, there has been a bias toward study of the family as “the breeding ground for somatic complaints.”

Despite these traditional emphases, even as early as 1976, there was interest in some of the more positive or salutary aspects of family structure and process, as captured in Pratt’s notion of the energized family and in an emerging family strengths movement in social science and family therapy.

More recently, researchers as well as clinicians have demonstrated the value of documenting and examining successful families, and good child outcomes.

The interest in positive features of family process and structure was not pursued only to counteract the problematic emphasis on psychopathologic processes and illness outcomes. Rather, broadening the research focus to include dimensions of strength, success, and resilience was pursued to achieve a more comprehensive, accurate, and ecologically valid view of family influences on health, a view with greater utility for professionals interested in promoting health and good outcomes for children.

To date, most of the intervention research has fallen short of the conceptual demands of a social-ecologic framework, despite the growing awareness and policy demands for consideration of family contexts.

In a review of 40 randomized clinical trial intervention studies using child’s physical health concerns as outcomes, only 31 were explicitly theory driven, and only 7 enacted a social-ecologic model, as indicated by including family members in the intervention itself.

Those researchers who strove for a more balanced articulation of strengths and weaknesses have generated some of the most useful data and understandings that manifest in contemporary notions of at-risk families with factors of risk, protection, and resilience. For instance, although poverty is widely acknowledged to be a powerful, even pervasive, negative influence on families and a correlate of numerous negative health outcomes for children, researchers using multifactorial and ecologic frameworks have been able to identify significant opportunities for building on strengths to promote children’s health and well-being. The critical reviews by Black et al of interventions targeting children in low-income urban settings demonstrated how these more sophisticated frameworks can guide policy and practice in ways likely to improve important health outcomes. Poverty as a final common denominator is also better understood when anthropologic research weighs in on such multifactorial and multidisciplinary challenges. For instance, the 9-year longitudinal study of children in a rural Caribbean village by Flinn and England found that family environment was a more important predictor than socioeconomic condition in accounting for relationships between psychosocial stress and illness, concluding that the stress and immunosuppression associated with family processes may mediate links between poverty and health.

Processes by which children in adverse circumstances evade predicted negative impacts and emerge healthy or successful in later life are characterized by the notion of resilience. Among the basic features of healthy or successful families are resil-
ience and the capacity to adapt. Resilient families are those who “withstand and rebound from disruptive life challenges.” Positive health outcomes for children may be more likely in resilient families in which particular belief systems, organizational processes, and communication processes described by family researchers suggest guidelines and principles for practice. Resilience researchers have marshaled the conceptual and empirical justifications for this progressive orientation toward individual and family functioning.

Although the discussion that follows will emphasize application of recent research on successful or resilient families, it is important to note that retaining the concepts of risky families will be important as well. For instance, Repetti et al. adapted a cascade of risk framework in their analysis of the associations between family structure and processes and children’s health to conclude that:

... diverse research literatures consistently point to adverse developmental effects of 3 characteristics of a family social environment: conflict, anger, and aggression; insufficient emotional sustenance; and poor regulation of children’s behavior. In some cases, the effects on health are direct, such as when parental neglect leaves a child vulnerable to accidents or when aggression results in physical abuse of a child. In other cases, the effects may be mediated and sustained by disruptions in the child’s ability to acquire appropriate emotional and behavioral self-regulatory skills or to mount a successful physiologic/neuroendocrine and/or behavioral response to stress...

Our analyses then will need to consider family processes, such as conflict, anger, aggression, emotional neglect, and ineffective discipline, as elements in poor health outcomes for children. At least as important will be consideration of the association of successful family variables, such as good communication, social connectedness, positive parenting, and religious or spiritual orientation, as factors in health and illness.

**MUTUAL INTERESTS OF FAMILY RESEARCHERS AND PEDIATRICIANS**

These considerations of trends in behavioral and social science converge in important ways with the trends in pediatrics outlined earlier. Family researchers and pediatrics have mutual interest in understanding successful families and healthy children. Health and health promotion are key concerns; illness and health-risk behavior, especially as encompassed by the new morbidity, are shared foci. As an example, consider the problem of substance abuse, a developmental biopsychosocial morbidity of serious consequence. Data reviewed by Repetti et al. supported their cascade model of risky families:

Our model posits that the enhanced risks for mental and physical illness are the result of an integrated biobehavioral risk profile that evolves from exposure to risky family environments and is characterized by dysregulated physiologic and neuroendocrine functioning, the accumulation of allostatic load, poor emotional regulation skills, poor social competence, and poor health behaviors, especially substance abuse. The model emphasizes that these factors are interrelated: Enhanced physiologic and neuroendocrine reactivity are associated with poor emotional regulation, which is believed to be a primary origin of poor social competence; substance abuse has been posited to represent, in part, a method of coping in the absence of effective emotion-regulation and social competence skills, and a method of self-medication for dysregulated biological systems. This biobehavioral risk profile enhances risk for mental and physical health, which, in turn, influence each other.

Another example of the converging mutual interests of pediatricians with social and behavioral scientists is evident in confirming the integrity of the “Health Charter” found in Bright Futures, a well-regarded guide for progressive and effective pediatric practice. It states: “Every child and adolescent deserves a nurturing family and supportive relationships with other significant persons who provide security, positive role models, warmth, love, and unconditional acceptance. A child’s health begins with the health of his parents.”

This premise accrued important empirical support in a recent report titled Setting an Example: The Health, Medical Care, and Health-Related Behavior of American Parents. These analyses of survey data from the National Center for Health Statistics revealed that 30% of mothers and 40% of fathers engage in at least 1 health risk behavior (smoking, drinking, being overweight, exercising insufficiently, driving after drinking). Less than half of all parents surveyed engaged in at least 3 of 5 good health habits (using a seat belt, eating breakfast, participating in sports or exercise, getting enough sleep, rarely snacking). Married parents who reported having stress in their lives were less likely to practice positive behaviors and more likely to engage in negative behaviors. Only 55% of fathers and 74% of mothers reported having a medical check-up within the last 2 years. The “report concludes by calling on parents to set a better example of healthy behavior for their children. It also calls on the public health community to find more effective strategies for encouraging parents to engage in healthful behaviors. Parents have the strongest motivation of any group of adults to change their behavior and preserve their health: they have children to raise.” Thus, social and behavioral science joins Bright Futures in setting an agenda for health care professionals.

