

Faculty Health in Academic Medicine

Thomas R. Cole • Thelma Jean Goodrich
Ellen R. Gritz
Editors

Faculty Health in Academic Medicine

Physicians, Scientists, and the Pressures
of Success

 Humana Press

Editors

Thomas R. Cole
McGovern Center for Health, Humanities,
and the Human Spirit
University of Texas-Houston Medical
School
Houston, TX

Ellen R. Gritz
Department of Behavioral Science
Olla S. Stribling Distinguished Chair
for Cancer Research
The University of Texas M. D. Anderson
Cancer Center
Houston, TX

Thelma Jean Goodrich
Department of Behavioral Science
The University of Texas M. D. Anderson
Cancer Center
Houston, TX

ISBN 978-1-60327-450-0 e-ISBN 978-1-60327-451-7
DOI 10.1007/978-1-60327-451-7

Library of Congress Control Number: 2008931180

© Humana Press, a part of Springer Science+Business Media, LLC 2009

All rights reserved. This work may not be translated or copied in whole or in part without the written permission of the publisher (Humana Press, 999 Riverview Drive, Suite 208, Totowa, NJ 07512 USA), except for brief excerpts in connection with reviews or scholarly analysis. Use in connection with any form of information storage and retrieval, electronic adaptation, computer software, or by similar or dissimilar methodology now known or hereafter developed is forbidden.

The use in this publication of trade names, trademarks, service marks, and similar terms, even if they are not identified as such, is not to be taken as an expression of opinion as to whether or not they are subject to proprietary rights.

While the advice and information in this book are believed to be true and accurate at the date of going to press, neither the authors nor the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein.

Printed on acid-free paper

springer.com

Foreword

In the 21st century, academic medical centers across the United States continue to make scientific breakthroughs, to make improvements in patient care, and to provide the most advanced information and guidance in matters affecting public health. The signs of growth are everywhere—in new research buildings, new partnerships with industry, new forms of molecular medicine, and new sensitivity to the role of the human spirit in healing. This growth is due in large part to the dedication and productivity of our faculty, who are providing more patient care, more research, more teaching, and more community service than ever before.

Today, there are roughly 135,000 physicians, scientists, and other faculty working at approximately 125 academic medical centers around the country. Increasingly, they are asked to do more with less. Since the 1990s, academic medical centers in the United States have lost the financial margin they once enjoyed, thereby putting new pressures on research, education, and clinical care. Medical school faculty, previously given funded time for teaching and research, are increasingly drafted to bring in clinical revenues to cover their salaries. Dedicated to the missions of research, teaching, and care, our faculty have responded well to these challenges and perform at a very high level. However, we are beginning to see the results of ongoing stress.

Recent trends in bioethics have emphasized concern for the patient as a whole person, but very little attention has been paid to the legitimate needs and concerns of physicians, scientists, and other health care professionals. This ground-breaking book is the first to look carefully at issues of faculty health and well-being. It grows out of a conference sponsored by the McGovern Center for Health, Humanities, and the Human Spirit at University of Texas-Houston Health Science Center in the summer of 2007. Its findings and recommendations offer an essential framework for protecting and enhancing the well-being of our faculty, our institutions, and the future of academic medicine.

James T. Willerson
President
University of Texas-Houston Health Science Center
Houston, Texas, USA

Preface

Altruism and self-governance, in addition to an evolving body of knowledge, are among the most important attributes of a learned profession. In medicine, altruism means placing the patient's interests above the physician's interest. Altruism also implies the responsibility of physicians to teach the learned profession to their students. The original Hippocratic Oath specifically identified this responsibility to pass on knowledge and wisdom. Self-governance has traditionally implied physicians' responsibility to be concerned about their colleagues' functioning and quality of care. For centuries, this responsibility took the form of "professional courtesy" in which physicians cared for colleagues, and often their families, without charging a professional fee. In the last part of the 20th century, this tradition gave way to insurance regulations, which precluded its practice in most situations.

Over the past half century, the commitments of the profession to meet the requirements for self-governance and altruism have eroded. Physicians have been extremely reluctant to respond to or identify dysfunctional colleagues. Physicians often fail to intervene when they sense a colleague may have mental health problems. Although over half of medical trainees experience an episode of depression, and a significant number have suicidal thoughts, the stigma associated with mental illness has posed a substantial barrier to students seeking aid. These concerns often prevent students from seeking counseling in institutional facilities unless truly confidential off-campus opportunities are created for the student to seek help.

This culture of denial of mental and physical symptoms among physicians is strongly internalized by students and subsequently becomes an important part of the behavior pattern of health professionals later in their careers. Long working hours, increased pressure to generate income in medical education, accelerating administrative responsibilities, and the shame/blame conundrum in medical education, have served to increase the stresses on health providers, particularly physicians and nurses.

