

INTRODUCTION

In 1982, the National Academy of Science's Institute of Medicine published a volume entitled, *Health and Behavior: Frontiers of Research in the Biobehavioral Sciences*, which summarized current knowledge about the interaction of behavioral factors and a wide range of health phenomena. This volume has become the cornerstone for much of the public and private policy guiding present behavioral health research and research support.

Early fall of 1984, Dr. James Ralph, former Chief, Minority Research Resources Branch, Division of Biometry and Applied Sciences, National Institute of Mental Health, called *Health and Behavior* to our attention, and asked for a reaction to its findings and recommendations regarding future research, with special emphasis upon American Indians and Alaska Natives. A careful reading of this work suggests that, despite its comprehensive nature, the contributors often either ignore or understate the role of cultural dynamics in the interaction of health and behavior. We know, for example, that within our society there are widely divergent views about the nature and cause of illness, the associated signs and symptoms, the kinds of social situations that render one vulnerable to illness, and the appropriate treatment options, as well as the process of seeking such help. Moreover, the concerns raised by this volume do not apply equally across all communities. Ethnic minorities are at higher risk for various forms of physical morbidity and psychological dysfunction than other segments of the United States population and this higher risk is closely related to their particular lifestyles. Among American Indians and Alaska Natives, this is especially true for diabetes, rheumatoid arthritis, gall bladder disease, and alcoholism, which occur at unprecedented rates in many reservations and villages. Consequently, with support from the National Institute of Mental Health, we convened a conference in April, 1985, at Timberline Lodge on Mount Hood, Oregon, to review the Institute of Medicine publication.

Focus of Conference

The conference was comprised of two and one-half days of discussion focusing on the most relevant of the twenty chapters encompassed by *Health and Behavior: Frontiers of Research in the Biobehavioral Sciences*. These chapters included: Stress, Coping, and Health: Models of Interaction; Alcoholism, Alcohol Abuse, and Health; Diabetes and Behavior; Aging, Health, and Mental Health; Social Disadvantage and Health; Prevention Efforts in Early Life; Mental Health Care in a General Health Care System; and Changes in Human Societies, Families, Social Supports, and Health. Twenty nationally recognized experts on the American Indian and Alaska Native population were invited to participate on the basis of either current research or service experience in health care settings related to the above topics. Nine participants prepared major overview and position papers that were guided in part by the issues and concerns

raised in the respective chapters of *Health and Behavior: Frontiers of Research in the Biobehavioral Sciences*. Each paper was discussed at length and revised after the conference with the benefit of expert reaction and opinion.

Conference Participants

The contributors and conferees constitute a diverse mix of disciplines, specifically, sociology, medical anthropology, psychology, public health, psychiatry, endocrinology, nursing, and health education. Nearly half of the manuscripts are authored by American Indian health professionals. Moreover, the presence of high-ranking administrative officials from the Indian Health Service, Alcohol, Drug Abuse, and Mental Health Administration, the National Institute of Mental Health, and tribal programs, significantly increase the direct, substantial impact of the proceedings on public policy in this area. In addition to the editors, the contributors and conferees include: Dorothy M. Ghodes, M.D., Project Director, Indian Health Service Diabetes Project; Jerrold E. Levy, Ph.D., Professor, Department of Anthropology, University of Arizona; Richard Schulz, Ph.D., Associate Professor, Department of Psychiatry, Western Psychiatric Institute; Joseph E. Trimble, Ph.D., Professor, Department of Psychology, Western Washington University; James H. Shore, M.D., Professor and Chairman, Department of Psychiatry, University of Colorado Health Sciences Center; Joseph D. Bloom, M.D., Professor and Chairman, Department of Psychiatry, Oregon Health Sciences University; Gerald V. Mohatt, Ed.D., Professor and Dean, College of Human and Rural Development, University of Alaska/Fairbanks; Stephen Kunitz, M.D., Ph.D., Professor, Department of Family Medicine, University of Rochester; Philip A. May, Ph.D., Associate Professor, Department of Sociology, University of New Mexico; R. Dale Walker, M.D., Chief, Alcohol Dependence Treatment Unit, Seattle Veterans Medical Center and Associate Professor, Department of Psychiatry and Behavioral Sciences, University of Washington; Pat Silk-Walker, R.N., M.S., Associate Professor, Department of Psychosocial Nursing, University of Washington; George Guilmet, Ph.D., Professor, Department of Comparative Sociology, University of Puget Sound; David Whited, M.F.A., Director, Department of Health Planning, Puyallup Nation; William Hunter, M.D., Deputy Director, Office of Mental Health Programs, Indian Health Service; Al Hiatt, Ph.D., Director, Indian Children's Program, Indian Health Service; Donald Callaway, Ph.D., Research Analyst, Mineral Resources Management, Alaska Division, Bureau of Indian Affairs; Sandra Joos, Ph.D., Adjunct Assistant Professor, Institute on Aging, Portland State University; James Ralph, M.D., Chief, Minority Research Resources Branch, National Institute of Mental Health; Stephen Goldston, Ed.D., Director, Office of Prevention, National Institute of Mental Health; Gordon Neligh, M.D., Assistant Professor, and Director, Program in Public Psychiatry, Department of Psychiatry, University of Colorado Health Sciences Center; and C. Joseph Pine, Ph.D., Psychologist, Sepulveda Veterans Medical Center.

