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The Quest for Optimal Health

Can Education and Training Cure What Ails Us?

ABSTRACT: *This paper reviews the current need for training and education in the pursuit of optimal health for mental health consumers. Recommendations for building the capacity of consumers and the mental and medical health-care systems to support the self-directed recovery of health by persons living with mental illness are made.*

Premature mortality, comorbidity of variety of serious medical comorbidities, and ineffective treatment for persons with serious mental illness have been the enduring outcomes of the mental health system for over 30 years [1]. This is not a new crisis by any measure for people who live with a mental illness. Until recently, data has suggested that over 60 percent of individuals with mental illness develop serious medical

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comorbidities that result in a lost life span of 15–20 years compared with the general population [2]. Recently, even more alarming evidence indicates that in just the last decade, the risk for lost years of life has accelerated to 25 years earlier than the general population [3]. Anecdotal evidence suggests that not only persons receiving poor or psychiatric care are at increased risk for mortality from natural causes, but those receiving excellent and comprehensive psychiatric and psychosocial care are at increased risk as well.

Compelling clinical and research data has emerged that documents how treatment medications prescribed to ameliorate the symptoms of mental illness induce a number of serious adverse health issues including the metabolic syndrome, diabetes, dyslipidemia, obesity, osteoporosis, periodontal disease, and sexual dysfunction [4–7]. Indeed, the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) study found that those who take olanzapine are at increased risk for abnormal glucose and lipid metabolism compared to those taking conventional antipsychotics [8]. The CATIE findings also indicated that most individuals who develop these complications are not treated for them or are treated inadequately [9]. Rates of nontreatment ranged from 30.2 percent for diabetes, to 62.4 percent for hypertension, to 88.0 percent for dyslipidemia. These findings support the need for "increased attention to basic monitoring and treatment of cardiovascular risk factors in this vulnerable and often underserved psychiatric population" [9, p. 15].

It is indisputable that this staggering lack of a wellness lifestyle has been a powerful contributor to the disability experience and the recovery efforts of persons who live with mental illness [10]. The prevalence of being overweight, a smoker, and living a sedentary lifestyle is greater among people living with a mental illness (hereafter referred to as mental health consumers) compared to individuals without a mental illness. Lack of knowledge of correct dietary principles, lower self-efficacy, limited social support, and psychiatric symptoms influence health-related behavior [11]. Functional outcomes—including employment, independent living, utilization of support services, hospitalization, and mental health service utilization—are negatively impacted by this elevated incidence of serious medical disease [12–13].

This personal burden of illness represents a significant disparity in health care that must no longer be considered an inevitable de facto outcome of the mental illness experience. Mental health consumers

have a human right to optimal health, and the assertion of this right has significant implications for the mental health system, programs, providers, consumers, and families [10]. Federal mandates are pressuring the mental health system to transform its approach to mental health care to ensure that services support the full recovery of mental health consumers, which includes an emphasis on health promotion and improved access to and interface of physical and mental health [14–18].

Training and education of all stakeholder groups (i.e., consumers, families, and professionals) to promote health and reduce disparities in care is fundamental if we are to respond effectively to this crisis and promote the full recovery for mental health consumers.

Current Education and Training Opportunities That Promote Health

Professional training and consumer education are two distinct activities that can be used to disseminate knowledge and build capacity for specific behaviors. The lack of relevant training and education about health issues and health promotion are identified barriers that impede the achievement of optimal health for mental health consumers [16]. The inability to transfer education and training into daily practices and lifestyles underlies these barriers and has long been recognized as the most difficult aspects of creating change and achieving desired outcomes. The lack of financial reimbursement strategies for health promotion services is also a formidable barrier that thwarts implementation of training, education, and health-care practices. These funding barriers are compounded by differing staff training and philosophy, resource, and time constraints [19]. The consequences of these challenges have hindered recovery because people have experience unnecessary suffering, functional impairment, mortality, economic losses, and health-care costs [20].

Health Promotion and Education for Consumers

Despite these hurdles, there has been a growing recognition of the prevalence of a mind–body duality assumption in the mental health system and the need to develop training and educational opportunities to address this fragmentation. There is an abundance of evidence-based research that demonstrates that people live longer and live well when they practice

healthy lifestyles and receive quality care [21–22]. The excess comorbidities in people with serious mental illness are largely preventable health conditions that respond positively to educational interventions with diverse groups of people and in challenging environmental and cultural environments, indicating the potential for these strategies to be used in mental health [23].