The challenges in such an agenda cannot be underestimated, given recent findings reported by Minkovitz et al. Their survey of 30 pediatric practices participating in the Healthy Steps for Young Children program, a national demonstration project committed to improving the quality of children’s health care by enhancing child development and family-involvement components, found that only one third of physicians conduct family risk assessments basic to enhanced care delivery.

One more example illustrates the mutual concerns of pediatricians and family researchers and introduces a set of caveats that complicate the task of enhancing communication between researchers and practitioners. In his thoughtful manifesto for child health care professionals on the front line, Rushton provided perspectives on the challenges of divorce and single-parent families:

Even if we were to suddenly make a dramatic shift back to two-parent households in this country, the damage already done to more than one generation may take generations to...
family structure. Research on the effects of divorce is that of family discord indicators relevant to examination of the impact of family investigations, philosophic and ideologic biases may be the first appearance of the consensus document on serve the children in our care. The intersection of health research and family research is especially vulnerable. For example, Cotten documented the problems inherent in research on marital status and mental health because of the commonly restricted comparison of married versus nonmarried groups in many studies. Her analyses that broke out from the nonmarried group sub-samples of separated or divorced, widowed, and never married generated some highly differentiated patterns of relationships between these marital statuses and distress as well as utility of psychosocial resources, such as support from friends and family or self-esteem. Even in this recent effort substantiating the need for more precise levels of the marital status index, it is striking that parent versus nonparent status is not incorporated. This omission is especially problematic given that important health correlates of parent status have been documented. More specifically, health outcomes for adolescents with diabetes can be differentiated in contrasts of single-parent, blended, and intact family structures. In addition, multiple sources or multiple informants in research on family processes are important given demonstrations of discordance between children and their caretakers on a variety of perceptions of health indices. With these cautions in mind, it remains useful to review recent research with successful families as a framework and then to consider a variety of venues of pediatric practice that might call on such findings.

SUCCESSFUL FAMILIES AND HEALTHY CHILDREN

As noted earlier, a catalog of family processes associated with positive outcomes has been generated in recent years by family researchers. A growing body of research is documenting relationships between such family processes and child health in ways relevant to current pediatric practice, training, and policies. Examples of such research will be reviewed here, followed by consideration of existing pediatric venues most likely to use and generate such understandings. Next, examples of such integrations of family research findings in pediatrics will be described. Although one may rely on the original catalog of successful family variables generated by a gathering of family researchers a decade ago, it is important to recognize that there is considerable conceptual and methodologic overlap of constructs within the catalog, as well as a set of several constructs generated since that time or in studies beyond the scope of the original review. Thus, the catalog is neither comprehensive nor definitive but is certainly useful to organize current data and understanding. For the presentation that follows, we will refer to the dimensions or characteristics offered by Krysan et al and constructs and variables studied in the literature on family coping and positive parenting. These researchers have mapped a view of child health outcomes associated with processes in successful families that include communication, encouragement of individuals, expression of appreciation, commitment to family, religious or spiritual orientation, social

Thus, Rushton had important expectations of the research on successful families. In addition, he was aware that a naive view that simple notions of family structure that might contrast “normal” families and divorced families or might attribute deficits in a simple causal relationship without adequate consideration of complex family processes will not ultimately serve the children in our care.

CAVEATS ON RESEARCH AND ITS APPLICATIONS

Before reviewing the recent research on successful families that might serve pediatricians and the children in their care, it is important to consider some of the limitations and cautions to be exercised in constructing applications of the social and behavioral science to pediatric practice and policy. As suggested earlier, the mutual concerns of family researchers and pediatricians are already generating helpful conceptualizations and practices. Perhaps we know enough about family strengths and weaknesses and how best to care for children such that further basic research is not necessary or may even be counterproductive in terms of resource allocation or access to quality services. Certainly, in the decade since the first appearance of the consensus document on characteristics of successful families, important clarifications and elaborations have been generated by social and behavioral scientists and used in formulating policy and practice in pediatrics.

Among the challenges faced in the application process are a variety of generic limitations of research and a few concerns specific to family research. For instance, practitioners are most often appropriately concerned with the individual patient in their care at the moment; calling on scientific data summarized and interpreted on the basis of groups and statistical probabilities can be irrelevant or misleading. Most relationships demonstrated by the social and behavioral research under consideration derive from correlational analyses. Inappropriately or prematurely inferring or substantiating causal relationships and then applying these to a single case is fraught with dangers, inaccuracies, and ethical problems. When families or “family values” are the subject of investigation, philosophic and ideologic biases may be implicit and explicit in even the most objective scientific research. Among the most compelling distinctions relevant to examination of the impact of family process on child health is that of family discord independent of or in association with marital status or family structure. Research on the effects of divorce may be especially prone to some of these biases, confounds, and fallacies.

As noted earlier, a catalog of family processes associated with positive outcomes has been generated in recent years by family researchers. A growing body of research is documenting relationships between such family processes and child health in ways relevant to current pediatric practice, training, and policies. Examples of such research will be reviewed here, followed by consideration of existing pediatric venues most likely to use and generate such understandings. Next, examples of such integrations of family research findings in pediatrics will be described. Although one may rely on the original catalog of successful family variables generated by a gathering of family researchers a decade ago, it is important to recognize that there is considerable conceptual and methodologic overlap of constructs within the catalog, as well as a set of several constructs generated since that time or in studies beyond the scope of the original review. Thus, the catalog is neither comprehensive nor definitive but is certainly useful to organize current data and understanding. For the presentation that follows, we will refer to the dimensions or characteristics offered by Krysan et al and constructs and variables studied in the literature on family coping and positive parenting. These researchers have mapped a view of child health outcomes associated with processes in successful families that include communication, encouragement of individuals, expression of appreciation, commitment to family, religious or spiritual orientation, social
connectedness, ability to adapt, resilience, clear roles, and family time together.

Many manifestations of successful family functioning are observable in communication processes and dynamics within the family. Parent-child and marital communication processes have been studied. Walsh32 documented communication clarity, open emotional expression, and collaborative problem-solving as elements of resilience associated with recovery from illness and adaptation to chronic illness or disability. In a community-based sample of 225 families with an adolescent, similar communication skills and styles reflecting conflict resolution, problem-solving, and open, reciprocal emotional expression were among the factors positively associated with better health; health assessment was based on a self-reported child’s health composite indexed along numerous dimensions, including somatic symptoms, health perceptions and evaluation, abstinence from alcohol, general well-being, and traditional mental health items on depression and anxiety.54 Clearly, specific relationships of a particular communication style to a specific health outcome have not been substantiated by studies such as this. However, salutogenic elements of empirically derived family typologies have been documented and suggest that more effective or successful families have better child health as part of their success.