Overview

The ensuing set of papers offer: (1) a state-of-the-art review of research knowledge of greatest relevance to the health status of American Indians and Alaska Natives; (2) the identification of gaps in research knowledge and promising areas for further research; (3) an indication of the readiness of the biobehavioral sciences to pursue this research; and (4) a description of an agenda and accompanying priorities for the support of both basic and applied dimensions of such research. This material is supplemented with a tightly edited record of the debate that followed each paper, offering valuable insights into disciplinary, substantive, and methodological differences on the subject matter.

"Stress, Coping, and Health: Models of Interaction for Indian and Native Populations," by Dinges and Joos, considers a range of concepts that hold considerable promise for future research at the interface of these three phenomena among American Indians and Alaska Natives. In many ways, this chapter provides a framework for the papers which follow and encourages a systematic review of available theoretical models for understanding the outcomes of past studies as well as for designing subsequent inquiries. Dinges and Joos begin by reviewing current trends in morbidity and mortality among Indians and Natives, underscoring—as do several other authors—the epidemiological transition that seems to be underway in this population. They then describe a general model of the stress and coping process, highlighting internal and external mediators of health outcomes. Turning to specific research topics, the authors propose a series of studies that flow from recent advances in the behavioral health field. These include attention to the relationship between perceived control and health behaviors, the stress-mediating role of social supports, health care utilization patterns, adherence to treatment, and patterns of coping with illness induced stress. Dinges and Joos conclude by enumerating and prioritizing basic research issues for the future study of stress, coping, and health among American Indians and Alaska Natives.

"Alcoholism, Alcohol Abuse, and Health in American Indians and Alaska Natives," by Silk-Walker, Walker, and Kivlahan, reviews specific research needs concerning the epidemiology and natural history of alcohol use, assessment and diagnostic indicators of alcohol misuse, treatment intervention and outcome, as well as prevention. These emphases, as the authors point out, depart significantly from the Institute of Medicine volume. The latter focused on the biological, physiological, and genetic aspects of alcohol abuse/dependence. Although the Indian Health Service data on morbidity and mortality readily document the severe health consequences and increasing proportions of alcohol abuse within this population, little epidemiologic information is available. For the most part, current estimates derive from service delivery records which yield rates of "treated" prevalence that suffer from a number of biases therefore reducing their planning and programming value. Walker et al. clearly reveal the extent to which theory has outstripped empirical evidence in the

conceptualization of alcohol abuse/dependence among Indians and Natives. This gap is not likely to close very quickly given how little is known about the performance of available screening tools and diagnostic protocols when administered to members of this population. Perhaps the most distressing observation presented in this chapter is the lack of outcome data from the 177 alcohol treatment programs funded by the IHS. Silk-Walker and colleagues note that a previous overview of these programs revealed many lack even a statement about intervention goals and treatment philosophy. This chapter closes by calling for systematic research on the efficacy of primary prevention efforts, the deterrent effects of antabuse, the relationship between alcohol use and violence, and over-reliance on detoxification as treatment.

