Bridging the Gap Between Mental and Physical Health: A Multidisciplinary Approach

Betty Vreeland, M.S.N., A.P.R.N., N.P.-C., B.C.

People with serious mental illnesses have higher rates of morbidity and premature mortality compared with the general population. This population loses from 13 to over 20 years of life compared with their nonpsychiatric cohorts. A multitude of factors contribute to this silent tragedy. A major problem is that multiple barriers exist, making it difficult for individuals with serious mental illness to access quality health care. Additionally, compared with the average American, people with serious mental illness are more likely to engage in unhealthy lifestyle practices, such as lack of regular physical activity, poor nutrition and overeating, smoking and other substance abuse, irregular and inadequate sleep, and failure to visit health care practitioners regularly. These unhealthy behaviors and the added burden of antipsychotic medication side effects increase the risk for cardiac and metabolic diseases. However, best-practice models exist that provide the knowledge and tools to assist people with serious mental illness in making informed decisions about healthier lifestyle behaviors, including addressing tobacco use and excess weight. The challenge is how to integrate these practices effectively into routine behavioral health care. The growing problem of premature death calls for urgent public action to transform the current mental health care system into a more integrated system of care. Because of their holistic training and approach to care, nurses are well prepared to work collaboratively with both mental and physical health care providers and systems. In the new mental health care system, both psychiatric and physical health care providers will need to broaden their treatment paradigm to address the whole person. An integral part of behavioral health services will be to ensure that the health status of all individuals is assessed, that there are medical monitoring protocols in place for people taking antipsychotic medication, that each individual has a primary care provider, and that there is an effective mechanism in place for communication between behavioral health and primary care providers. A transformation of the existing mental health care system toward a system that utilizes a coordinated, multidisciplinary, holistic approach not only may effectively bridge the existing gap between mental and physical health, but also may ultimately save lives.
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As noted previously in this supplement, research has demonstrated consistently higher rates of major medical morbidity and premature mortality in people with serious mental illness compared with the general population. Yet, despite calls for both psychiatric and physical health care providers to improve health monitoring and management in the psychiatric population, their poorer physical health and shorter life spans compared with the nonpsychiatric population appear to be worsening.[1,2]

This problem is, in part, due to the fact that many behavioral health care professionals have not been trained to address physical health issues. Additionally, many clinicians question whether health and wellness are feasible goals for people with serious mental illness due to numerous factors, including the disease itself; patients' lack of interest or "motivation" in their own health and well-being; the lifestyle challenges that these individuals face due to socioeconomic circumstances, which affect issues such as access to quality medical care; and the side effects and potentially life-threatening complications of antipsychotic medications.

This report aims to dispel this myth. It does so by assessing the scale of the problem of health care disparities among people with schizophrenia, bipolar disorder, and other forms of serious mental illness and examining research that has shown that health and wellness are indeed possible in these individuals. A primary area of focus for the discussion addresses the growing need for a coordinated, multidisciplinary, holistic approach to bridge the gap between physical and mental health among people with major psychiatric disorders. Guidelines and initiatives that have been developed to improve patient outcomes are reviewed, and the vital role that nurses can play in engaging this population to take responsibility for their own physical health is considered. Finally, best-practice models of integrated care that have been successful in preventing and reversing antipsychotic-induced weight gain in people with serious mental illness are presented, and strategies to help accomplish the transformation to a new system of mental health care are described.

THE SCALE OF THE PROBLEM

About 6%, or 1 in 17 adults, suffer from serious mental illness, according to the 2004 U.S. Census residential population estimate for people ages 18 years and older.[3] In a given year, schizophrenia and bipolar disorder affect 2.4 and 5.7 million American adults, respectively (or 1.1% and 2.6% of the U.S. adult population, respectively).[3] During their lifetime, these individuals not only will experience a wide range of symptoms related to their mental disorder, but also will be affected by a higher-than-average number of potentially serious physical health problems. For example, as many as 75% of people with schizophrenia have been found to have high rates of diabetes, hypertension, and respiratory, heart, and/or bowel problems.[4]

A number of intrinsic and environmental factors explain why people suffering from major mental illness are more prone to

From the University of Medicine and Dentistry of New Jersey and University Behavioral HealthCare, Piscataway, N.J.

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Corresponding author and reprints: Betty Vreeland, M.S.N., University of Medicine and Dentistry of New Jersey, 151 Centennial Ave., Suite 1500, Piscataway, NJ 08854 (e-mail: vreelael@umdnj.edu).