At a more molecular or biologic level, the nature of these relationships also have been elucidated by longitudinal research demonstrating that parent-child communication patterns described as parental coaching of emotional expression are associated with improved vagal functioning in response to stress at 5 years of age.55 Such family communication styles or child-rearing practices that teach about emotions and their regulation are predictive of the child’s emotion regulation 3 years later and significantly associated with the child’s physical health at 8 years of age.

Communication dimensions were seen in a more directly clinical situation in a study of 101 adolescents (mean age: 15.5 years) who had recurrent headaches. When compared with healthy controls, these children were less likely to frequently express their emotions in daily family life.56 Because the sample of children with headaches had a disproportionate number of single-parent families, Osterhaus suggested 2 hypotheses relevant to the structural dimensions of communication to be addressed by future research: is reduced emotional expressivity a function of having 1 rather than 2 parents in the home; and/or might the stresses associated with life in a single-parent home generate a greater load of particular types of emotion (eg, worry, sadness), which may be expressed in different ways? Such empirical questions open the way to identifying communication patterns or skills that could characterize successful single-parent families as well as successful 2-parent families.

Family time together is a dimension of successful families related to communication and often measured in terms of families’ rituals, including family mealtime. Though Baranowski57 remained concerned about methodologic problems in the relevant research, there do appear to be cognitive and dietary-practice benefits for children when families have mealtime together.

Among the most substantially documented relationships between a characteristic of successful families and health outcomes is social connectedness or social support. This dimension is evident and relevant within the family (eg, quality of relationships between and among family members) and in the family’s connection to instrumental and emotional resources outside the family. The importance of social support for health is evident from the beginning of life, as documented in a review by Dunkel-Schetter et al58 of more than 200 studies of the determinants of adverse birth outcomes; social support from the infant’s father and/or other family members predicts higher birth weight, among other positive birth outcomes. The mechanisms by which social support impacts health remain the subject of ongoing research, though evidence indicates that the changes in cardiovascular, endocrine, and immune functions associated with social support justify incorporation of social support interventions in prevention and treatment of health problems.59 Scores of studies across the life span document reduced health risks as well as lower morbidity and mortality in conditions of adequate to high social support.60 Only a few of these studies examined child health outcomes explicitly, so it is important to consider the positive impact of parental health on child health, as noted earlier, along with more direct child health indicators. Marriage, itself a key form of social connectedness, is well documented as a health protector in that “married individuals are more likely to comply with medical regimens, abstain from smoking, drink moderately, avoid risk-taking behavior, and lead stable, secure, and scheduled lifestyles.”61 Children with married parents, then, have an advantage of such models for shaping their own health behavior.42 The protective impact of marriage appears to be stronger for men than for women, though how this might change with recent changes in women’s roles and work outside the home, for instance, remains to be seen.51,62

If marriage has direct and indirect positive impacts on children’s health, what then of divorce, an example perhaps of disconnectedness or an unsuccessful family? As noted earlier, research on the impact of divorce on children remains controversial, and the findings to date are subject to varying interpretations and numerous qualifications.49 Relatively little of this research has examined the long-term impact of divorce on children’s health. Our best information on this question comes from the classic Terman Life Cycle Study, which documented a higher risk of premature mortality for boys from divorced families throughout the life span56; the somewhat higher risk for girls was not statistically significant. This study began in 1921 and followed a large homogeneous group of 1528 bright, white, middle-class Californian children through 1991. At study entry, the children were approximately 11 years old. Approximately 13% of the sample (160 children) experienced the divorce of their parents before reaching 21 years of
age. Of these, 48% (76 individuals) died between 1950 and 1991. The factors mediating this increased risk for men include a greater likelihood to have their own marriages end in divorce, lower educational level, and lower degree of involvement in service activities. For women, those who experienced parental divorce during childhood were more likely to experience their own divorce in adulthood and more likely to smoke, 2 factors predicting higher mortality risk. Small sample size precluded definitive explanations of the higher risks, though evidence suggested that “psychosocial difficulties associated with parental divorce may lead individuals down a destructive path that ultimately results in higher mortality risk.” The authors appropriately pointed out that although their analyses were based on comparisons of divorced with nondivorced families, this rather crude index was probably a proxy measure for family conflict. If more refined measures of communication styles or conflict types and levels had been available in the Terman Study archives, they would have expected even stronger relationships with morbidity and mortality. Married families with high conflict would likely have shown greater risk than would divorced families with low conflict levels. On the one hand, the homogeneity of the sample and its decades-old data sources limited generalizability; on the other hand, the demonstration of this effect in a longitudinal sample relatively free of known risk elevators, such as poverty or limited access to medical care, underlined the salience of the findings.

Factors of poverty and limited access to health care figured more prominently in other recent studies that document social connectedness as a successful family dimension. For instance, with recent concerns about underimmunization among Latino children living in poor urban areas, Anderson et al64 surveyed 688 mothers in Los Angeles to find that those with 1 or more close family members present were more likely to have a child with adequate immunization status. Interestingly, the findings of this study also showed that the better-immunized children were with less acculturated mothers, suggesting that the continuity of the closer family or social structure of the mostly Mexican culture may be a protective factor.

One additional example of the salience of social connectedness for optimal health comes from the National Longitudinal Study on Adolescent Health (Add Health).65 Drawing from cross-sectional interview data from more than 90,000 adolescents in grades 7 through 12, these researchers identified parent-family connectedness and school connectedness as the most robust correlates, protective against virtually all of the multidimensional health risk behaviors assessed. The items composing these variables included the adolescents’ ratings of questions about closeness to mother or father, perceived caring by mother or father, satisfaction with relationship with mother or father, feeling loved and wanted by family members, feeling part of school, feeling treated fairly by teachers, and feeling close to people at school. With notable consistency across the domains of risk, the role of parents and family in shaping the health of adolescents was evident.