Mental health consumers strongly agree and use a variety of integrative and complementary health practices and treatments as they pursue improved well-being [24]. There is a growing repository of educational tools that address healthy lifestyles that reduce comorbidities. Health education and structured health interventions are currently available as resources to educate consumers to help them achieve improved health outcomes. In addition, peer-delivered health and wellness education curriculums have been widely implemented. For example, Kate Lorig and associates at the Patient Education and Research Center in Palo Alto, California, are developing, evaluating, and disseminating self-management programs for people living with chronic diseases, including arthritis, diabetes, and HIV/AIDS [25–26]. These programs are based on needs assessment, are peer led, and deal with medical, physical, and emotional components. These programs come in many formats including groups, Internet based, and mail delivered. These models are based on the notion that individuals can learn promote their own health, as well as contribute to the management of illnesses. Similarly, the Illness (also called Wellness) Management and Recovery Program for the management of serious psychiatric disorders is an evidenced-based practice that provides a standardized intervention that emphasizes skill development to help people cope more effectively with their psychiatric illnesses so they can pursue their recovery goals [27].

Wellness and health promotion approaches for mental health practice have been proposed in recent years [10, 28–33]. Currently considered a promising practice, the Wellness Recovery Action Plan (WRAP) is an excellent example of a peer-delivered self-management tool designed to teach people to identify self-care strategies to maximize health [34]. WRAP is an educational self-management model that provides a structure to increase support and develop an action plan for both health and illness. This educational model prepares people to take responsibility for their health as a fundamental process of their personal recovery and wellness.

WRAP provides an excellent strategy to help people develop daily plans and other self-awareness processes to help restore personal wellness and recovery [31]. Translation of the WRAP is currently underway to allow its implementation into different Latino communities.

Another peer-delivered educational self-management approach has been developed based on the National Wellness Institute dimensions of wellness, coaching principles, and peer support. This model is derived from the work of Travis and Ryan [22], Swarbrick [31–32], and Arolski [35] and is being offered in both community and hospital settings. Wellness is defined as a lifestyle that includes a balance of self-defined health habits such as adequate sleep and rest, productivity, exercise, participation in meaningful activity, nutrition, productivity, social contact, and supportive relationships [31–32]. There is an emphasis on collaboration; the peer acts as a coach, helping to guide the person toward successful and long-lasting behavioral change. Peers apply principles and processes of professional life coaching to the goal of lifestyle improvement for higher levels of wellness [36].

Heath promotion and education that includes the integration of physical activity, nutrition education, diet and glucose monitoring, dental health practices, smoking cessation, and HIV/AIDS education has a growing evidence base as effective practices that reduce morbidities that are largely preventable. Although not yet reimbursable as mental health services (some are reimbursable as "regular" health care), the effects of lifestyle education on chronic disease outcomes are large and consistent across multiple populations including serious mental illness [37]. Guidelines are available to assist in the provision of evidenced-based physical activity interventions that educate consumers and promote improved health [38]. Research has demonstrated that the response to physical activity among mental health consumers is very similar, if not more pronounced, than the response found among the general population. Physical activity not only has known health benefits regardless of illness type, but research has also documented that it can alleviate secondary symptoms such as low self-esteem and social withdrawal [39–40]. Physical activity programs that integrate education about the importance of activity as well as the supported activity are recommended as education strengthens self-efficacy, which is one of the most important predictors of adherence to an active lifestyle [38]. Physical activity and educational interventions are feasible

and can result in significant behavior change, which improves the physical health outcomes of people with serious mental illness. This type of education is critical in a recovery-oriented approach to mental health.

Brown and Chan [41] reported on a brief health promotion intervention for persons living with mental illness. In a randomized controlled trial using a health promotion package, they produced small but statistically significant gains in exercise and weight loss, as well as improved subjective well-being. Participants in this study had unhealthy lifestyles but were concerned about their health and interested in trying to improve it. Significant health gains were found.

Tobacco use is a significant issue contributing to the poor health of consumers. Smoking cessation educational materials and intervention strategies have been shown to be effective. A manual for successful smoking cessation among persons with serious mental illness, *Tobacco-Free Living in Psychiatric Settings,* has been developed by Jill Williams and her colleagues at the National Association of Mental Health Program Directors [42].