Table 1. Integration of Physical and Mental Health Care: Critical Issues

Multiple barriers exist that make it difficult for people with serious mental illness to access primary care[9]
Mental health clinicians feel ill-prepared to manage patients' physical issues[10]
45% of patients state that their mental health care providers do not ask about medical issues[11]
Standards and clinical guidelines do not address the importance of health screening and monitoring in psychiatric patients[12]
Among individuals with schizophrenia, many major conditions are undetected and/or undertreated[2]
30.2% not treated for diabetes mellitus
62.4% not treated for hypertension
88.0% not treated for dyslipidemia

worsened physical health than the general population. Overall, people with mental illness are a medically underserved population. Furthermore, when they do seek and receive medical care, it is often substandard. In 1460 subjects enrolled in the Clinical Antipsychotic Trials of Intervention Effectiveness (CATIE) schizophrenia study,[2] it was observed that nontreatment rates at study entry were 30.2% for diabetes, 62.4% for hypertension, and 88.0% for dyslipidemia. These findings are particularly disturbing and highlight the need for increased attention to basic monitoring and treatment in this population. As a result, expert evidence-based guidelines have been developed to assist clinicians in the assessment and management of conditions such as diabetes, hypertension, and dyslipidemia in people with mental disorders.[5–7]

However, barriers to receiving prompt and appropriate physical health care include the difficulties faced by consumers in accessing and negotiating the health care system due to illness behaviors, lifestyle factors, adverse effects of antipsychotic medication, and refusal to accept medical treatment when offered.[8] Reasons for the need for the integration of physical and mental health care are presented in Table 1.[2,9–12]

Another contributing factor to the problem is that many behavioral health care professionals are not convinced that health and wellness are feasible in people with serious mental illness as a consequence of the nature and symptomatology of their illness (e.g., cognitive impairment, social isolation, poor interpersonal skills, and other positive and negative symptoms). However, research suggests that, like people in the general population, individuals with serious mental illness are able to achieve health and wellness. A study by Dansinger et al.[13] assessed adherence rates and effectiveness of 4 popular diets (Atkins, Zone, Weight Watchers, and Ornish) as a part of individualized weight control strategies in 160 overweight adults without mental disabilities. After 1 year, overall adherence rates (i.e., those who completed the study) ranged from 50% to 65%, with a mean weight loss among the 4 diet groups ranging from 2.1 kg (4.6 lb) to 3.3 kg (7.3 lb). Similarly, Menza et al.[14] studied 31 overweight and obese patients with schizophrenia or schizoaffective disorder on treatment with second-generation antipsychotics (SGAs) in a 52-week weight control program, consisting of nutrition, exercise, and behavioral interventions. At 1 year, their mean adherence (attendance) rate was 69%, with a mean weight loss of 3.7 kg (8.1 lb) in study completers. Together, the studies[13,14] show that the subjects with serious mental illness not only had similar adherence rates, but also demonstrated greater weight loss than subjects without mental disorders. This suggests that it is possible for people challenged by mental illness to adopt healthy behaviors for improved health and wellness and that they can benefit from the establishment of integrated systems of care that address both their physical and mental health needs.

In turn, given the barriers to access and use of primary care among people with serious mental illness and the disinclination of some of these individuals to access medical care even when available, behavioral health care professionals should assume greater responsibility for the routine screening, monitoring, and management of their patients, especially since certain conditions may be an adverse effect of their prescribed antipsychotic treatment regimens, which can lead to life-threatening complications. These health care professionals need to view the apparent underutilization of evidence-based clinical guidelines as another important concern. At a minimum, medical monitoring protocols need to be in place for patients treated with SGAs, along with an effective mechanism for referring patients with abnormal findings and a system to monitor whether patients are following up with these referrals. Multidisciplinary teams and nurses in particular may be extremely helpful in coordinating this care.[2,4,15]

PRESIDENT'S NEW FREEDOM COMMISSION ON MENTAL HEALTH

In recent years, the need to integrate behavioral and physical health care has become a focus of considerable guidance and health care policy. A number of initiatives have been introduced to improve the health and well-being of people with serious mental illness, the most notable of which is the President's New Freedom Commission on Mental Health.[16] Established by President George W. Bush in April 2002, the Commission's purpose was to conduct a comprehensive study of the nation's mental health care system and make recommendations based on its findings. Specifically, the Commission was directed to identify policies that could be implemented by federal, state, and local governments to maximize the utility of existing resources, improve the coordination of treatments and services, and promote successful community integration for mentally ill adults and children with serious emotional disturbances.[17] In its report entitled *Achieving the Promise: Transforming Mental Health Care in America*,[16] the Commission observed that the nation's mental health care system is beyond simple repair. Instead, there is a need for a complete transformation of the system, which is unintentionally focused on managing the disabilities associated with mental illness rather than on promoting recovery. Importantly, the Commission acknowledged that this limited approach is due to fragmentation, uneven quality, and gaps between physical and mental health care services and systems. The Commission proposed that a new transformed mental health care system should[16]