Certain changes in the health care delivery system and in the health professions are beginning to ameliorate these problems. The substantial increase in the number of women in medicine has diminished the role of "machismo" and the "I-can-take-anything-that-the-system-dishes-out" mentality of male trainees. Limitations on the work schedule for residents, the introduction of patient safety, and quality improvement programs that emphasize the analysis of errors rather than blame/shame

mentality are all steps in the right direction. At the same time the increasing pressures to be financially productive while teaching—or to be funded for research in an increasing competitive environment—have exacerbated stress. And research scientists, who play such an important role in our academic health centers, are particularly stressed by the increased competition for diminishing federal research dollars.

In this context, altruism and self-governance take on new urgency and new meanings. Self-governance should entail increased attention to promoting wellness and self-care among one's colleagues, especially in our academic health centers. In order to be of maximum service to patients and society, altruism requires that physicians and scientists attend to their own well-being. There is no single explanation for either the high rates of burnout, depression, and suicide among health professionals, particularly physicians, or the psychological dilemmas, which are faced by our clinical and research faculties. What is encouraging, however, is the emerging focus on the importance of faculty health, especially mental health, and the need to better understand the factors which contribute to unhealthy situations.

There is no single answer to the challenge of faculty health. Illuminating the issue, validating its importance, and focusing the intellect of thoughtful individuals on solutions to these problems are important steps forward. In this volume a wide variety of experiences is discussed, and a number of theories are advanced with regard to the faculty health conundrum—from prevention and wellness to diagnosis and treatment. Like many issues in health and science, it is critical that specific hypotheses be advanced and careful efforts made to determine their validity through interventions that are as well controlled as possible. As with all elements of human behavior and human need, these are difficult issues to study. But solving these problems requires that we move from theory to well-constructed research and practice.

This volume offers important opportunities to identify the questions and, in many cases, suggest ways that solutions might be tested. It will be important to share the outcomes of interventions and best practices of the health and science professionals as we attempt to improve faculty health. This is a responsibility academic health centers have to their faculty and faculty in the health professions have to themselves and each other. In the 21st-century academic health center, self-governance requires organizational health and commitment to the well-being of faculty. And altruism—serving others and educating new professionals—requires self-care and care for one's peers.

Kenneth Shine
Executive Vice Chancellor for Health Affairs
Interim Chancellor
University of Texas System
Austin, Texas, USA

Contents

Part I Introduction

1 The Context of Concern for Faculty Health 3
Thelma Jean Goodrich, Thomas R. Cole, and Ellen R. Gritz

Part II Examination of Faculty Health

2 Epidemiology 13
Daria Boccher-Lattimore

**3 Causes and Treatment of Impairment and Burnout
in Physicians: The Epidemic Within 29**
Eugene V. Boisaubin

4 Measuring and Maintaining Faculty Health..... 39
Mamta Gautam

Part III Personal and Social Dimensions

**5 The Architecture of Alignment: Leadership
and the Psychological Health of Faculty 55**
Susan H. McDaniel, Stephen P. Bogdewic, Richard L. Holloway,
and Jeri Hepworth

**6 The Career Management Life Cycle: A Model for Supporting
and Sustaining Faculty Vitality and Wellness..... 73**
Thomas R. Viggiano and Henry W. Strobel

**7 Faculty Resilience and Career Development: Strategies
for Strengthening Academic Medicine 83**
Janet Bickel

8	Diverse Academic Faculty: A Precious Resource for Innovative Institutions	93
	Elise D. Cook and Harry R. Gibbs	
 Part IV Perspectives from the Humanities and Interpretive Social Science		
9	Organizational Culture and Its Consequences	115
	R. Kevin Grigsby	
10	The Ethics of Self-Care	127
	Craig Irvine	
11	Faculty Health and the Crisis of Meaning: Humanistic Diagnosis and Treatment	147
	Thomas Cole and Nathan Carlin	
12	Retaining and Reclaiming the Call of Medicine	157
	Henry W. Strobel	
 Part V Supports and Interventions		
13	A Model for Designing and Developing a Faculty Health Program: The M. D. Anderson Experience	167
	Ellen R. Gritz, Janis Apted, Walter Baile, Kathleen Sazama, and Georgia Thomas	
14	Fostering Faculty Well-Being Through Personal, Community, and Cultural Formation at an Academic Medical Center: Indiana University School of Medicine as a Case Study	183
	Debra K. Litzelman, Penelope R. Williamson, Anthony L. Suchman, Stephen P. Bogdewic, Ann H. Cottingham, Richard M. Frankel, David L. Mossbarger, and Thomas S. Inui	
15	Conflict Resolution in an Academic Medical Center: The Ombuds Office	205
	Anu Rao, Patricia A. Parker, and Walter F. Baile	
16	Preserving Principal: Programming for Faculty Health and Well-Being	223
	Thelma Jean Goodrich	