The Add Health study also provided data on another of the successful families dimensions, religious or spiritual orientation. Most of the adolescents (88%) reported having a religion. Among those ascribing an importance to religion and prayer, onset of sexual behavior was later and levels of substance abuse were lower. These students did not show lower levels of emotional distress associated with their religious orientation, though other longitudinal studies have identified a protective function.66,67 Data from the University of Michigan’s Monitoring the Future survey of a nationally representative sample of 5000 high school students documented the association between levels of religiosity (indexed in terms of importance, attendance, and affiliation) and healthy outcomes; Wallace and Forman68 found “religious youth less likely than other youth to engage in behaviors that are potentially detrimental to their health and more likely than other youth to engage in behavior that can enhance their health.” The correlations were weak to moderate but statistically significant. In addition, in calling on survey data from previous years (1976–1996), they were able to document that “highly religious high school seniors have been relatively unaffected by the broad societal-level increases in marijuana use; their use has remained relatively low.”

Although these studies focus on adolescents, fewer studies have focused on the relationship between religiosity and health behavior in younger children. In Tinsley’s69 studies of preschool children and their mothers, it was a family climate characterized as moral-religious that correlated with the child’s tendency to select healthful foods. The manner in which such relationships are established or evolve remains in need of further research, but it is likely that the kind of modeling or observational learning processes suggested earlier from Setting an Example42 are responsible. Neumann and Chi70 hypothesized that “parental theistic religious values and church attendance may correlate with the physical health and stress response of their offspring” and found suggestive support in their exploratory study of adults using psychologic and physiologic measures.

Indirect effects of religiosity on health and health behavior may be relevant in successful families. In a questionnaire study of 97 couples, Mahoney et al71 found that when couples engaged in religious activities together and shared perceptions on the sanctification of marriage, including beliefs about sacredness and presence of God in marriage, marital adjustment and perceived benefits of marriage were higher. Conflict was lower and communication was better in these families. These manifestations of what the authors term an integration of religion and marriage were more powerful correlates than the religiosity of an individual in the couple or religious homogamy, both members of a couple belonging to the same faith denomination or tradition. It is likely that the associations between the family’s religious or spiritual orientation and child health are significant and complex, with their delineation in need of fur-
ther research. Useful conceptual models, such as Walsh's for family resilience, invoke belief systems with transcendence and spirituality as key elements and may guide research and practice.

Resilience as a property of successful families and a factor in healthy outcomes in children also involves a belief system that makes meaning of adversity and maintains a positive outlook. This ability to adapt has also been associated with flexibility in organizational processes and proactivity as family processes. Only limited data exist to document these relationships. For instance, in a prospective cohort study of 246 patients in 66 families with at least 1 child, Clover et al found that 46 children and 20 adults developed influenza B infection during the 1983 flu epidemic. Functional families with higher scores on an adaptability scale (ie, flexibly organized and responsive to stress) were more likely to remain healthy. An unexpected finding was that dysfunctional families characterized as disengaged (eg, less cohesive, spend less time together) also remained healthy. The findings from Ransom and Fisher noted earlier also documented better child health outcomes in flexible, adaptive, balanced families. Because complicated conceptual and methodologic controversies constrain interpretation of these data, they are offered here only as suggestive of the kinds of behavioral science data on successful families that might eventually be relevant to pediatricians.

CONTEMPORARY VENUES AND MODELS FOR APPLICATION OF FAMILY RESEARCH

As family researchers continue their mission to conceptualize and measure successful families, clinical researchers and collaborations among behavioral and social scientists and pediatricians continue to use family-oriented ideas and tools to enhance the quality of care for children. Neither restricting practice only to applications strongly supported by empirical evidence nor disregarding suggestive concepts and findings about family factors in child health characterizes current pediatric practice. At its best, this situation promotes the refinement of research and practice such that children's health can be promoted and enhanced. Before reviewing examples of such work, it is useful to briefly list some of the particular venues, specialties, or disciplines that are most conducive to such advances. These venues include behavioral and developmental pediatrics, community pediatrics, collaborative family health care, pediatric psychology, and home visiting. Examples in the areas of health maintenance and primary care, chronic illness care, and community or public health policy and advocacy will then be considered.

A series of statements within pediatrics over the past several years have reflected awareness and commitment to the crucial role of family processes in child health. In 1994, Palfrey issued what she termed an “action plan for child health,” a blending of best practices in pediatrics with emphasis on advocacy, family preservation, and interdisciplinary collaboration constituting community child health. Around the same time, Zuckerman and Parker called for preventive pediatrics and described their version of “enriched pediatric primary care.” Schor conceptualized family influences on child health in contributing to the pediatric seminar Family-Focused Pediatrics and, along with a sociologist, reviewed the extant research supporting the vital role of family factors in children's health. Green's treatise No Child Is an Island: Contextual Pediatrics and the "New" Health Supervision articulated the awareness and commitment to the role of family processes also emphasized in the Bright Futures protocols. As the century turned, powerful statements on community pediatrics were issued from the AAP. These statements again highlighted family contexts and processes, invoked the name of Abraham Jacobi, MD, founder of pediatrics, and elaborated the pioneering statements of the field issued 3 decades earlier. In addition, these statements capitalized on the experiences and empirical data emerging from the Community Access to Child Health (CATCH) initiative and the Healthy Tomorrows Partnership for Children Program.

Also, within pediatrics, the specialty area of behavioral and developmental pediatrics emphasized psychosocial factors, including family process and structure, as key determinants of health and appropriate foci for intervention. Coleman offered pediatrics solution-oriented techniques for behavioral problems as interventions appropriate for some of the new morbidities and family-focused pediatrics. By 1999, developmental and behavioral pediatrics residency curriculum guidelines were promulgated, including competencies in family systems analysis, crisis and change in the family, diversity in family constellations, and family-focused communication skills.

Along with this ferment within pediatrics, advances in other health care disciplines converged on the salience of family processes in health along with the need for interdisciplinary activity. For instance, mental health professionals defined key roles for family therapy approaches in a range of physical health settings, defining collaborative family health care as an interdisciplinary endeavor. Pediatric psychology adopted a family focus for its research, practice, and policy initiatives and looked to build bridges with pediatrics and collaborative family health, as did developmental and behavioral pediatrics.

Home visiting has been another arena strongly associated with the salience of family processes in child health. A wide range of programs, mostly targeted at high-risk families, have matured to a point where increasingly sophisticated outcome evaluations are suggesting sufficient efficacy that at least modest expectations are appropriate. The AAP Council on Child and Adolescent Health concluded that “home visitation programs can be an effective early intervention strategy to improve the health and well-being of children, especially if they are embedded in comprehensive community services to families at risk” and recommended increased physician involvement. The family support movement, including home visiting as one of its key service delivery modes, is perhaps the most vociferous...
advocate for identifying family strengths and enabling successful families, complementing the family research reviewed earlier.