Behavioral approaches are effective in achieving a modest weight loss for people with psychiatric disabilities, which is associated with important health protective outcomes. Evidence-based food education assists people to manage their weight more effectively and counteract the ill effects of weight gain associated with lifestyle and medications [43–44]. These manualized rehabilitation interventions include goal setting, skills training, skills practice, and the provision of social support around nutrition that supports the recovery process. In addition, these curricula were adapted to compensate for any educational and cognitive impairment that people may experience.

A dental health intervention that educates consumers on the importance of oral health and teaches skills is essential to reduce comorbidity and mortality [45]. Psychiatric illness and the medications used to treat illness can cause oral complications and side effects including tooth decay, periodontal diseases, and excess salivation. Of concern is the fact that oral health and general health are closely associated, adding to the poor health burden of mental health consumers [46]. Oral health can be improved through consumer education programs that focus on dental education, dental instruction, and reminders [47].

The National Alliance on Mental Illness has developed an educational program that targets comorbid physical health needs. *Hearts and Minds* is a 13-minute inspirational video and a 26-page booklet. The purpose of the program is to raise awareness and provide information on diabetes,

diet, exercise, and smoking. The program also includes basic information on addictions, recovery, stigma, and treatment. Along with information on diabetes and sleep apnea, *Hearts and Minds* contains tips for exercise, diet and includes a shopping list template, recipes, and a food diary.[1]

Recommendations

Recommendation 1: Including Health Promotion in Curricula and Training Experiences of All Providers

It is clear that health promotion should be included in the training curriculum and training experiences of all providers. The President's New Freedom Commission [18] noted that serious problems in the education and training of mental health providers exist that contribute to problems in both access to and quality of care for persons with serious mental illness. Treatment of persons with mental illness has traditionally come from a pathological orientation. This approach to treatment, which often begins with professional education, is further ingrained by stereotypical beliefs and attitudes toward persons living with a psychiatric disability as being sick, incapable, and dependent. The incorporation of health promotion practices and philosophy into mental health service provision complements the recovery vision of the mental health system. Professional education that incorporates health promotion principles, health knowledge, skills, and strategies is necessary in the transformation of the system to one that supports recovery [10]. The President's New Freedom report [18] stated that university training programs responsible for the education of mental health-care providers must adapt to meet the needs of persons living with a psychiatric disability. Recently, the Annapolis Coalition reports concluded similarly [48]. Therefore, educational, behavioral, and cultural approaches that promote health must be essential components of provider education [49–50]. Specific skills and knowledge that are essential for all professionals working with people living with mental illness on their health issues include active teaching skills; consultation skills; communication skills including shared decision making, information sharing, and partnering; cultural competency skills; and trauma-informed health knowledge as well as basic health literacy skills [14, 51–52].

A vast literature base documents the importance and positive of effective communication skills between a person and a provider on health

outcomes. Active participation in one's health-care leads to greater satisfaction, relevant treatment, and better health outcomes. Working within a health framework, rather than an illness framework, providers need the tools to support change not only in people's mental health but also in their lifestyle choices that contribute to illness, functional health, subjective well-being and perceived quality of life.

Recommendation 2: Educate Medical and Allied Health Professionals in Working Collaboratively with Persons Diagnosed with Mental Illness

Educating all medical and allied professionals to work collaboratively and share decisions with mental health consumers and assist them to self-direct their health is critical. Many medical and dental providers indicate they lack the knowledge to assess and respond effectively to mental health consumers. Collaborative care models that integrate interdisciplinary care have developed academic programs that educate psychiatrists to recognize and treat medical disorders as well as programs that train primary care physicians to recognize and treat psychiatric disorders. Approximately 40 dual training programs exist that educate physicians to become board eligible in psychiatry and a primary care specialty. Unfortunately, the translation of this integrated health education into daily medical practice has been limited.

Currently, the education that many mental health staff receives does not adequately prepare them to collaborate with mental health consumers to help them reduce their comorbidities and prevent premature death. Providers need communication skills. Many providers lack the awareness and knowledge of health-care problems in people with mental illness. In addition, many providers may struggle with similar health issues themselves such as smoking, obesity, and unhealthy lifestyle habits and may not have yet mastered their own skills in managing their health.