- Ensure that Americans understand that mental health is essential to overall health
- Underscore the value of individualized care that is consumer- and family-driven
- Eliminate disparities in mental health care services
- Make early mental health screening, assessment, and referral to services routine practice
- Provide excellent mental health care and accelerate research
- Increase the use of technology to access mental health care and information

Much of the support for this proposal has centered on the Commission's emphasis on a system focused on recovery from mental illness, its call for consumer- and family-centered care, and its recommendation that states develop a more comprehensive approach to mental health. This will facilitate ongoing dialogue and collaboration between mental health care and primary care providers to help bridge the gap in the quality of care that now exists for those with psychiatric disorders.

BRIDGING THE GAP

To bridge the gap between mental and physical health, it has been suggested that psychiatric professionals need to broaden their treatment paradigm to include the whole person.[18] This would entail the use of a multidisciplinary team approach in collaboration with patients with mental illness and their primary care providers to optimize psychiatric and physical outcomes. The multidisciplinary team would consist of psychiatrists, nurses, social workers, psychologists, primary health care providers, mental health authorities, patients, families, caregivers, and advocacy groups. In particular, psychiatric nurses would be key members of these health teams because their holistic training and approach to patients are ideally suited to help bridge the gap between mental and physical health care systems.[18,19]

There are many treatment team strategies available to help bridge this gap. A randomized trial by Druss et al.[20] evaluated an integrated model of primary medical care among 120 individuals with severe psychiatric disorders in a Veterans Administration (VA) mental health clinic. A total of 59 patients were randomized to receive primary medical treatment through an integrated care system located in the VA mental health clinic, and 61 participants to "usual" care through the VA general medical clinic. Patients receiving onsite, integrated, primary care that emphasized increased communication between patients and clinic staff via phone calls, e-mails, and/or face-to-face meetings demonstrated a significantly greater improvement in health status than did those who received usual medical care ($p = .005$). There were no significant differences observed in any measures of mental health symptoms or total health care costs between the 2 groups.

Similarly, Griswold et al.[21] examined the integration of case management versus usual care among patients in psychiatric crisis presenting to a hospital emergency department. In this study, 56 patients were randomized to meet with nurse case managers within the first week of facilitation and routinely at primary care appointments. Case managers shared in decision making with patients regarding primary care provider selection, site location, and travel routes and reinforced any patient education that occurred after primary care visits. In contrast, 45 patients were assigned to receive services routinely offered through the hospital's psychiatric emergency program, which included complete psychiatric assessment and management, targeted therapeutic approaches, and linkages to community mental health services. Referral to primary care was provided only on patient request or when a significant medical problem was noted at presentation. Within 3 months of study enrollment, 57% of those in the case management group were successfully linked to primary care services compared with 16% of patients in the usual care group ($p = .004$).[21]

The Bazelon Center for Mental Health Law[4,22] has studied numerous programs for improving integration and coordination of mental and physical health care for adults and children with serious mental illness. Regardless of whether the integrated care programs involved (1) embedding primary care providers within public mental health programs; (2) offering unified mental and physical health care programs through a single administrative entity; (3) improving collaboration between independent, office-based primary care and public mental health providers; or (4) colocating behavioral health care providers in primary care offices, all made a positive difference in the quality and outcomes of physical health care for persons with serious psychiatric illness. Of interest was the finding that the most common strategy to overcome barriers to coordination of care was to give case managers (typically registered nurses) this responsibility. Due to their holistic management approach, nurses are well prepared to work collaboratively with both mental and physical health care providers and systems.

