

The evolution of professional societies in behavioral medicine

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Received: May 5, 2018 / Accepted: June 22, 2018 / Published online: March 1, 2019
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Abstract The Academy of Behavioral Medicine Research, the American Psychosomatic Society, the Society for Health Psychology, and the Society of Behavioral Medicine are the four largest behavioral medicine research organizations in North America. All four of these organizations have evolved over the past 40 years, in response to changing times and conditions. They have done so independently, and each one occupies a unique niche in the field of behavioral medicine. However, all four recognize the need for cooperation to address challenges of mutual concern and to capitalize on opportunities for behavioral medicine research to have a greater impact on preventive services and health care. The recent formation of the Behavioral Medicine Research Council (BMRC) is a prime example. As an autonomous joint committee of all four organizations, the BMRC will promote large, definitive, randomized controlled trials to address some of the highest-priority problems in behavioral medicine. This cooperative venture will help the entire field, along with the major behavioral medicine research organizations, continue to evolve in productive ways over the next 40 years.

Keywords Behavioral medicine · Societies, scientific · Randomized controlled trials as topic · Multicenter studies as topic

The Academy of Behavioral Medicine Research (ABMR), the American Psychosomatic Society (APS), the Society

for Health Psychology (SfHP), and the Society of Behavioral Medicine (SBM) are the four leading professional societies for behavioral medicine specialists in North America. They are also four of the leading behavioral medicine organizations in the entire world, thanks in part to their international memberships.

All of these organizations have played critical roles in the field of behavioral medicine, yet they formed at different times, for different reasons, and with different missions. All of them have evolved over time in response both to internal and external trends and developments, but they have done so independently over the past four decades. All of this is a recipe for variegation, i.e., the emergence and widening of differences among them. Remarkably, despite their differences, these four major organizations having been seeking common ground and finding new ways to cooperate and collaborate on ventures of mutual interest.

Historical background

The American Psychosomatic Society is by far the oldest of the four organizations. It was founded in 1942, although it was initially called the American Society for Research in Psychosomatic Problems. *Psychosomatic Medicine*, the society's official journal, went to press in 1939, 3 years before APS was founded. The formation of APS reflected a growing interest in the 1930's and 1940's in the intersections among psychiatry, psychology, internal medicine, and physiology, and in an assortment of conditions such as peptic ulcers that were thought at the time to be psychogenic (i.e., psychosomatic) disorders (American Psychosomatic Society, 2018; Levenson, 1994).

The traditional psychosomatic disorders were gradually eclipsed within APS by research on biobehavioral mecha-

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nisms that are hypothesized to link a variety of behavioral, psychosocial, and psychiatric problems to the development of major chronic illnesses such as cancer, diabetes, and heart disease, and to adverse outcomes in patients with established illnesses. APS has thus evolved over time into one of the leading organizations for researchers who study psychosocial and biobehavioral factors in physical health and chronic disease. In doing so, it embraced many of the same scientific, clinical, and public health issues that dominate the other organizations' meetings and journals.

APS was essentially the entire organizational universe in our field until 1978, when all three of the other major behavioral medicine organizations were created. Why 1978? Why did such a radical change occur after 36 years of APS's dominion? There are many reasons, but perhaps the most fundamental is the "epidemiologic transition" (Omran, 1971) that had occurred in many wealthy, industrialized nations by the late 1960's. During an epidemiologic transition, a country or region sees age-old scourges such as famines, infectious disease epidemics, and high infant mortality rates recede into the wretched past, only to be replaced by the chronic illnesses of modern life.

After epidemiologic transitions occurred in North America and Europe, it became apparent that a variety of behavioral and psychosocial factors play important roles in chronic medical illnesses. For example, the landmark report that linked cigarette smoking to medical morbidity and mortality (United States Surgeon General's Advisory Committee on Smoking and Health, 1964) devoted an entire chapter to the psychosocial aspects of smoking. Interest in the role of behavioral factors in health and illness grew rapidly during the 1960's and 1970's. This extended beyond "lifestyle" factors such as smoking, physical inactivity, and poor dietary habits, to psychosocial problems such as stress (Birk, 1973) and Type A behavior (Friedman & Rosenman, 1974).