Recommendation 3: Primary Care Physicians Need More Education on Psychiatric Disorders

Primary health physicians need enhanced education about the confluence of psychiatric disorders and health issues—especially given that 40 percent of patients treated by primary care physicians have significant mental health problems and only about one-half of these receive mental health care, usually by the primary care physicians themselves

[53]. Indeed, there is an extensive literature published over five decades identifying a strong need for ongoing mental health training for primary care physicians [54]. Recently, there has been an increased attempt to incorporate psychiatry in primary care training programs. Directors of 1,365 accredited residency training programs in internal medicine, family practice, obstetrics/gynecology, and pediatrics received a 16-item anonymous questionnaire focused on descriptive data concerning their psychiatry training. A majority of primary care training programs are dissatisfied with the current status of their psychiatric training (except for family practice programs, which have the most variety in training formats, locations, and teachers). The majority of primary care training programs desire more training in all aspects of psychiatry [53, 55]. More attention to education on psychiatric illnesses is critical in the preparation of primary care physicians.

Recommendation 4: Professional Training of Psychiatrists and Others with Prescriptive Privileges Must Include Training in Metabolic Syndrome and Other Common Side Effect Profiles

The strong association of both conventional and second generation antipsychotic medications with obesity and related conditions such as diabetes, hypertension, and other metabolic syndrome disorders must become central to the consciousness of prescribing antipsychotic medication, just as motor side effects and tardive dyskinesia have previously become central considerations. Thus, at the very onset of prescribing these medications, weight, glucose, and lipid monitoring should commence, as should preventive measures in diet and exercise that will reduce the risk of obesity. This practice is not yet standard. It has been recommended that psychiatrists complete residencies not only in psychiatry but also family practice or internal medicine, considering the high likelihood of psychotropic side effects compromising other bodily systems. Later, board certification on psychiatry and one of these other areas should also be sought.

Recommendation 5: Allied Health Professionals Need Training on Psychiatric Disorders and Communication Skills

Not only do psychiatrists, primary care physicians, and advance practice nurses have a role in integrating the primary and psychiatric care of

mental health consumers, but also many other allied health professionals have a role, including nutritionists, dieticians, physical and occupational therapists, dentists, and dental hygienists. There is little published specifically on training of the professionals in psychiatry (for a review, see [56]). Yet, they need to know something of diagnoses, course, and outcomes of serious mental illnesses and the role of side effects in the lives of mental health consumers. See Table 1 for a summary of critical health tips for health-care professionals about mental illness, antipsychotic medication, and overall health. These professionals need education about diagnoses and communication skills. Spagnolo and Murphy [56] asserted that all health care professionals may face communication challenges with mental health consumers, including difficulty describing symptoms. There may be a tendency to overattribute vague or abstract descriptions to the disorder or "somatization" a delusional symptom. This tendency needs to be counteracted. Spagnolo and Murphy [57] have developed an on-line course and a DVD, *Innovative Strategies in the Health Care of Persons with Psychiatric Disabilities*, to help professionals build skills in this area.

Recommendation 6: All Professionals Need to Understand the Importance of Self-Management Models

Certainly, there is ample evidence that persons without mental illness can contribute to the successful self-management of their diabetes and related disorders. Both allied and mental health professionals need to avoid the trap of pessimism regarding outcomes for mental health consumers. These professionals need education to understand the widespread evidence of the likelihood of successful recovery. In addition, there are reasons to believe that mental health consumers can profit from dietary and exercise interventions in terms of weight loss and improved glucose levels [41, 44]. The current movement to promote the evidence practice of illness management should include wellness management of obesity and the metabolic syndrome. All professionals need to understand the effectiveness of illness and wellness self-management principles and practices.

Recommendations 7: Education and Training Practices Based on Psychiatric Principles to Promote Wellness

Psychiatric rehabilitation education, peer-delivered models, and mentoring/coaching are opportunities for providers to learn the essential skills

Table 1
Critical Health Tips for Health Care Professional About Mental Illness, Antipsychotic Medication, and Overall Health