Pediatricians and other health care professionals have thus embraced many dimensions of the family process correlates of health and applied them in a variety of practice settings. Some of these applications have been implemented along with some form of systematic evaluation. Findings from such studies serve to improve the quality of health care services and to advance and enrich the research on the relationships between family process and child health. Examples of such work in health maintenance and primary care, chronic illness care, and community or public health practice or advocacy are now presented.

**PRIMARY CARE AND HEALTH MAINTENANCE**

Contemporary protocols and guidelines for health supervision invariably call for attention to a variety of psychosocial and family factors requiring assessment and intervention. Beginning with the prenatal visit, “one of the pediatrician’s most complex but gratifying tasks is to help mothers, fathers, and other supportive adults mature into more competent caregivers.” Accomplishing this goal, along with tending to the immediate and present direct needs of the developing child, challenges pediatricians to integrate knowledge and skills, many of which derive from research and theory on family processes. The clinical research addressing these challenges is limited and inconclusive but suggestive of directions for practice and further investigation.

A key dimension of the challenge lies in communication between health care professional and parent. Analyzing data from 1841 families with children 4 to 8 years of age in 19 practices in the Greater New Haven Child Health study, Horwitz et al found a significant proportion of the children (27.5%) with 1 or more psychosocial problems identified by the clinician. Most parents (81%) believed it was appropriate to discuss such problems with their pediatrician in hypothetical situations, but only 41% did discuss these problems when they occurred for their child. A variety of possibilities were suggested to account for this gap, including parents not communicating problems to the pediatrician, pediatrician relying on observation alone rather than including parent report, encounters being too brief, pediatrician being uncomfortable, parent having a previous experience with a nonresponsive pediatrician, or other communication inhibitors.

The quality and quantity of communication between parent and health care professional does appear to be amenable to intervention, as demonstrated in one of the few experimental investigations of this problem. Before scheduled well-child visits, Finney et al asked parents of 32 infants and young children if they had specific child health questions or concerns. Half the parents were randomly assigned to be prompted to discuss these concerns; the other 16 parents served as a control group. The prompting intervention consisted of a 5-minute discussion in which the investigator listed the age-appropriate anticipatory guidance topics, asked if the parent had any questions, and encouraged the parent to ask their pediatrician these or any other questions. Parents in the control condition spent a few minutes in the same conversation but without the encouragement to talk with their pediatrician. Although both groups subsequently reported satisfaction with their encounter, the prompted parents initiated significantly more interactions with their pediatrician, and these discussions included a greater number of topics. If or how such enhanced communication translates into improved health outcome for the child remains to be described by future research. Although this study included only a small number of families with a low socioeconomic status in an urban community health center, parents surveyed in a nationally representative sample of 2017 parents of young children (3 years or younger) overwhelmingly (79%) indicated an interest in more child development and parenting information from their pediatrician.

This same survey also indicated that important health-promoting behaviors such as “breast-feeding and reading to the child on a daily basis were much more likely if a physician encouraged parents to do so,” according to parental report. These researchers lamented that although pediatricians and parents have been aware of this mutual interest and need for discussion of nonmedical concerns for more than 30 years, communication content, quantity, and quality remain inadequate. Among the solutions suggested were reconfigurations of pediatric practices with nurses, early childhood educators, and psychologists as partners in expanded roles (an interdisciplinary approach) as well as alternative modes of information delivery (eg, telephone or group approaches).

Some evidence exists to support the use of group child health supervision as a potential part of the solution, at least in documenting that this mode is comparable to the traditional individual family mode. Rice and Slater involved 25 of their families from a largely Caucasian, middle-class health maintenance organization in a group health supervision study over the first year of their firstborn child’s life. Of the families selected sequentially on entry into the practice, 21 families served as controls and 4 families were allocated to the study intervention; both groups received usual well-child care from the same pediatrician. At each visit, the 4 study families gathered for a 45-minute group discussion with the pediatrician, including anticipatory guidance and exchanging of child development information, viewing brief age-appropriate videotapes, and participating in question-and-answer time. The infants were examined briefly in individual encounters just before or just after group sessions at visits at 2, 4, 6, and 10 months. The study families in group supervision had fewer illness-related visits than the control families. Families supervised in groups had slightly higher scores on a questionnaire about child health and development knowledge, and mothers had slightly lower levels of self-reported depression, though these differences and an index of maternal perceived social support were not statistically significant. Nonetheless, the researchers were optimistic about
the potential for group child health supervision, and their study points to a variety of opportunities for more systematic and rigorous evaluation of such innovation.

Home visiting and case management have been proposed as optimal vehicles for improving child health outcomes with an appropriate elaboration of primary care practice. In the case of an important outcome, such as immunization, some of the evidence to date does not show that these elaborations are effective. In an at-risk urban African American clinic population, the addition of case management, parent education, and home visiting had minimal influence on missed appointments for immunizations. More than 50% of 1092 visits when immunizations were due were missed whether the 265 families had the extra services or not.

Although communication around issues of child development and health poses certain challenges in pediatric health care delivery, it is the expansion of the pediatrician’s purview into areas of the parent’s own health and health behavior and health-related family and marital processes that is particularly daunting and controversial. Although the data and promulgated policies require such expansion, the methods, skills, and attitudes have not yet been established and obstacles have only recently begun to be addressed.

Direct and indirect relationships between parental health and health behavior and child health and health behavior have been amply documented. To serve the child patient, the pediatrician needs to assess and intervene in parental and family behavior. The scope of practice is thus broadened and complicated.

At the level of parental health behavior, the deleterious effects of parental smoking or parental drinking on the child’s health may be considered. Secondhand smoke accounts for increased risk and incidence of respiratory illness, asthma, otitis media, and pulmonary dysfunction. Children with a parent who smokes are more likely to smoke themselves. In addition, tobacco use is often associated with use and abuse of other substances. Genetic and environmental factors and exposure to alcohol abuse or alcoholism predispose children to alcoholism and a host of mental health, physical health, and behavior problems. Alcoholism in a family can be associated with negligent or abusive rearing, disorganized home milieu, social isolation, and economic hardship, all factors cited by Grant in documenting these health risks for children. Her recent survey estimated that approximately 1 of 4 US children is exposed to alcohol abuse or dependence, indicating that close to 10 million children are affected.