LIFESTYLE AND MEDICAL DISEASE

Lifestyle behaviors, including smoking, lack of exercise, poor diet, and obesity can increase the risk of developing physical problems such as heart disease (smoking, exercise, obesity, poor diet), cancer (smoking, obesity, poor diet), stroke (smoking, exercise, obesity, poor diet), respiratory diseases (smoking), accidents (substance abuse), and diabetes (exercise, obesity, poor diet).[23,24]

The Nurses' Health Study,[25] established in 1976 by Frank Speizer, M.D., and the Nurses' Health Study II,[25] established in 1989 by Walter Willett, M.D., M.P.H., are among the largest prospective investigations of the risk factors for major chronic diseases in women. Data from more than 238,000 women participating in these prospective, observational studies of women's health consistently have provided evidence that making healthy lifestyle and behavior choices (e.g., not smoking,[26,27] being more physically active,[26,28,29] maintaining a healthy weight,[26,29] and eating a diet rich in fruits,[27,30,31] vegetables,[30,31] and whole-grain fiber[32,33] and low in saturated[26] and trans[26,34] fats) can help prevent or delay much of the burden of chronic diseases and their consequences.

While the body of evidence is not as vast as that in the general population, studies[35–39] have shown that people with serious mental illness also can adopt healthier lifestyle behaviors. Despite the known health risks intrinsically associated with mental illness, research indicates that, like those without mental illness, people with schizophrenia, bipolar disorder, and other types of serious mental illness can recover from addiction,[35] stop smoking,[36] prevent and reverse psychotropic-associated weight gain,[14,37] develop healthier eating and exercise habits,[14,38] and benefit physiologically by losing weight.[14,39]

AREAS IN NEED OF INTEGRATED MANAGEMENT

Tobacco Use

Tobacco use is the most common co-occurring disorder among the severely mentally ill population.[40] While there has been a dramatic reduction in tobacco use in the general population during the past 40 years, there has been almost no reduction among smokers with psychiatric disorders.[40] It is estimated that up to 85% of persons with schizophrenia, bipolar disorder, and other forms of serious mental illness use tobacco, most of whom will die and/or have a reduced quality of life because of tobacco-related medical disease.[40] Because it is among the leading causes of preventable deaths in people with serious mental illness,[8] nico-

tine dependence should become a priority for integrative therapy for numerous reasons, including the following: tobacco contains 4000 compounds with 60 known carcinogens,[41] only 50% of psychiatric patients are advised by any doctor to stop smoking,[10] nicotine use is a trigger for other substance use,[36] smoking can alter medication blood levels,[36] there are immediate and long-term benefits to quitting,[42] and treatment has been shown to work in individuals with major mental illness.[40,43]

The Agency for Health Care and Policy Research[44] has proposed a relatively simple and effective management strategy for patients who smoke. The Agency advises clinicians to (1) ask about smoking at every visit, (2) assess the extent of the patient's dependence, (3) advise tobacco users to quit, (4) assist the patient in developing a plan to quit, and (5) arrange follow-up.

The University of Medicine and Dentistry of New Jersey (UMDNJ), with funding from the New Jersey Division of Mental Health Services (NJ DMHS), recently developed a manual called *Learning About Healthy Living: Tobacco and You*[45] that addresses tobacco use in people with major mental illness. The manual is designed to target smokers with serious mental disorders who are not ready to stop smoking because they either are unaware that they have a problem or are just beginning to think about quitting (termed precontemplators and contemplators, respectively).[46] The manual contains a facilitator's guide and consumer handouts and can be administered by a spectrum of mental health care professionals, ranging from psychiatric nurses to psychologists and psychiatrists. Learning About Healthy Living pilot studies (J. M. Williams, M.D.; D. M. Ziedonis, M.D., M.P.H.; B.V.; et al., manuscript submitted) at 9 outpatient treatment centers have yielded promising results, with over 90% of facilitators rating its consumer interest as "excellent" or "very good." Behavioral health care facilities across New Jersey are being trained in the use of the manual, and plans are being made to make it available for download off the NJ DMHS Web site.

Obesity

Obesity is another of the most common physical health problems among persons with severe and persistent mental illness. Obesity in these individuals has been attributed to various factors, including sedentary lifestyle, poor nutrition, the effects of both the mental disorder itself and the medications used to treat it, and lack of access to adequate medical care, nutritional guidance, and exercise programs.[46] Obesity and weight management in these individuals can be challenging and may lead to medication nonadherence, psychiatric relapse, hospitalization, and secondary medical problems such as hypertension and diabetes.[47]

Obesity and its potentially life-threatening complications are not exclusive to those with mental illness. Obesity has reached epidemic proportions in the general population as well.[48] Because of this, in 2005, the U.S. Department of Agriculture (USDA) not only updated the *Dietary Guidelines for Americans 2005*,[49] but also unveiled an entire new food guidance system. Released in April 2005, *MyPyramid: Steps to a Healthier You*[50] retains all the food groups from the original USDA pyramid but now includes important additional recommendations for a healthy way of life. The new food guidance system utilizes dietary reference intakes (DRIs) that were issued by the Institute of Medicine. The DRIs include recommendations for 50 nutrients, which include 14 vitamins, 18 minerals, and 18 macronutrients and food components. The new system also provides recommendations on how to prevent disease through a healthy diet and, for the first time, encourages regular physical activity (a minimum of 30 minutes a day, with between 60–90 minutes for weight loss and keeping weight off). The new DRIs and the MyPyramid food guidance system address the eating and physical activity changes needed to manage the obesity epidemic.

