

Translational Behavioral Medicine: a pathway to better health

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Cite this as: *TBM* 2011;1:1–3
doi: 10.1007/s13142-011-0029-z

HEALTH DETERMINANTS/HEALTH PRACTICES

Isn't it time to close the chasm between what we know about health determinants and what we put into practice to improve health [1]? Around the globe, 60% of all deaths are caused by chronic disease [2]. All parts of the world are affected. Eighty percent of chronic disease deaths now occur in low- and middle-income countries [2]. In the United States, nearly 50% of adults live with at least one chronic condition, and those conditions account for 75% of health care costs [3, 4].

The major causes of chronic disease – behavioral, psychosocial, and environmental influences on health – are the subject matter of behavioral medicine [1, 5]. Behavioral medicine is the interdisciplinary field concerned with integrating and applying psychosocial and biomedical knowledge to promote health, prevent disease, and manage illness. The mission of *Translational Behavioral Medicine (TBM)*, a new journal of the Society of Behavioral Medicine, is to advance the field's knowledge and actualize it to improve individual and population health. *TBM's* editorial board aims to accomplish this by bringing sound, actionable science to practitioners and catalyzing debate on policy issues that surround implementing the evidence.

We know that people get sick because of unhealthy behaviors: a poor quality diet, physical inactivity, and tobacco use are the major risk factors for chronic disease around the globe. Eliminating those risks would make it possible to prevent at least 80% of heart disease, stroke, type 2 diabetes, and 40% of cancers [1, 6]. Adverse psychosocial influences, including depression and work stress, have just as negative effects on health, and they act separately from the harm produced by unhealthy behaviors [7]. We know that people get sicker or fail to recover because they don't adhere to treatments. In fact, only about 50% of prescribed medications are actually taken [8, 9]. And yet, few countries spend very much money to address behavioral or psychosocial influences on health. The U.S., for example, allocates only 5% of its health care dollars to health promotion/disease prevention [5].

A PERVERSE DOUBLE STANDARD FOR INVESTMENT

Why don't we invest more in behavior change interventions that could improve health? One

reason is that “we” are several different constituencies that collaborate too rarely. *TBM's* editors hope to seed this journal with content that prompts dialogue and builds collaboration. Constructing a bridge across health care's translational chasm requires behavior change. The behaviors in need of change are not just those of our patients, but also those of our main professional partners: researchers, practitioners, and policy makers. A dearth of cross-talk between practitioners and researchers has long been lamented [1, 10]. One consequence of the disconnect is that even after 17 years, only 14% of research knowledge is adopted into practice [11].

Rarer still is dialogue between policy makers, on the one hand, and researchers and practitioners, on the other. Improved cross-talk might nudge payers toward more rational, less fragmented coverage of better quality care [12]. Consider, for example, the double standard that now applies to investment in treatment of illness versus health promotion. Coverage for medical treatments requires only that procedures be safe and effective. In contrast, even when behavioral preventive care mitigates the need for more expensive treatments, investment in health promotion is held to the much higher standard of requiring rapid return on investment (ROI) [5]. More strategic alignment of incentives and smoother integration of public health and clinical preventive efforts could yield a lot more population health [13–15].

Well-validated, cost-effective behavioral treatments exist for pervasive risk factors like obesity and smoking [16–19]. For several reasons, though, few such treatments are readily accessible to the public. Many behavioral interventions whose efficacy and cost-effectiveness is well established are intensive (involving multiple sessions) [16–19]. Yet, public sentiment runs against financing multiple sessions to help people overcome “bad behavior” that is perceived as their personal responsibility. The profit motive also runs counter to such investment since the ROI breakpoint for professionally delivered intensive treatments usually exceeds the 2 to 3 years that private insurers expect to maintain their clientele [12].

Accordingly, rather than scale and train the professional personnel needed to intensively treat

health risk behaviors, usual policy has been to try to save money by reducing the treatment dose by 50% or by having paraprofessionals rather than professionals deliver treatment (cf., [20, 21]). Although either is a reasonable strategy to try, we need also to continue to question why behavioral treatments are expected to turn such a rapid profit or else be chopped in half. Few would expect a salutary outcome from asking a cardiologist to prescribe 50% of the effective dose of a statin. Similarly, few insurers would try to save money by asking an oncologist to remove 50% of a tumor or using general surgeons instead of oncology specialists to remove tumors. Surely, it is just as false an economy to offer comparably diluted weight loss treatment to an obese patient who will progress to needing far more expensive bariatric surgery if behavioral treatment fails [22]. Likewise, even when bariatric surgery is necessary, the addition of lifestyle intervention makes good the financial investment since poor eating habits and physical inactivity dilute weight loss and undermine maintenance [23, 24].

To be clear, investment in intensive lifestyle treatments for high-risk patients should not displace low-intensity population-wide behavioral or policy efforts to promote health [13–15]. Intensive behavioral treatments are needed to keep high-risk patients from bankrupting the health care system by progressing to need more expensive treatments or hospitalization. Community-wide health promotion also is needed to reduce future disease burden by shifting the overall population distribution of a risk factor towards lower risk [13–15, 25]. Both approaches are necessary; neither alone can suffice.

WHERE THE PUCK WILL LAND

In forthcoming issues, *TBM's* editorial board will endeavor to skate our readership to where we believe the puck will land vis a vis fast-moving issues in behavioral medicine. I am delighted to launch our first issue with a special section on *Information Technology and Evidence Implementation*. Health Informatics has changed and will continue to change the way we communicate, practice, and study health and illness. *TBM's* launch issue on this topic will be released in tandem with an interrelated special issue of the *American Journal of Preventive Medicine (AJPM)*. The *AJPM* issue focuses on the broad context of cyberinfrastructure and public health. *TBM's* special section examines how information technology can be applied to advance behavioral medicine practice and policy.

The second issue of *TBM* will feature a collection of papers examining the transfer of evidence and evidence-based practices between cultures and countries around the globe. A special section in the third issue will consider findings and lessons learned from research designed to implement intensive obesity treatment in real-world settings. The fourth issue will feature a series of papers that showcase the

Veterans Health Administration's programs of translational research and practice in behavioral medicine. Special sections slated for *TBM's* second year will be just as exciting and actionable. On the docket is coverage of translational pain management, optimizing health behaviors among older adults, behavioral health involvement in the patient-centered health home, educating the interprofessional workforce about evidence-based practice, and the science and practice of teams. As important, there will be papers on the cutting edge, impactful topics that you, our readers and contributors, submit.

To foster cross-talk among *TBM's* researcher, practitioner, and policy maker communities, most articles will be accompanied by an "Implications" box that highlights key takeaways for each constituency. Other novel features include one-page policy briefs, news items from the CDC and NIH, and a column devoted to evidence-based practice. Also featured will be case studies that highlight practice and policy questions in need of research and that describe innovative ways in which evidence-based practices have been implemented in under-resourced settings. Systematic reviews of the effectiveness of interventions and policies will be showcased, and *TBM* will also present short pieces that synopsise new reviews, practice guidelines, and practice tools released elsewhere. Above all else, *TBM* seeks to engage our readership to improve how behavioral medicine is practiced, researched, and translated into policy. Please share your insights with our community.

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