These trends led to a number of developments that preceded the 1978 organizational baby boom. Some of the key events included the National Heart, Lung, and Blood Institute (NHLBI) Conference on Health Behavior in 1975, the establishment of the National Institute of Health Behavioral Medicine Study Section in 1976, the Yale Conference on Behavioral Medicine in 1977, and the creation of the Behavioral Medicine Research Branch within NHLBI in 1977. Some of the leaders of these initiatives, including such renowned figures as Drs. Stephen Weiss and Joseph Matarazzo, were also founders of ABMR, SfHP, and SBM. There was strong and immediate interest in all three organizations.

The organization that is now known as the Society for Health Psychology started out as a division of the American Psychological Association (APA), i.e., the Division of Health Psychology, otherwise known as Division 38. It

remains a division of APA, but it changed its name in 2015 in line with its growth and its increasingly prominent role in all aspects of health psychology.

The Society for Health Psychology is the only one of the four organizations that is not multidisciplinary; its membership is relatively large but it consists almost entirely of psychologists. Throughout its first three decades, the American Psychosomatic Society was also dominated by a single discipline. Most of its members were psychiatrists, and many of them were subspecialists in consultation-liaison (CL) psychiatry, i.e., the care of patients with comorbid psychiatric and general medical conditions. However, APS became increasingly multidisciplinary in in the 1980's and 1990's. An unintended consequence of this evolutionary change was that many of the practitioners of CL psychiatry who had been active in APS lost interest in the organization. Most subspecialty practitioners of CL psychiatry now regard the Academy of Consultation-Liaison Psychiatry (ACLIP)—not APS—as their organizational "home base" (Lipsitt, 2001). Meanwhile, APS continues to evolve as a multidisciplinary, research-oriented organization, leaving SfHP as the only one of the "Big Four" that focuses primarily on a single discipline within the multidisciplinary field of behavioral medicine.

The Society of Behavioral Medicine is one of the largest and most multidisciplinary of the four behavioral medicine organizations. Its membership includes psychologists, physicians, nurses, nutritionists, public health specialists, exercise physiologists, and others who share an interest in the interactions of behavior with biology and the environment, and in applications of research on these interactions to improve the health of individuals, families, communities, and populations (Society of Behavioral Medicine, 2018).

In its early years, SBM was less multidisciplinary than it is today; the majority of its members were psychologists. It was also dominated by cardiovascular behavioral medicine, and many of the studies that were presented at SBM meetings focused on relationships of behavioral and psychosocial factors such as stress, hostility, and social support to cardiovascular dysregulation. Today, a smaller proportion of SBM meeting and publication content is devoted to cardiovascular behavioral medicine and to psychosocial factors such as stress, anxiety, and depression.

This shift did not occur because these topics are any less important than they once were. It reflects the impressive growth of research on lifestyle behaviors and other behavioral factors such as adherence and self-management in cancer, diabetes, asthma, and many other chronic medical conditions. It may also reflect a related issue that has confronted many scientific organizations in recent years: Researchers with busy schedules, multiple demands on their time, and limited funds for professional memberships

and conference travel tend to drift away from meetings at which their areas of interest are underrepresented and towards ones at which they are particularly well represented. The field of behavioral medicine comprises many different areas of research and practice, and like other organizations, SBM has to work hard to attract, retain, and engage a membership with very diverse interests.

The Academy of Behavioral Medicine Research stands alone as the only one of the four organizations whose membership is by invitation only. ABMR was founded in 1978 at a meeting at the Institute of Medicine (now called the National Academy of Medicine) in Washington DC by a group of prominent biomedical and behavioral scientists. The meeting was co-chaired by two eminent scientists, Drs. Neal Miller and David Hamburg. They went on to become the first and second presidents (respectively) of ABMR, a position that has been filled ever since by leading researchers in behavioral medicine (Academy of Behavioral Medicine Research, 2018).

The founders wanted ABMR to resemble the Institute of Medicine in the sense that it would be something like a “think tank” for a select group of leading scientists. The elected fellows of ABMR were supposed to convene annually to evaluate the state of the science of behavioral medicine and to chart new directions in research. It has always fulfilled this mission to the extent that ABMR meetings combine outstanding presentations on cutting-edge science with opportunities for leading researchers to share ideas with one another at informal events. Numerous scientific collaborations and novel research projects have emerged from these interactions. However, ABMR’s role as the pathfinder *par excellence* for the entire field of behavioral medicine has been largely aspirational. It has traditionally focused more on cultivating and convening the leaders of the field than on leading the field, but it is striving for a better balance between these objectives. Thus, like the other organizations, ABMR is evolving.