"Diabetes and Behavior: American Indian Issues," by Pine, addresses one of the most common and widely studied diseases of this special population. The author reviews the multifactorial etiology of Type II diabetes among American Indians, focusing first on potential genetic contributions and secondly on such environmental influences as obesity, diet, activity levels, gender, and age. Pine pays particular attention to the roles of psychopathology and emotional stress in the onset and course of diabetes. In this regard, he reports his own attempt among Indian diabetics to examine the emotional arousal theory (EAT) of obesity, which postulates a relationship between anxiety and overeating. Pine then describes intervention strategies with the typical American Indian diabetic, characterized as female, morbidly obese, 40 years of age or older, mother of a large family, responsible for household duties, and of low socioeconomic status. He recommends a comprehensive assessment prior to treatment, followed by cognitive-behavioral intervention grounded in culturally relevant and family-oriented curricula. This chapter ends with a brief overview of basic research issues and with an outline of the prototypic study for disentangling the web of psychosocial and physiological factors that mediate health outcomes for Indian diabetics.

"Major Mental Disorders and Behavior among American Indians and Alaska Natives," by Neligh, examines the extent of our current knowledge of mental health and illness in this population. As he points out, this knowledge derives from the service delivery system as well as the research literature. Both sources exhibit certain strengths and weaknesses which are described with care. The former offers the best opportunities for identifying trends and answering questions in regard to Indian/Native mental illness. However, its providers have not contributed significantly in this regard, largely because of the intensity of their workloads, the attitudes of some Indian communities toward research, the relative shortage of research-oriented personnel, and the vagaries of in-house data systems. Moreover, Neligh observes that the vast majority of mental health services are rendered by nonpsychiatric providers and many nonpsychiatric mental health staff are uncomfortable with diagnostic labeling and/or the structured interviews required to arrive at accurate diagnoses. The research literature fares little better. Neligh notes the virtual absence of studies of

community-based epidemiologic trends, of the reliability and validity of screening and diagnostic protocols, and of treatment outcomes. He calls for the extension of existing mental health technology into several areas of Indian/Native mental health. These include the genetic and familial transmission of mental illness, the biological bases of various mental illnesses, with special emphasis on neurotransmitter chemistry, receptor physiology, functional neurophysiology, the classification of personality disorders and normal development, and the identification as well as innovative approaches to caring for chronically mentally ill Indian/Native patients.

"Health and Aging among American Indians: Issues and Challenges for the Biobehavioral Sciences," by Manson and Callaway, opens with a poignant case example of an elderly Navajo couple. This example depicts the complex interaction of social, economic, physical, familial, and political factors which affect the well-being of many older American Indians. The authors next consider the changing demographics of this segment of the Indian/Native population, and the epidemiologic implications thereof. Despite the relatively small percentage of Indians and Natives age 65 and older, increasing numbers of these individuals are living and will live to older age. The consequences are considerable in regard to their future physical health, mental health, and social service needs. The Indian Health Service and most tribal programs are predicated upon acute care models which are not designed to take into account the already evident increase in chronic physical illnesses. Manson and Callaway subsequently review the status of long-term care planning and programming in Indian and Native communities. Their own work reveals the limits of IHS provider knowledge of and attitudes toward long-term care concepts. Yet, there are a number of exciting examples of local attempts to offer different types of service along the continuum of care. In each case, the authors pose a series of questions, answers to which promise to inform the further development of needed programs. The chapter closes by highlighting the major planning dilemmas that need to be debated. These dilemmas revolve around questions about the segregation of care for the elderly from other age groups, the priorities for targeting such care, and preferred service strategies among the elderly.

"The Effects of Labeling on Health Behavior and Treatment Programs among North American Indians," by Levy, represents a slight departure from the original *Health and Behavior* volume. Rather than explore the relationship between social disadvantage and health status—as in one Institute of Medicine chapter and like, in many senses, all of the contributors to this monograph—we decided to emphasize the cultural construction of illness and tensions that arise in the negotiation of biomedical and local explanatory models. Consequently, the author traces for us the basic assumptions of the labeling theory and how such a perspective can help one to understand many of the interactions between practitioners of modern Western medicine and patients from culturally distinct populations, namely American Indians. Levy illustrates, for example, the problems that emerge when their respective definitions of illness are at variance.