- Regular use of antipsychotic medication, use of multiple versions of antipsychotic medication is associated with obesity, the metabolic syndrome, circulatory and cardiac complications, and thus premature mortality of 15–25 years compared to persons with mental illness [58–59].
- These side effects are associated with both conventional antipsychotic medication and second generation medications, with risks of mortality four times greater than that of the general population for traditional antipsychotic medication, five times greater for second generation medicines [7].
- Metabolic disorders such as diabetes, hyperlipidemia and hypertension are highly prevalent in populations with schizophrenia, exceeding 50% in some studies [9]. A total of 30%–88% of these individuals, depending on the disease, are not treated at all for these disorders [9].
- These metabolic syndrome disorders are best conceived of as also circulatory and cardio-vascular disorders.
- Coordination of psychiatric and medical care cannot be left to chance or simple referrals without follow-up.
- Other side effects can include motor symptoms including tardive dyskinesia (primarily conventional antipsychotics) [8] and dry mouth, resulting in serious dental problems.
- Pharmacological interventions for these metabolic syndrome disorders are effective, as are behavioral methods (such as self-monitoring of glucose levels by people with diabetes). When these diseases are well-managed, individuals with these disorders suffer minimal complications and live a normal life span.
- There is evidence that persons living with mental illness can profit from health promotion and prevention initiatives including dietary assistance, exercise programs, and educational content about these disorders.
- Illness management and recovery techniques, as well as psychiatric rehabilitation methods, provide promising methodologies for prevention and health promotion interventions.
- There is no reason to be pessimistic about promoting wellness and recovery in this realm.

of working collaboratively as a partner with people in their personal health and recovery. Psychiatric rehabilitation principles and practices acknowledge the individuality of people with psychiatric disabilities, their unique health needs, personal goals, and their capacity for self-determining their own health promotion activities [10]. Health promotion principles state that health education is the cornerstone for health promotion and prevention for mental health consumers (see Table 2). These principles are grounded in the fact that people recover and that people need functional health as a foundation for their recovery [10]. Professional development in psychiatric rehabilitation that focuses on these health values, principles, knowledge, and skills is available through

Table 2
Principles of Health Promotion

1. Health and access to health-care are universal rights of all people.
2. Health promotion recognizes the potential for health and wellness for mental health consumers.
3. Active participation of mental health consumers in health promotion activities in ideal.
4. Health education is the cornerstone of health promotion for mental health consumers.
5. Health promotion for consumers addresses the characteristics of environments where people live, learn, and work.
6. Health promotion is holistic and eclectic in its use of many strategies and pathways.
7. Health promotion addresses each individual's resource needs.
8. Health promotion interventions must address differences in people's readiness for change.

Source: Hutchinson et al. [10].

university programs and certification programs.[2] Health education from a recovery orientation utilizing existing resources in programs can be responsive to the unique needs of people living with co-occurring mental health and medical conditions.

A promising psychiatric rehabilitation practice developed by Brown, Goetz, Van Sciver, Sullivan, and Hamera [44] provides an example of the application of psychiatric rehabilitation methods to weight loss. Another promising practice that utilizes existing resources to educate both professionals and consumers is the integration of knowledgeable medical staff such as a nurse in mental health settings. Both informal and formal health education can be provided to staff and participants on relevant health issues through this role. Engagement, encouragement, education, and advocacy around functional health that supports recovery can occur through this strategy [60].

Recommendation 8: Peer- and Family-Driven Health and Wellness Promotion Models

Peer support/peer-delivered models are based on the premise of mutuality and education to support personal health and recovery. Trained peers represent a potent, untapped resource to help consumers through education, support, and coaching to achieve improved health outcomes. These models can be effective educational approaches for both mental health consumers and families. They also provide a form of social support that

public health and medical research has long recognized as a necessary condition for quality of life and healthy living. Utilizing peer-to-peer education to improve health has recently been tested in a multipronged program that emphasizes the centrality of personal medicine and shared decision making. Peers help one another to articulate their personal medicine [61] that supports their recovery, identify their health concerns, and prepare for working with medical providers to ensure their needs are met. There is provider component that helps providers assist people in their medication decisions and dilemmas as well as a software program that prepares people to engage as proactive participants in their health encounters [62].

Health promotion is a process of enhancing wellness through education, guidance, and support, which contributes to positive behavioral change. It involves empowering people to assume responsibility for their own individual, healthy lifestyle patterns. Peer-delivered health promotion curriculums such as WRAP and others should be further developed, researched, and disseminated. WRAP offers a "train the trainer" approach to provide facilitation skills and strategies that promote the dissemination of these curriculums and train both providers and peer providers with the competencies needed to teach self-management skills.

There needs to be a greater focus on the knowledge of health issues (health literacy), the availability of health information and access to health education and promotion services to create opportunities to obtain health resources. In conjunction with the Ad Council, the Agency for Healthcare Research and Quality has launched a public education campaign, entitled "Questions Are the Answer," to encourage people to get involved in their health-care. It includes public service announcements as well as on-line tools to prepare consumers for doctors' visits.[3] The role of family's in promoting recovery and their influence on lifestyle is indisputable.