Part VI Conclusion

17 Faculty Health: A New Field of Inquiry and Programming 235
Thelma Jean Goodrich, Thomas R. Cole, and Ellen R. Gritz

Afterword..... 239
John Mendelsohn

Appendix Foundations of Faculty Health:
A Consensus Statement of Editors and Authors 241

Index..... 243

Authors and Affiliations

Janis Apted, M.L.S. Faculty Development, University of Texas M. D. Anderson Cancer Center, Houston, TX

Walter Baile, M.D. Department of Behavioral Science, University of Texas M. D. Anderson Cancer Center, Houston, TX

Janet Bickel, M.A. Janet Bickel and Associates, Falls Church, VA

Daria Boccher-Lattimore, Dr.P.H. Clinical Sociomedical Sciences in Psychiatry, Mailman School of Public Health, Columbia University, New York/New Jersey AIDS Education and Training Center, New York

Steven Bogdewic, Ph.D. Department of Family Medicine, Office of Faculty Affairs and Professional Development, Indiana University School of Medicine, Bloomington, IN

Eugene Boisaubin, M.D. Department of Internal Medicine, University of Texas-Houston Medical School, Houston, TX

Nathan Carlin, M.Div. Rice University, Houston, TX

Thomas R. Cole, Ph.D. McGovern Center for Health, Humanities, and the Human Spirit, University of Texas-Houston Medical School, Houston, TX

Elise Cook, M.D. Department of Clinical Cancer Prevention, University of Texas M. D. Anderson Cancer Center, Houston, TX

Ann H. Cottingham, M.A.R. Special Programs, Indiana University School of Medicine, Indianapolis, IN

Richard M. Frankel, Ph.D. Department of Medicine, Department of Geriatrics, Regenstrief Institute, Inc., Indiana University School of Medicine, Richard L. Roudebush VAMC, Indianapolis, IN

Mamta Gautam, M.D., F.R.C.P.C. Department of Psychiatry, University of Ottawa, Ottawa, Ontario, Canada

Harry Gibbs, M.D. Office of Institutional Diversity, University of Texas M. D. Anderson Cancer Center, Houston, TX

Thelma Jean Goodrich, Ph.D. Department of Behavioral Science, University of Texas M. D. Anderson Cancer Center, Houston, TX

Kevin Grigsby, D.S.W. Professor of Psychiatry, Department of Psychiatry, Vice Dean for Faculty and Administrative Affairs, Penn State College of Medicine, Hershey, Pennsylvania, USA

Ellen R. Gritz, Ph.D. Department of Behavioral Science, University of Texas M. D. Anderson Cancer Center, Houston, TX

Jeri Hepworth, Ph.D. Department of Family Medicine, University of Connecticut School of Medicine, Storrs, CT

Richard Holloway, Ph.D. Department of Family and Community Medicine, Office of Student Affairs, Medical College of Wisconsin, Milwaukee, WI

Thomas S. Inui, Sc.M., M.D. Department of Health Services Research, Regenstrief Institute, Inc., Indiana University School of Medicine, Indianapolis, IN

Richard L. Roudebush, V.A.M.C., Indianapolis, IN

Craig Irvine, Ph.D. Department of Medicine, College of Physicians and Surgeons, Columbia University, New York, NY

Debra K. Litzelman, M.A., M.D. Department of Medicine, Indiana University School of Medicine, Indianapolis, IN

John Mendelsohn, M.D. President, University of Texas M. D. Anderson Cancer Center, Houston, TX

Susan McDaniel, Ph.D. Department of Family Medicine, Department of Psychiatry, Wynne Center for Family Research, University of Rochester School of Medicine, Rochester, NY

David M. Mossbarger, M.B.A. Regenstrief Institute, Inc., Indiana University School of Medicine, Indianapolis, IN

Patricia A. Parker, Ph.D. Department of Behavioral Science, University of Texas M. D. Anderson Cancer Center, Houston, TX

Anu Rao, Ph.D. Ombuds Office, University of Texas M. D. Anderson Cancer Center, Houston, TX

Kathleen Sazama, M.D., J.D. Department of Laboratory Medicine, University of Texas M. D. Anderson Cancer Center, Houston, TX

Ken Shine, M.D. Executive Vice-Chancellor for Health Affairs and Interim Chancellor for the University of Texas System, Houston, TX

Henry W. Strobel, Ph.D. Department of Biochemistry and Molecular Biology, Office of Faculty Affairs, University of Texas-Houston Medical School, Houston, TX

Anthony L. Suchman, M.A., M.D. Department of Medicine, Department of Psychiatry, Relationship Centered Health Care, University of Rochester School of Medicine and Dentistry, Rochester, NY

Georgia Thomas, M.D. Employee Health Services, University of Texas M. D. Anderson Cancer Center, Houston, TX

Thomas Viggiano, M.D. Department of Gastroenterology, Office of Faculty Affairs, Mayo Clinic, Rochester, MN

James Willerson, M.D. President, University of Texas-Houston Health Science Center, Houston, TX

Penelope R. Williamson, Sc.D. Department of Medicine, The Johns Hopkins University School of Medicine, Relationship Centered Health Care, Baltimore, MD

Part I

Introduction

Chapter 1

The Context of Concern for Faculty Health

Thelma Jean Goodrich, Thomas R. Cole, and Ellen R. Gritz

Love is a central theme in the profession of medicine. It is an undeniable drive that leads individuals onward to serve others, whether through clinical care or laboratory science. Naming that force for what it is and claiming it again as one's own turns the corner away from discouragement toward renewal of the promise to that primal altruism which first sparked the notion of joining an honored tradition of service.