Convergence

Ever since 1978, these four organizations have been dedicated to achieving their own goals and contributing to the field in their own ways. They have occupied their own distinctive niches in the behavioral medicine landscape and have evolved in different ways in response to their own unique challenges. They never have shown any interest in merging with one another, but they have always been interested in finding common ground and in working on endeavors of mutual interest. After 40 years of coexistence and maturation, all four organizations are opening up to new forms of cooperation. The recent formation of the

Behavioral Medicine Research Council (BMRC) exemplifies this trend.

The BMRC is not an organization in its own right; it is an autonomous joint committee of ABMR, APS, SBM, and SfHP. Its mission is to identify significant clinical and public health problems that will take well-organized, large-scale efforts by the behavioral medicine research community to solve. It also encourages multidisciplinary, multi-center collaborations to pursue advances in biobehavioral science to improve clinical and public health outcomes.

Why did these four well-established behavioral medicine organizations decide that they needed to form a joint committee to pursue this mission? They did so because of its growing importance in the contemporary health care environment, coupled with a realization that none of the organizations was able to pursue it productively on its own. All four organizations reached the conclusion that they have a vital stake in this mission, and that the most effective way to pursue it is by joining forces and cooperating.

Research over the past several decades, much of which has been conducted by the members of these organizations, has established beyond any reasonable doubt that behavioral, psychosocial, and psychiatric factors play important roles in a variety of major medical conditions. However, evidence-based behavioral interventions still play commensurate roles in the prevention and treatment of very few of these conditions. One of the principal reasons for this gap is that stronger evidence is needed to influence health care guideline writers and policymakers, third party payers, and the clinical practice and prevention communities to target behavioral risk factors and to implement evidence-based behavioral interventions to improve medical outcomes. To produce this evidence, it is necessary to move beyond the small, scattershot intervention studies that have been the norm in behavioral medicine, to large, definitive, multicenter, randomized controlled trials (RCTs) with clinically important outcomes. It is also necessary to proceed from positive multicenter RCTs to effectiveness and implementation research.

Fortunately, the establishment of the BMRC occurred in the midst of a burst of interest in translational research models (e.g., Czajkowski et al., 2015), intervention development and clinical trial methodologies (e.g., Collins et al., 2011; Mohr et al., 2009; Patient-Centered Outcomes Research Institute, 2017; Riley, 2017), and the emergence of research strategies for examining and promoting dissemination and implementation of evidence-based practices in behavioral medicine and other areas of health care (Brownson et al., 2012). These developments are moving the field toward more systematic and programmatic approaches to achieving major research goals, at a time when the need for them has become urgent.

The Diabetes Prevention Program (DPP) (Knowler et al., 2002) is the best example to date of a long-term research program that culminated in rigorous multicenter testing and widespread implementation of an evidence-based lifestyle intervention that effectively prevents disease progression. The DPP exemplifies the potential benefits of large-scale, long-term, collaborative, multicenter research programs in behavioral medicine. Unfortunately, it is a rather lonely example. While numerous, game-changing, multicenter RCTs have been conducted to address significant problems in “mainstream” cardiology, pulmonary and critical care, oncology, and other medical fields, such trials have been rare in behavioral medicine. The BMRC was created to help behavioral medicine catch up with the rest of medicine in this arena.

The BMRC is responsible for identifying the most promising strategic research goals in behavioral medicine. These are long-term goals that have considerable translational potential and whose achievement will require concerted and persistent efforts of well-organized, well-led, multidisciplinary, multicenter research networks. The BMRC’s mission also includes cultivating these research networks and encouraging them to pursue high-priority strategic research goals.