Only a few techniques or protocols for family psychosocial screening are currently available to pediatricians to begin to assess such issues as an initial step in addressing these health needs of children. A review by Kemper and Kelleher highlighted the following 6 relevant domains to be assessed by the pediatrician in primary care: maternal depression, substance abuse, domestic violence, maternal history of abusive punishment during her own childhood, frequent moves, and social support. A similar set of parental health factors was tapped in the Quick Check-Family History protocol currently under development as part of the Healthy Steps program.

Some clinicians and researchers find the Family Appar, a 5-item assessment of the parent’s satisfaction with family support, useful. Considerable and problematic variability in the psychometric soundness of current scales, including topics or items yet to be systematically studied, limits the current utility of family screening.

Even when and if family health risk information is available to the health care professional, intervention effort and effectiveness are not yet evident. Zapka et al surveyed a random sample of 350 pediatricians in Massachusetts on their counseling practices related to smoking. Although many pediatricians reported encouraging children and adolescents not to start using tobacco, adolescents already smoking less often received counseling on stopping, and parents who smoke were even less likely to be addressed by pediatricians. Having training in such counseling, believing in the efficacy of such counseling, having confidence in one’s ability to counsel, and perceiving such intervention as required or valued by the professional community were among the factors influencing pediatricians’ practices in smoking prevention and intervention.

The awareness of parental behavior and family process influences on the patient’s health has produced expectations for counseling and health education services as part of pediatric health supervision and primary care. Systematic evaluation of such interventions is only beginning. Glascoe et al culled the literature on patient education to identify brief and appropriate methods and techniques available to pediatricians. They considered verbal, video, and written information; patient-held records; and group well-care visits, among others. They also considered important issues, such as literacy, language, and cultural differences as well as other barriers, and provided guidelines for tailoring interventions to enhance efficacy. Their conclusion that “these approaches, if selected wisely and applied well, offer families needed assistance that has proven effectiveness in improving children’s and families’ health and well-being” constituted a guide and agenda for much needed empirical research.

**CARE OF CHRONIC ILLNESS**

In the realm of the care of children with chronic illness, pediatric practice and research on family strengths and processes converge in important ways. To illustrate, examples from diabetes and asthma work will be considered after noting some more generic findings from noncategoric research. Practice guidelines such as those for the home care of infants, children, and adolescents with chronic disease reflect the recognition that the family environment and resources can be crucial elements of quality care.

Project Resilience involved 124 families with a preadolescent child with a chronic illness or disability. Parents of these children were interviewed on their perceptions of social support experienced in caring for their child. These volunteer parents emphasized...
the importance of other family members for the emotional and tangible support that facilitated their caregiving. Health care professionals (physicians, nurses, therapists, social workers, and home health aides) were appreciated for their informational support. Parents also described unhelpful kinds of support, or nonsupportive behaviors, most of which were experienced with extended family members or health care professionals, including rude or insensitive remarks, disrespectful behavior, or inadequate care, information, services, or referral. Follow-up interviews a year later revealed relative stability of these patterns.102 Thus, the social support processes identified earlier as emblematic of successful families and implicated in successful adaptation to chronic illness can be measured and targeted for improving quality of care and quality of life.

One area in which this utility of social support is directly relevant is how children cope with painful medical procedures. Parents strive to reduce their child’s pain and discomfort and manage their own anxiety and distress; health care professionals strive to secure the child’s compliance and the procedure’s safety and effectiveness. A wide range of interventions with a number of systematic empirical studies have yielded inconclusive findings, many of them summarized in a recent review.103 The transactional and goodness-of-fit models that Rudolph et al.104 proposed for organizing our understandings of how children cope with medical distress recognize the complex mechanisms and influences of child characteristics, parent characteristics, and environmental factors. Design and evaluation of these interventions will be fertile ground for collaboration between family researchers and pediatricians. Some dimensions of this cross-fertilization between family research and pediatric practice are evident in studies of specific chronic conditions, including asthma and diabetes.

The concept of treatment alliance may be useful in illustrating this cross-fertilization. The recently promulgated Guidelines for the Diagnosis and Management of Asthma105 emphasized the important role of a positive partnership, or treatment alliance, among the child, parents, and physician in optimal asthma intervention. That this alliance can indeed be described, observed, and measured and further that this alliance is correlated with important dimensions of family functioning, treatment adherence, and outcomes has been demonstrated in research by Gavin et al.105 They studied 60 families with an adolescent who had severe and chronic asthma. Family functioning was measured with self-reports of problemsolving, communication, roles, affective responsiveness, affective involvement, and behavioral control on the Family Assessment Device and with coded observations of videotaped family discussions of difficult or conflictual issues. Multivariate analyses indicated that physician ratings of their treatment alliance were associated with several dimensions of family functioning, even beyond the more obvious connection between such ratings and the child’s adherence. Interestingly, on one of the global measures of family functioning, it was actually worse family functioning that was associated with better alliances, leading the authors to speculate that perhaps “when physicians identify families with poor disciplinary structure as well as those with inadequate parental involvement, they feel they can intervene in a helpful way to improve illness management.”

Frankel and Wamboldt106 cast a broad net in their examination of the impact of a child’s asthma on a family in a sample of 70 patients at an asthma tertiary care setting. They considered how this impact might be related to illness severity, socioeconomic status, family structure, parental health and distress, child emotional characteristics, and family functioning processes, including social support. The most important associations with impact on the family revealed in their regression models included the degree of emotional distress reported by the caregiving parent and the amount of social connectedness. This combination of a traditional risk factor (parental mental health) and a successful families variable (social connectedness) underlined the importance of comprehensive assessment of family factors.

In addition to the variations in family processes implicated in the course of illness and intervention, cultural variations are likely factors in adjustment, adaptation, and medical utilization. In their analysis of Medicaid claims during 1988–1992 for 576 African American children and 1369 Caucasian children, Lozano et al.107 found that costs for African American children tallied 24% higher than those for the Caucasian children, mostly because of greater use of emergency departments and hospitalizations. They concluded that “African American children may be receiving substandard care for asthma,” and suggested that among the relevant influences could be “family’s belief systems, compatibility of parent and provider communication styles, cultural attitudes toward health care providers, and institutional racism.”