So began a three-day working conference on faculty health and well-being in academic medical centers, the first to focus entirely on that subject. Henry Strobel spoke these words at the opening dinner. They both set the theme and recalled the reason for the gathering: faculty burnout and demoralization. The causes are multiple. Sometimes faculty work under onerous conditions—too much to do in too short a time, not enough resources, not enough support staff, and so on. Other times—out of what they regard as dedication and passion—faculty work past needing rest, past needing family, and past needing renewal. Either way, the result is finally a separation from the very inspiration that “sparked the notion of joining an honored tradition of service.”

The conference was organized by the editors of this volume and was sponsored by the McGovern Center at the University of Texas Health Science Center in Houston in collaboration with the M. D. Anderson Cancer Center, also in Houston. It had its origins in concern for loss of meaning and its deleterious consequences. But what pulled us forward was envisioning a new field of inquiry that would explore all facets of faculty well-being—the major factors affecting it and resources for protecting, recovering, and enhancing it. Our aim was to convene those with expertise in relevant areas and produce a foundational book for this new field.

T.J. Goodrich

Department of Behavioral Science, University of Texas M. D. Anderson Cancer Center,
Houston, Texas, USA

e-mail: tjgoodrich@mdanderson.org

T.R. Cole

McGovern Center for Health, Humanities, and the Human Spirit, University of Texas-Houston
Medical School, Houston, Texas, USA

E.R. Gritz

Department of Behavioral Science, University of Texas M. D. Anderson Cancer Center,
Houston, Texas, USA

We set out key areas of discussion:

- Types and prevalence of harms to the health of faculty
- Challenges to health at different stages of the professional life cycle
- Psychological strengths, vulnerabilities, and injuries
- Issues raised by gender, generation, race, and ethnicity
- Helps and hindrances from the professional and organizational culture
- The ethical imperative of self-care
- The spiritual crisis and the role of the humanities
- The need for supportive programs

These topics required experts in epidemiology, impairment, career development, psychology, diversity, organizational phenomena, ethics, medical humanities, and program design. In February, 2007, the organizers identified scholars across the country who had a professional stature in these areas. We wanted to act quickly and set a July date at the University of Texas Health Science Center in Houston. Given this time and place, we were uncertain how many would agree to come. Nevertheless, within a week of our phoned invitations, everyone we had called had agreed to attend. There could not be a stronger endorsement of the importance and urgency of the subject at hand.

Rationale

Undergirding our project was the expanding published research showing that clinicians and researchers in academic medicine, performing daily under high levels of stress, do so at great cost to their health. Many physicians are burned out, demoralized, wounded, and physically compromised [1–3]. Physicians suffer higher levels of anxiety and depression than do those in comparative general populations [4, 5]. A national survey of generalist physicians in the United States found a significant direct relationship between reports of job stress and measures of poorer physical and mental health [6]. A profession rooted in compassion, care, and service to patients has apparently failed to take seriously its own needs for self-care, stress management, meaning, and nurture

Socialized to diagnose and treat disease through biomedical science and technology, physicians sometimes wall themselves off from emotional connection with their patients. As a result, they miss the spiritual sustenance and vitality that emerge from genuine human exchange between a doctor and a patient. Further, in academic medicine, physicians face substantially increased clinical work and are still expected to participate in teaching, research, service to the university, and writing for publication—activities that bring their own stresses and create constant conflict about use of time.

Researchers, too, suffer from stressors endemic to scientific studies in an academic medical setting. Most often, they rely on grant support for their research and all or most of their salary. Submissions are not only highly competitive for the initial award

of a project, but also for its continuation. Recently, the overall success rate has fallen to about 20% of grant applications submitted to the National Institutes of Health [7]. In 2005, only 9% of all investigators secured independent investigator-initiated (R01) funding on the first round, an outcome necessitating multiple submissions [8]. Finally, in the past few years, awarded grants have been cut 15–30% from the original budget levels [9]. Junior investigators are at greatest risk of being driven out of the field, and even seasoned investigators are feeling the strain severely.