He refers to one set as the consequence of "intracultural labeling" and to a second set as the result of "cross-cultural labeling." The first involves definitions of physical disease (epilepsy among the Navajo; suicide and alcoholism among the Hopis and the Shoshone-Bannocks) as forms of social deviance within Indian communities that depart markedly from those of both the dominant society and medical establishment. The latter involves over-reliance on literal, word-for-word translation in contrast to a calibration of concepts, often compounded by an asymmetry in the interactional structure, e.g., subordinate Navajo and superordinate Anglo. Levy concludes his remarks with a careful analysis of obstacles to the appropriate consumption of research of this nature.

"The Health Status of Indian Children: Problems and Prevention in Early Life," by May, focuses on death and disease patterns of American Indian and Alaska Native children. The ages considered are from conception through 14 years. By design, the contents are intended to allow the health professional to focus "upstream" to enable one to deal with health problems at their source. A focus on the young is not only important in Indian health care, but it is particularly appropriate given the young age structure of Indian and Native populations. Some behavioral changes and environmental improvements, May argues, are needed to reduce morbidity and mortality from birth defects—especially fetal alcohol syndrome, post neonatal death, trauma and injury from motor vehicle and other accidents, nursing bottle caries, otitis media, gastroenteritis, meningitis and selected other infectious and parasitic diseases. He describes environmental and simple behavior changes which can bring major reductions in the above problems. Examples include, increased rates of early and overall prenatal care, cessation of prenatal alcohol consumption, a safer and more hygienic environment for infants and youth, increased breast feeding of infants to 6 or 8 months of age, careful and informed use of baby bottle feeding at all ages, and the use of car seats and other protective devices for infants and all youth.

"Mental Health Care in a General Health Care System: The Experience of the Puyallup," by Guilmet and Whited, examines—through an analysis of the Puyallup tribal experience—the Institute of Medicine's recommendation that mental health care be increasingly integrated into the roles of primary care practitioners. The Institute of Medicine's proposal to conduct research on the increased role of the primary care sector in the provision of mental health care is only partially supported by their analysis. The Puyallup experience strongly supports the Institute of Medicine's call for research on the enhanced coordination of primary care practitioners with other basic mental health treatment programs. The authors also conclude that support to community paraprofessionals would both lead to greater community involvement in the existing mental health care system and further the reintegration of traditional values, beliefs, and practices into mental health delivery.

"Societies, Families, and Change: The Alaskan Example," by Mohatt, McDiarmid, and Montoya, undertakes the challenge of linking the health of individuals to the larger social systems in which they are embedded. It begins by

articulating the assumptions that underpin such an effort. These spring from the central premise that culture and society bridge individual needs and social values, are the mechanism for transmitting knowledge across generations, thereby engendering a sense of continuity, and provide organized means of adapting to change. The authors subsequently describe the nature and extent of change in Alaska and its impact upon Native families. This change occurs in socioeconomic, political, as well as ideological realms. Mohatt and colleagues draw clear lines between these forces and numerous behaviorally oriented health outcomes like coronary heart disease, suicide, alcohol and drug abuse, sexual abuse, and early, high-risk pregnancies. They then place these trends within recent models for understanding individual as well as familial adaptation. Yet, the authors argue, none of these models account for the local historical dynamic in which change and adaptation are continuous processes, rather than simply consequences of contemporary pressures. Here, Mohatt et al. turn to Antonovsky's notion of "a sense of coherence" as the master motive which integrates personal and social agendas.

Summary

These proceedings offer an exciting point of departure for future research in the behavioral health fields. The Institute of Medicine's publication has stimulated a rethinking of the current state-of-the-art with respect to American Indians and Alaska Natives. Hopefully, future policies that derive from it will take into account the insights and experiences shared by the contributors to the present volume. As each demonstrates, circumstances unique to this special population require careful analysis prior to the application of the recommendations outlined in *Health and Behavior: Frontiers of Research in the Biobehavioral Sciences*.

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