Studies of families with a child with diabetes also have documented the importance of transactional family processes in adjustment to illness. For instance, French children 7 to 13 years of age with diabetes who had families who rated higher on cohesion or adaptability experienced fewer episodes of ketoacidosis and hypoglycemia in a cross-sectional, multisite study.108 Chaney et al.109 reported a prospective 1-year longitudinal study of 48 families with a battery of self-report and interview measures of parent and child adjustment. Hierarchical multiple regression analyses documented important predictive relationships among paternal, maternal, and child distress reflecting systemic influences and multiple targets of opportunity for intervention.

Family processes, such as those described earlier as features of successful families, are as important as family structure (eg, intact versus single-parent versus stepfamilies), as indicated in a study of 119 adolescents with diabetes.32 These youngsters’ adjustment to diabetes and adherence to treatment did not differ according to their family status as intact, blended, or single-parent, and these groups did not differ on parent or adolescent reports of conflict and communication. However, when the 2-parent fami-
lies (intact and blended) were combined for comparison with the single-parent families, adolescents from single-parent families showed poorer metabolic control indicated by higher glycosylated hemoglobin levels. Further, it was African American children from single-parent homes who showed the poorest metabolic control, relative to African American children from 2-parent homes or Caucasian children from single-parent or 2-parent homes. Thus, family structures and processes do distinguish qualities of adaptation to chronic illness, and these relationships may differ across cultural groups. Future research will need to clarify the complex nature of such relationships between family processes and adaptation to illness, though these preliminary data suggest opportunities for intervening with family behavior and physician behavior may be paths to improved health for children with chronic illness.53,110,111 The care of children with chronic illness will continue to be a vital area for collaboration between pediatricians and social and behavioral scientists.

PUBLIC HEALTH, COMMUNITY PARTICIPATION, AND ADVOCACY

Alliances between pediatricians and social and behavioral scientists are necessary because child health is increasingly and correctly perceived as a focus of public health, community participation, and advocacy initiatives. Predictions for the future of pediatric practice in the 21st century anticipate reorganizations of health care delivery that will meet the challenges of the new and newest morbidities, respond to multicultural diversity, and engage multiple disciplines in treating illness and promoting health.8 Current work by the Consortium for Longitudinal Studies of Child Abuse and Neglect and the Family and Child Well-Being Network of the National Institute of Child Health and Human Development illustrated the manner in which these newer community foci and interdisciplinary alliances conceptualize problems and implement systematic empirical research integrating traditional notions of risk with appreciations of successful families.

Runyan et al112 conducted a cross-sectional case control analysis comparing young children doing well and not doing well at baseline in the Longitudinal Studies of Child Abuse and Neglect Consor

tium. A total of 667 children 2 to 5 years of age participated. The investigators constructed a composite social capital index including variables such as having 2 parents or 2 parent figures in the home, having social support of a maternal caregiver, having no more than 2 children in the family, having neighborhood support, and regularly attending church. They conceived of social capital as a quantifiable dimension of interpersonal family and community support or “benefits derived from personal social relationships. . . and social affiliations.” Only 13% of children could be categorized as doing well on the basis of a wide range of health indicators, including behavioral, emotional, and developmental outcomes; social capital indicators predicted the increasing odds of doing well. Findings such as these compel those committed to promoting the health and well-being of children to consider cultivation of social capital or enriching social relationships in the family and community a priority commitment. Pediatricians have a role to play in strengthening family functioning as well as in population-based or community-based interventions.

School-based health centers represent one venue in which pediatric practice expands in this appropriate and beneficial direction. This movement in educational reform and integrated services is demonstrating important successes in promoting children’s health.113 New alliances and teams unifying health professionals, educators, and human service professionals are in need of advocacy and implementation.

IMPLICATIONS FOR TRAINING, PRACTICE, AND RESEARCH

These elaborations beyond traditional clinical roles for pediatricians involve a family orientation, new competencies, new alliances with other health care professionals, and awareness of a broadened range of services to be marshaled in the promotion or protection of children’s health. A priority for evidence-based approaches or interventions subjected to systematic empirical validation or evaluation will increase the likelihood of improving health outcomes. A few examples of these competencies and services will be described to illustrate how the converging interests of pediatricians and social and behavioral scientists in families as the crucible of children’s health present key challenges and opportunities.

At a very basic level, the appreciation of the significant influences of family functioning on child health requires that the pediatrician include such considerations in the diagnostic process. Schor23 suggested that for each patient, the pediatrician should establish a family database detailing household composition, relationship status, child care arrangements, parental substance use or abuse, familial and extrafamilial social support or conflict, physical and emotional health status of all family members, and religious affiliation and practice as examples of such needed information. He proposed a set of trigger questions to be used at each encounter to monitor changes in family processes relevant to the child’s health and functioning. For example: “How are things going at home? Are you satisfied with how well you are doing as a parent? What sorts of things does your family do together? Have there been any unexpected changes or stresses in your family since your last visit?”

A similar process was suggested by Cole-Kelly and Seaburn114 toward the goal of a more family-oriented approach in primary care. Their protocol for inquiry and decision tree for intervention and referral covers 5 broad questions: “Has anyone else in the family had this problem? What do family members believe caused the problem or could treat the problem? Who in the family is most concerned about the problem? Have there been any other recent changes in your family? How can your family be helpful to you in dealing with this problem?” Training health care professionals to elicit and use these kinds of
tools is a pressing challenge, as is documentation of the validity and utility of such screenings. Integration with recent advances, such as the Diagnostic and Statistical Manual for Primary Care (DSM-PC) Child and Adolescent Version, may be an opportunity in the context of systematic training and evaluation efforts now underway. 116,117

The data reviewed earlier along with our repeated qualification of certain findings in terms of cultural differences suggest that the commitment to a family orientation also requires a concomitant community orientation. For instance, Mendoza and Fuentes-Afflick described an epidemiologic paradox in that a majority of Latino children in the United States live in poverty; yet, the relationship between poverty and poor health is not consistently obtained. Many poor Latino children have good health outcomes. Drawing on data from the Hispanic Health and Nutrition Examination Survey, they documented important contrasts among Mexican American, mainland Puerto Rican, and Cuban American children in terms of incidence and prevalence of numerous medical conditions. They then posed a family-community health promotion model to guide practice, research, and policy using more accurate functional health measures, more valid research strategies, and more effective policies.

The biopsychosocial frameworks required to diagnose and treat the new morbidities require closer collaboration between pediatricians and mental health professionals as well as an awareness of what kinds of problems and services can or should be provided to children or their families. For example, recent meta-analyses of studies of treatment for behavioral and emotional disorders can now classify interventions as well established or probably efficacious with some consensus on scientific criteria or standards. Burns et al demonstrated effective support for treatment of attention deficit disorders, anxiety disorders, depression, and disruptive behavior disorders.