In sum, academic researchers function at the pressure point between the scientific importance of their work and its unstable future. Additionally, they must fund their research staff, protect sought-after lab space, publish steadily, teach, have national visibility, and provide both intramural and extramural service. Thus, like physicians, they feel the constant pull of attending to multiple masters. Health does not thrive under these pressures, nor do family and personal relationships.

An academic medical center's lack of attention to human resources is not only short-sighted, it is expensive as well. The costs of faculty turnover are estimated to be 5% of a center's budget, not including the costs of lost opportunities, lost referrals, overload on remaining faculty, reduced productivity, and lower morale. Likewise, staff turnover is not only costly in itself, but also stresses faculty and disrupts their productivity.

Defining the Territory

The conference was divided into four sections: examination of faculty health, personal and social dimensions, perspectives from the humanities and social sciences, and supports and interventions. Several authors contributed chapters for each section. What follows is a summary of key findings, concerns, and recommendations.

Examination of Faculty Health

Epidemiology. As detailed in Chapter 2 by Daria Boccher-Lattimore, data regarding morbidity, mortality, and health care provide a telling perspective on the state of health of academic faculty in medicine. Because virtually all the surveys focus only on physicians—and many of those surveys target physicians working in the community—not enough is known about the health of academicians, whether researchers or physicians. This gap stands as a major area to fill with upcoming studies.

Impairment. Special attention is given in most settings to what is termed the “impaired physician.” Chapter 3 by Eugene Boisaubin gives the definition of impaired physician held by The American Medical Association: one who is “unable to fulfill professional or personal responsibilities because of a psychiatric illness, alcoholism, or drug dependency.” Dr. Boisaubin proposes that the list ought to include chronic, unremitting stress because it too can affect judgment and performance.

Methods and uses of measuring faculty health. Mamta Gautam in Chapter 4 suggests a number of measures of wellness that can be used in the workplace to

determine the presence and level of burnout and illness. The results of such measures can lend support for the creation of a wellness program for the faculty. Specific steps are outlined to facilitate the development of such a program.

Personal and Social Dimensions

Psychological health. The interplay between the academic medical center and its faculty shapes the health of both. Susan McDaniel, Stephen Bogdewic, Richard Holloway, and Jeri Hepworth advise, in Chapter 5, that leaders must have the vision and the courage to align systems in a manner that ensures both individual and organizational success. In turn, faculty must assess their own talents and interests and determine how they align with organizational goals and priorities. The authors provide tables offering a framework for assessing the psychological health of the individual and the medical center.

Faculty life cycle. Stage of career is relevant for understanding and responding to changing stressors and needs of faculty. In Chapter 6, Thomas Viggiano and Henry W. Strobel present The Career Management Life Cycle Model. It identifies eight phases: recruitment, orientation, exploration, engagement, development, vitality, transition, and retirement. Each phase provides the institution with an opportunity to give targeted and tailored support to assist the individual. In many instances, however, the culture of the institution requires significant change before any efforts to help the individual can be successful.

Gender and generation. Among the complex factors shaping the experience of and response to the exacting conditions of academic medicine, gender and generation stand at the forefront. In Chapter 7, Janet Bickel emphasizes both the work that remains to facilitate women realizing their potential and the newer challenge of bridging generational differences. In light of the resulting demands placed on senior faculty, she outlines promising directions for leaders in academic medical centers who are forward-looking enough to place faculty vitality high on their list of priorities.

Diversity. Faculty members who belong to underrepresented minorities have unique stressors in addition to those shared with their colleagues. Elise Cook and Harry Gibbs specify in Chapter 8 that marginalization, lack of mentoring, limited networking opportunities, social isolation, devaluation of their work, and lower rates of promotion than those of the majority of the faculty are marked examples. The authors examine the consequences of discrimination and other stressors not only for careers, but also for morale and health.

Perspectives from the Humanities and Interpretive Social Science

Organizational culture. Each academic medical center has its particular organizational culture, or shared pattern of basic assumptions about “how things are done around here.” In Chapter 9, Kevin Grigsby describes some organizational cultures

as conflict laden and competitive, while others value nurturing and mentoring. More explicit attention to faculty health and wellness requires not only programs of prevention and enhancement, but also changes in organizational culture needed to promote faculty well-being.

The ethics of self-care. The medical academy's primary ethical imperative may be to care for others, but this imperative is meaningless if it is divorced from the imperative to care for oneself. So argues Craig Irvine in Chapter 10. How can we hope to care for others, after all, if we, ourselves, are crippled by ill health, burnout, or resentment? Too often, however, this imperative remains unheeded by medical academicians and ignored by professional ethicists. If they are to heed the self-care imperative, medical academicians must turn to an ethics that not only encourages, but even demands care of the self. An important resource can be found in narrative ethics. Since narrative is central to the understanding, creation, and recreation of our selves, we can truly *care* for our selves only by attending to our self-creating stories. Narrative ethics brings these stories to our attention; so doing, it allows us to honor the self-care imperative.