Models of existing family-to-family education as employed by the National Alliance on Mental Illness, and family psychoeducational approaches can be adapted to integrate critical content on health promotion and wellness.

Recommendation 9:The Role of Program Administrators and State Authorities

Program administrators need to re-examine their staffing and expertise pattern to determine whether their services programs can deliver wellness and health promotion programs. Depending on the patterns of strengths

identified: recruitment of qualified personnel and training them to work in mental health settings may be required. In addition, training of existing personnel in this area is necessary because most come without the expertise needed. In addition, there needs to be administrative support for these wellness and health promotion activities in terms of scheduling, materials, supplies, and equipment.

Administrators will, of course, raise the issue of reimbursement for these services: "How will we pay for it?" A brief review of one state's mental health authority regulations and Medicaid rules found that many of these services are already reimbursable, although not commonly delivered. For example, in some areas, diabetes education is a regularly reimbursable service. Others are not yet covered. Administrators are also in the position, potentially, of reaching out to other community resources and providers, such as federally qualified health centers, that can help coordinate and improve care for community mental health consumers. Seeking other funding sources such as foundations and pharmaceutical companies, who are developing an interest in this area, are additional possibilities.

State agency administrators have the task of reducing any regulatory barriers or funding barriers that exist, as well as helping program administrators find out how to use existing funding streams for these types of services. Outcomes in this area could be measured by the number of states and other jurisdictions that make regulatory changes, set standards to promote wellness and recovery, or establish programs to explain how to use existing funding mechanisms to provide these services.

Recommendation 10: Accreditation Bodies and Toolkits

Outreach to educators, professional associations, and specialty accreditation bodies are necessary to promote the curricular changes discussed elsewhere in this paper. Outcomes in this area could be measured by the number of specialty accreditation bodies that adopt standards in this area and the number of academic programs that change their content. Developing toolkits in each of these areas for each of these target audiences would be an initial step in implementation in a sense—a necessary but certainly not sufficient approach that could provide some guidance and dissemination of ideas. Adoption of these practices required a fully trained workforce with regulatory and funding support.

Summary and Conclusion

The origin of these difficulties may be deep and ancient; perhaps part of the gap between psychiatric cares from the rest of medical care is a lingering mind–body dualism. This may be what the philosopher Gilbert Ryle [63] derisively referred to as the "ghost in the machine" fallacy—a mind or soul inhabiting a physical entity, an idea often attributed to Descartes but at least as old as Plato. An additional factor that has been a barrier in the quest for optimal health is in the peculiarly modern challenge faced by all consumers of health care. Technological advances and professional specialization have deepened but narrowed the scope of expertise of any one health-care professional, often leaving the consumer to navigate a maze of possible additional helpers of similarly narrowly defined expertise. Effective health promotion and wellness-focused strategies must be developed as part of treatment as usual so mental health consumers and their families can access the array of knowledge and technology that can improve their quality of life and ensure a normal lifespan.

In conclusion, professional curricula must include attention to the fact that a psychiatric diagnosis often suggests co-occurrence with the following health risks: smoking cessation, obesity, diabetes, lack of physical activity, increased risk of infectious disease, and increased incidence alcohol and substance abuse. Curriculum redesign is needed in both all mental health disciplines and allied health professions. Universities can collaborate with community mental health agencies on creative partnerships. Academic and professional association can partner in planning and coordinating trainings. There is a need to effect change within educational programs to support a workforce able to meet the complex needs of this population. There are changes and challenges ahead for the mental health workforce as society expects and implements new philosophy and methods to improve the health of mental health consumers. Education and research within the field must change and expand to develop and sustain emerging practice models to help address the life span and life status of individuals living with mental illness. We have a professional obligation to improve accountability and engage in applied scientific inquiry, to examine the efficacy of the wellness and health promotion guidelines to ensure people's right to health.

Notes

1. For more information, see the Hearts and Minds Web site at www.nami.org/template.cfm?section=Hearts_and_Minds.

2. For more information on education, training, and certification, see the U.S. Psychiatric Rehabilitation Association Web site at www.uspra.org.

3. See the AHRQ's "Questions Are the Answer" Web site at www.ahrq.gov/questionsaretheanswer.

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