On the basis of the understandings outlined earlier that family processes can enhance and protect child health, it is evident that the Triple P-Positive Parenting Program in Australia and New Zealand has a successful and systematic preventive orientation. This comprehensive multilevel program begins with universal primary prevention strategies that deliver parenting support and information in anticipatory guidance sessions in well-child care and mass media exposure, including an “infotainment” television series with 13 half-hour episodes, public service television spots, and newspaper columns on child health and development. A second and third level of Triple P intervention targets parents with specific concerns about a child and supports the health care professional (physician or nurse) in effective individual or small group early detection and management work with the parents, including skills training in couples communication, parental self-efficacy and self-sufficiency, assertive discipline, and self-regulation. Only in levels 4 and 5 do traditional referrals to mental health services get made, reflecting more intensive and specialized services for more severe or persistent problems. Preliminary data suggest that this multitiered public health approach may be an effective framework for pediatric and mental health teamwork enhancing and protecting children’s health. 121,122

Other less comprehensive interventions reflect similar potentials. For instance, Forgatch and DeGarmo have evaluated a parent training program for divorcing mothers with school-aged sons. Although direct effects on child outcomes were not documented, they were able to prevent the decay in parenting effectiveness typically observed in new single-parent families. McKenry et al report some improvement in parent-child relations associated with their parent education program for divorcing parents. Married couples may also benefit from preventive psychoeducational interventions. These interventions usually involve improving couples’ communication and problem-solving skills, instilling more of the successful families behaviors noted earlier to be associated with better child and parent health. 129

Thus, in their own practices as well as in their enriched collaboration with other health care professionals, including mental health practitioners, pediatricians have numerous opportunities to positively influence family processes, thus enhancing health-promoting environments for their patients. Systematic research is needed to select and refine the most efficacious interventions. In addition, child health services research is poised for enhancement, and its contributions are likely to be strengthened to the extent that a family orientation can be integrated, especially an orientation that includes the lessons from successful families. Pediatricians and behavioral and social science researchers have supported recent advances in child health care by describing, explaining, and using the important relationships among family processes, health behaviors, and health outcomes. The accompanying report of the AAP Task Force on the Family documents numerous directions for continued progress.

ADDITIONAL RESOURCES


Documents impact of urbanization on children’s health and well-being and abstracts key principles for community-oriented intervention and prevention.

A comprehensive critical review that supports the increasingly important role of family intervention in contemporary pediatric and adult health care systems.


These leading researchers marshal contemporary empirical evidence to illustrate that parental influences on child behavior and development are “neither as unambiguous as earlier researchers suggested nor as insubstantial as current critics claim.”

Fincham FD. Child development and marital relationships. Child Dev. 1998;69:543–574

Scholarly examination of if and how marital relationship quality, behavior, and cognition relate to child outcomes. Argues for attention to child’s perspective on marriage as critical element in understanding child behavior. Practical suggestions for assessment and research.


A special issue of psychology’s archival journal that contains state-of-the-art reviews of psychological research on topics of concern to pediatricians, such as child care, maltreatment, adolescent pregnancy, marital disruption, depression, and violence.


This report from a new organization chaired by former US Department of Health and Human Services secretary Louis Sullivan, MD, proffered as its foremost recommendation the need to “emphasize the central role of family and communities.”


Sophisticated scholarly analysis of theory and research relevant to child and family coping with pain, medical stressors, and procedures. Sets out a promising multidisciplinary research agenda.


A brief review of recent research documenting the effectiveness of psychoeducational interventions to enhance marital functioning. The inclusion of consideration of negative outcomes and potential harm is especially useful. Tailoring for gender and culture is warranted.


Documents and discusses the profound and far-reaching transformations of the American family at the close of the 20th century, with sophisticated analyses of family structures and roles.


Collection of contemporary theory and research on assessment and intervention in primary care, including consideration of DSM-PC.


Critical examination of the database and rationale for integrated health services, attentive to scientific, economic, and political contexts.


A comprehensive textbook with editors from multiple disciplines that covers health and social welfare policies and practices, emphasizing health promotion and advocacy. Good list of online resources.

ONLINE RESOURCES

http://www.beansprout.net

Beansprout.net is a privately held company networking parents, pediatricians, and child care services.

http://www.cfah.org

The Center for the Advancement of Health conducts meta-analyses to establish intervention effectiveness, with some initial work in maternal and child health interventions.

http://www.childrensinstitute.org

Children’s Institute International is a Los Angeles-based organization that models and supports comprehensive care for at-risk children and their families. The Web site includes newsletters and research brief documents.

http://www.childtrauma.org

The ChildTrauma Academy focuses on service, training, and research in the area of child maltreatment. The interdisciplinary educational Web site has resources on a range of trauma and domestic violence issues.

http://www.familycenteredcare.org

The Institute for Family Centered Care Web site offers a clearinghouse and information on advocacy.

http://www.familyeducation.com

Familyeducation.com is a parent community dedicated to children’s learning, including health and psychosocial concerns.

http://www.familyreunion.org

The Family Reunion site includes the program and report from former Vice President Al Gore’s 1998 Families and Health Conference with an emphasis on family-centered care.

http://www.familyvoices.org

Family Voices is a sophisticated grassroots organization of parents and advocates for children with disabilities and special health care needs.

http://www.cyfner.net

The Children, Youth and Families Education and Research Network features extensive information in the areas of child, youth, parent and family, community, and evaluation. Includes a page on parent-child relationships.

http://www.parentingproject.org
Web sites useful to families and professionals.
http://www.cfw.tufts.edu

This site sponsored by the Greater New Milford (CT) Area Healthy Community 2000 Task Force on Teen and Adolescent Issues includes factoids, strategies, and a faith-based pitch for family meals.
http://www.rtc.pdx.edu

Portland State University’s Research and Training Center on Family Support and Children’s Mental Health summarizes programmatic research and provides a resource clearinghouse.
http://www.strengtheningfamilies.org

http://www.unh.edu/cpe

The Center for Parent Education at University of North Texas chronicles research and resources for parent involvement and parent education.
http://www.cfw.tufts.edu

Systematically evaluates a wide range of research-based Web sites useful to families and professionals.

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Converging Trends in Family Research and Pediatrics: Recent Findings for the American Academy of Pediatrics Task Force on the Family

Donald Wertlieb

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