The humanities. From the perspective of scholarship in the humanities, faculty health is closely tied to the question of meaning. In Chapter 11, Thomas Cole and Nate Carlin explain that this focus is stated clearly in the definition of health put forward by the AAMC task force in 1999: health is "not just the absence of disease but a state of well-being that includes a sense that life has purpose and meaning." Academic physicians and scientists come to their work motivated by the values of science, compassionate care, service, and education. Yet current conditions (especially the requirement to produce clinical income or grant funds) often limit faculty's ability to live up to their highest ideals of service and teaching, a failing which creates cognitive dissonance. Cognitive dissonance in turn may lead to cynicism, disillusionment, self-doubt, disease, and retreat from those ideals that now seem so unrealistic. The humanities cannot "solve" these problems, but they can help faculty and institutions understand and address them.

Reclaiming the call. In Chapter 12, Henry W. Strobel reminds us that since antiquity, medicine has been a calling—a vocation dedicated to comforting, caring, and curing. Yet contemporary financial pressures and challenges of the health care delivery system combine to inhibit one's ability to give to others, to enter into a genuine relationship with patients. Medicine as a calling is undermined, a situation resulting in a loss of heart in faculty and a loss of faculty in institutions. The health and well-being of faculty and of institutions can be enhanced by making personal and structural changes designed to connect faculty with meaning in work.

Supports and Interventions

Developing a faculty health program. Ellen R. Gritz, Janis Apted, Walter Baile, Kathleen Sazama, and Georgia Thomas describe in Chapter 13 the beginnings and subsequent growth of the faculty health program at the University of Texas

M. D. Anderson Cancer Center in Houston, Texas. The program consists of prevention, intervention, and response. The preventive aspect offers seminars on stress, burn-out, resilience, human performance, and productivity, as well as skill-building in meditation, relaxation, and mental fitness. Customized programming is given to departments, chairs, and other faculty leaders, and faculty spouses. A Faculty Assistance Program offers confidential psychological consultations off-site for faculty and their families at no cost to them. The intervention and response programs put an institutional plan in place when an emergency or death occurs among the faculty. Faculty health initiatives are enhanced by collaborations with other institutional programs such as the comprehensive Faculty Development Program, a Faculty Leadership Academy, a Women Faculty Program, an Office of Institutional Diversity, an Ombuds Office, and an I²CARE program (Interpersonal Communication and Relationship Enhancement).

Changing the culture in academic medicine. Establishing a better environment for the challenging work of academic medicine presents itself as a more efficient way to aid faculty members than only targeting the people themselves. In Chapter 14, Debra K. Litzelman and her colleagues recount a unique initiative at the Indiana University School of Medicine that affected faculty well-being through an effort at comprehensive cultural change. The initiative was based on applying relationship-centered care not only to doctors and patients, but also to all members of the academic community. Early efforts at cultural change focused on the formal curriculum and on creating a broadly distributed written document regarding the organization's guiding professional values. Over a several year period, a wide variety of programs were offered regarding personal formation (knowing self), community formation (finding community), and cultural formation (creating value).

Conflict resolution. Several factors typical of academic medical centers contribute to significant potential for conflict among faculty. Examples of such factors include competition for resources, financial strains, turnover in leadership, and a negative climate for funding research. In Chapter 15, Anu Rao, Patricia Parker, and Walter Baile review strategies for managing conflict in academic medical centers. In addition, the authors present an approach developed at The University of Texas M.D. Anderson Cancer Center that utilizes an organizational ombudsperson.

Programming for faculty health and well-being. Most institutions have not initiated projects to change their culture in a substantial way, but some have initiated programs to help faculty members gain knowledge, skills, and opportunity to support self-care. That effort itself frequently stands as strong indication of care on the part of the institution. Faculty health programs may also gather data about sources of stress, sources that leaders may then work to resolve at the institutional level. Programming generally includes a range of offerings such as educational seminars on methods of reducing stressful reactions, confidential psychological counseling, meditation groups, and assessment tools and courses through a web site. Individual departments may also take responsibility for providing programs aimed at promoting stress reduction or increasing morale quite apart from what the formal faculty health program offers. Indeed, surveying the faculty either by department or

throughout the institution for their interests and needs creates a strong support and guide for programming.

Setting Forth

The foregoing summaries can only hint at the richness of ideas, innovations, theories, and needs given in the full chapters ahead. It is hoped that reading them will generate for the reader many new and interesting perspectives. These can then lead to contributions not possible before this conversation was engaged.