Prevention of metastatic breast cancer is an example of the kind of topic that the BMRC might decide to consider. Groundbreaking research by the National Cancer Institute’s Network on Biobehavioral Pathways in Cancer has identified neurohumoral mechanisms through which stress promotes metastasis (Cole et al., 2015). Beta-blockers (Ganz et al., 2011; Sorensen et al., 2013) and stress management interventions (Antoni et al., 2016) have shown considerable promise as methods for disrupting these mechanisms. If the BMRC decides to examine this area of research, it will evaluate whether it is time (or whether it may soon be time) for one or more large, multicenter clinical trials to determine whether these treatments can prevent metastatic or recurrent breast cancer and improve survival. If the BMRC concludes that this is a timely and important question that may be feasible to pursue, it will commission an expert writing group to examine it in greater depth. The writing group will issue a scientific statement regarding the strength of the evidence, the field’s readiness for large-scale, definitive trials of the most promising behavioral or psychosocial interventions for the secondary prevention of metastatic breast cancer, and the potential impact of such trials on guidelines, policies, practices, and health care financing. The statement will encourage the organized pursuit of this strategic goal if the circumstances are favorable. If the circumstances are more unfavorable than favorable, the statement may conclude that the time is *not* right for a large-scale effort in this area, and it may recommend an alternative course of action.

Several of the organizations’ official journals have agreed to co-publish these scientific statements, to promote broad dissemination.

In order for these efforts to succeed, the scientific culture of the behavioral medicine research community will have to evolve. We have traditionally placed a much greater emphasis on scientific independence and creativity than on team science and large-scale, well-organized collaborative efforts to achieve strategic research goals. However, it takes persistent, well-organized, long-term efforts to lay the groundwork for large, multicenter RCTs, to obtain the necessary funding, and to conduct these trials. We will have to find new ways to collaborate and organize ourselves for this purpose, without surrendering too much of our treasured independence and creativity. It is ironic that we have given such enthusiastic support to the major behavioral medicine research organizations over the past 40 years, while simultaneously remaining fairly disorganized in ways that are critical to the pursuit of strategic research goals. This will have to change for the practice of behavioral medicine to become a larger and better-integrated facet of mainstream medicine and public health.

The BMRC will be at the forefront of this change, and it will be there with the committed support and engagement of four major behavioral medicine research organizations. There is no better proof that the American Psychosomatic Society, the Academy of Behavioral Medicine Research, the Society for Health Psychology, and the Society of Behavioral Medicine are continuing to evolve to meet the needs of the behavioral medicine research community and of the high-risk populations, patients, and practitioners who are depending on our efforts.

Future directions

Scientific organizations, as well as entire scientific fields, have to adapt to changing times and conditions in order to survive. They may risk becoming irrelevant if they ignore this never-ending challenge. When the field of behavioral medicine was very young, circa 1978, it established its importance within the larger health care and medical research communities by discovering a host of ways in which behavioral and psychosocial factors affect the development, progression, and outcomes of chronic medical conditions. Over the next few decades, the field and the organizations that represent it gradually shifted towards a greater emphasis on prevention and intervention strategies. This was an evolutionary adaptation to growing societal needs and demands for answers to the kinds of health behavior issues and health-related psychosocial problems that our research had exposed. It was not enough to investigate health-related problems such as smoking, obe-

sity, or stress; it was necessary to try to do something about them. Thus, one of the ways behavioral medicine remained relevant to the larger health care and research communities was by taking on the challenge developing and testing preventive strategies and interventions for a wide range of behavioral and psychosocial problems.

More recently, it has become apparent that our prevention and intervention research has not had as much of an impact on clinical services, public health practices, and health outcomes as we had hoped. One way to change this is to conduct more definitive, multicenter RCTs, but this will require well-organized efforts and seasoned leadership. The four major North American behavioral medicine research organizations are taking this challenge seriously, as demonstrated by their unprecedented cooperative agreement to form the Behavioral Medicine Research Council. The BMRC will help the field shift into a higher gear in its prevention and intervention research efforts, by focusing on high-priority strategic research goals and fostering the pursuit of these goals by well-organized, well-led, multidisciplinary, multicenter research networks.

It can take many years to pave the way for a multicenter RCT, and many years to conduct, analyze, and report one. Thus, to expect the BMRC's efforts to influence clinical guidelines, clinical practices, prevention programs, or public health policies over the next few years would be to expect too much too soon. What we should expect is to see these efforts have a significant impact over the next several decades. The BMRC represents an investment in the long-term future of the organizations that created it, in the field of behavioral medicine research, and in the health and well-being of people who stand to benefit from our work.

Compliance with ethical standards

Conflict of interest Kenneth Freedland, PhD is a member of the four organizations that are discussed in this article. He receives an honorarium from the Society for Health Psychology for his editorial service.

Human and animal rights and Informed consent This article does not contain any studies with human participants or animals performed by any of the authors.

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