References

1. Adams, D. (2007) Doctor morale shaky as practice stressors surge (<http://www.ama-assn.org/amednews>) January 15, 2007.
2. Spickard, A., Gabbe, S.G., and Christensen, J.F. (2002) Mid-career burnout in generalist and specialist physicians *Journal of the American Medical Association* **288**(2), 1447–1450.
3. Schindler, B.A., Novack, D.H., Cohen, D.G., Yager, J., Wang, D., Shaheen, N.J., Guze, P., Wilkerson, L., and Drossman, D. (2006) The impact of the changing health care environment on the health and well-being of faculty at four medical schools *Academic Medicine* **81**, 27–34.
4. Aasland, O.G., Olff, M., Falkum, E., Schweder, T., and Ursin, H. (1997) Health complaints and job stress in Norwegian physicians: the use of an overlapping questionnaire design *Social Science & Medicine* **45**(11), 1615–29.
5. Sutherland, V.J., and Cooper, C.L. (1992) Job stress, satisfaction, and mental health among general practitioners before and after introduction of new contract *BMJ* **304**, 1545–48.
6. Williams, E.S., Konrad, T.R., Linzer, M., McMurray, J., Pathman, D.E., Gerrity, M., Schwartz, M.D., Scheckler, W.E., and Douglas, J. (2002) Physician, practice, and patient characteristics related to primary care physician physical and mental health: results from the Physician Worklife Survey *Health Services Research* **37**(1), 121–43.
7. The Cancer Letter (February 8, 2008) **34**(5), 1–4.
8. Mandel, H.G., and Vesell, E.S. (2006) Declines in funding of NIH R01 Research Grants *Letters Science* **313**, 1387.
9. NCI Funding Policy For FY 2008 Research Project Grant (Rpg) Awards. National Cancer Institute. 14 February 2008. <http://deainfo.nci.nih.gov/grantspolicies/FinalFundLtr.htm>

Part II

Examination of Faculty Health

Chapter 2

Epidemiology

Daria Boccher-Lattimore

Abstract In this chapter we will review what is known about the health of academic medical faculty and the related morbidities and mortalities. How are these experiences affected by gender, ethnicity, age, and cohort? What are the implications of an unwell academic faculty workforce? Other than the expected effect of impairment and performance, recent studies have shown the relationship between physician job dissatisfaction and less than optimal patient care. These results will be summarized and highlight the personal, professional, and institutional impact of faculty health.

Keywords Academic medical faculty, health status, mortality, morbidity, barriers to care

Introduction

17,596

the # of published articles with "health status" as a key subject heading

3,502

the # of published articles with "medical faculty" as a key subject heading

0

the # of published articles with "health status" and "medical faculty" as key subject headings¹

D. Baccher-Lattimore

Assistant Professor of Clinical Sociomedical Sciences in Psychiatry, College of Physicians and Surgeons, and Mailman School of Public Health, Columbia University
Director, New York/New Jersey AIDS Education & Training Center, New York, USA
e-mail: dmb82@columbia.edu

¹Based on Ovid Medline MeSH search for journal articles published 1950 through January 2008

“Faculty health” is an elusive concept. While on the surface a seemingly obvious notion, defining it in an inclusive and measurable way becomes challenging. Who are medical and scientific faculty? And how do we define their health? Once one answers these questions and identifies an operational definition, the challenge becomes identifying available measures, as demonstrated in the example above. Although there is a significant amount of published literature on subjects such as stress and burnout among physicians (but not on scientists), this chapter addresses the dimensions of faculty health more broadly.

There are nearly 125,000 full-time medical faculty in the United States, including clinical specialists and generalists, and basic, behavioral, and social scientists [1]. The majority (62%) are medical doctors; a quarter of them are Ph.D. or other doctorate-level faculty; and 7% have dual degrees (M.D./Ph.D.). In order to meet the institutional missions of the academic medical center, faculty divide their time among research, teaching, and clinical duties to varying degrees. Recent changes in the environment of academic health care settings, decreasing financial security, and increasing demands on faculty have created an increasingly stressful environment for the academic medical faculty member. Stress and workplace factors have long been known to have ill effects on the workforce. However, little is known if and how the changing academic environment has impacted the health of its faculty.

The definition of health has evolved from the biomedical definition of “the absence of disease” to a multidimensional concept, which includes physical, social, mental, and spiritual well-being. Indeed, some have argued that measures of signs and symptoms of disease are not sufficient measures on health, rather functional outcomes are necessary to truly understand a population’s health [2]. Yet as our conceptualization of health has expanded, the availability of adequate measures of such has lagged behind, particularly, as we seek to assess the health of a population. Our most readily available indicators of a population’s health remain measures of disease and its consequences, i.e., morbidity and mortality.

Indicators of a population’s health tend to come from three sources: vital statistics, surveys/self-reports, and information on health services utilization. Vital statistics provide us with counts on a population’s mortality and the incidence and prevalence of some diseases. This information is often supplemented with survey data, which range from large surveys of nationally representative samples to cohort studies focusing on small well-defined populations. These surveys allow for measures of experiences of distress and functioning and their impact on quality of life. Finally, increasingly, researchers have turned to measures of health care utilization and health practices as indicators of a population’s health.

This chapter will review the empirical literature on the mortality, morbidity, and health practices of academic medical faculty.

Mortality

14,008

the # of published articles with “mortality” as a key subject heading

3,502
 the # of published articles with “faculty, medical,” as a key subject heading
 0
 the # of published articles with “mortality” and “medical faculty” as key subject
 headings²

While mortality data are gathered on a regular basis, the literature is sparse on the mortality of academic medical faculty. Tens of thousands of articles address mortality and thousands are available focusing on medical faculty, yet no studies were referenced in the medical literature by both keywords, “mortality” and “faculty, medical”. This is a function of the sources of mortality data and the available measures of population subgroups. Larger vital statistic databases are the primary source of mortality data. While these generally include measures of occupation, they do so with generic (often census-based) categories. These data allow for, at best, a comparison of similar occupational categories, e.g., physicians and other professionals. Further differentiation of occupational group is not possible; so, for instance, one cannot distinguish between physicians practicing in the community from those based in an academic medical center. Cohort studies are another source of cause-specific mortality data, allowing for a focused analysis of a well-defined population. However, these studies often lack external validity, i.e., have limited generalizability to groups outside of the study population. In addition, mortality data of physicians and academic medical faculty is limited by the fact that women and minorities entered this workforce relatively recently; hence, available data are insufficient for subgroup analysis.

One of the few comprehensive studies on all-cause and cause-specific mortality among physicians was conducted by Frank et al. with a proportionate analysis of data from the National Occupational Mortality Surveillance database [3]. The National Institute for Occupational Safety and Health (NIOSH) maintains this database of death certificate data with occupation information. The usual occupation of the decedent is coded according to the Bureau of the Census classification system, allowing for comparisons of mortality across similar job classifications.

The authors compared the proportion of deaths due to a specific cause in physicians with the proportion of that cause of death in lawyers and all professionals. The cause of death of physicians and other professionals over the age of 25 reported in 28 states between 1984 and 1995 were the basis of analysis. Analyses were gender- and race-specific and were limited to those with a race/ethnicity of white or black, due to small numbers of other races. However, data for women were not presented because there were relatively fewer older women in the physician population.

Nearly four million deaths were reported of men aged 18–90 years and whose race was either black or white: 204,365 white male professionals, 13,034 white male physicians; 13,558 professional black males, and 347 black male physicians.

²Based on Ovid Medline MeSH search for journal articles published 1950 through January 2008

Overall, white male physicians lived longer (73 years, mean age at death) than lawyers (72.3 years), other professionals (70.9 years), and men in the general population (70.3 years). A similar result was found among black males. Black male physicians lived longer (68.7 years) than other professionals (65.3 years), men in the general population (63.6 years) and lawyers (62 years). (Curiously, black male lawyers had the youngest mean age of death.) Stark is the racial disparity in mean age of death, even among professionals. Black male physicians, while having the highest mean age at death among black males, had a younger mean age of death than all of the white male categories.

The overall finding that physicians live longer than others is not unexpected given the high socioeconomic status associated with the profession. However, this holds true even when comparing to professionals of assumed similar socioeconomic status. The reasons for this are not known, but may be attributed to better access to health care, more awareness of healthy behaviors and/or health practices. These will be examined below.

Frank et al. examined cause-specific mortality as well. Such subgroup analyses further reduced the sample size, so that cause-specific analyses concentrated on that of the white male physician populations. In general, the most common causes of death for white male physicians were similar to those in the general population: heart diseases and cancers. Elevated rates of death among white male physicians were found with accidents and suicide and drug-related causes. A similar analysis of the limited number of white female physicians shows an elevated rate of death due to drug-related deaths, suicide, and self-inflicted injuries. Black male physicians only differed from other black male professionals in a higher rate of diabetes mellitus-related deaths (but again the numbers were very small in these subgroup analyses).

In a study to determine the relationship between occupation and death from ischemic heart disease (IHD) (using the same database as Frank above), Calvert et al. (1999) found racial differences for physicians as well [4]. In white-collar occupations for black males, physicians had the highest proportionate mortality risk from IHD for all professions; while white male physicians had a significantly lower risk than their white-collar counterparts. These data further support the preliminary findings that racial differences may exist in cause-specific mortality among physicians.

Three earlier cohort studies support the conclusion that, in general, physicians experience a lower cumulative mortality than their counterparts in the general population [5–7]. Williams et al. (1971), in the earliest of these studies, reported that the expectation at the time was, in fact, that physicians would experience an elevated level of mortality than the general public due to higher levels of stress and longer working hours. Two of these cohort studies examined cause-specific mortality [5]. In a cohort study of medical school graduates from two California schools, Ullman et al. (1991) found elevated risks of suicide among one cohort and elevated risk of death by accidents in both cohorts, compared to the general US white male population [6]. In an analysis of young physician deaths reported in JAMA over an eight-year period, Sankoff et al. found an