Table 2. National Weight Control Registry Key Weight Management Strategies[a]

Engage in high levels of physical activity[53]
Eat a low-fat, low-calorie diet[53]
Eat breakfast[54]
Self-monitor weight regularly[55]
Maintain a consistent eating pattern on weekdays and weekends[53]
Catch slips before they turn into larger weight gains[56]
Initiate weight loss after a medical event[57]
Eat a diet with a limited variety in all food groups, especially groups higher in fat density[58]

[a]Based on Wing and Phelan.[52]

The National Heart, Lung, and Blood Institute (NHLBI)[51] also has issued guidelines on the identification, evaluation, and treatment of overweight and obesity in adults. The guidelines present solid evidence that the risk for cardiovascular and other diseases increases significantly when a person's body mass index (BMI) is greater than or equal to 25 and that the risk of death increases as the BMI reaches and surpasses 30. Anecdotal reports from behavioral health care professionals suggest that, according to the NHLBI guidelines, approximately 90% of the psychiatric patients whom they treat are overweight or obese and should therefore receive weight intervention treatment. It is important to note, however, that like the general population, many individuals with major mental disorders who are overweight or obese may have difficultly losing the recommended 1 to 2 lb per week and, for some individuals, prevention of further weight gain may be a more attainable goal. It is important for clinicians and patients to be actively involved in a shared decision-making process regarding an attainable weight loss goal. While a patient may state that he or she wants to lose 100 lb in 6 months, reaching such a goal is highly unlikely. In these cases, without discouraging the patient, the clinician should emphasize that even moderate weight loss (4% to 7% of body weight) can provide many health benefits. Simple weight loss strategies, such as those cited by the National Weight Control Registry,[52] may be of assistance in helping overweight and obese individuals with mental illness lose weight or at least prevent additional weight gain (Table 2).[52–58]

BEST-PRACTICE MODELS

The preceding discussion has shown that obesity is a growing problem in psychiatric populations, especially among those with schizophrenia or bipolar disorder, as well as in the general population. Weight gain is associated with many psychotropic medications, and research has shown that weight gain can be reversed, minimized, and prevented in those with severe mental illness. In particular, 2 programs[14,37,38] have been successful in preventing and reversing weight gain in patients who have gained substantial amounts of weight while being treated with SGAs.

Solutions for Wellness

The Solutions for Wellness program (Eli Lilly and Co.) is an easy-to-use, manualized, psychoeducational program

specifically designed for people with mental illness.[37] The program consists of 2 patient workbooks (*Nutrition, Wellness, and Living a Health Lifestyle* and *Fitness and Exercise*), both written at the 5th-grade reading level to promote proper nutrition, exercise, and healthy lifestyle habits. The program was first tested in a 6-month, open-label study[37] in 70 subjects with schizophrenia or schizoaffective disorder who began receiving olanzapine therapy when they entered the study. Participants in the control group (N = 35) received standard care. Participants in the intervention group (N = 35) attended a weekly, 1-hour psychoeducation class using the Solution for Wellness modules for a period of 4 months. These subjects also received weekly reminder letters and verbal encouragement from staff to attend all sessions. All sessions were conducted by the same Master's-level clinician, who was trained to teach the program. Subjects in both groups were followed for an additional 2 months to assess weight change.

Results showed that the intervention group consistently attended the weekly classes, with a compliance rate of 92%. Overall, significant differences in weight change were seen between the 2 groups. At 4 months, the mean weight change in the intervention group was +0.4 kg (+0.81 lb), in contrast to +3.3 kg (+7.17 lb) in the control group ($p = .005$). At 6 months, the intervention group demonstrated a mean weight change of less than 1 kg (–0.06 lb) compared with +4.4 kg (+9.57 lb) in the control group ($p < .001$). In both groups, men gained significantly more weight than women ($p = .007$).

Healthy Living

Healthy Living,[15,38] an investigator-initiated study funded by Eli Lilly and Co., is a multimodal, 12-month, weight control program for overweight and obese adults with serious and persistent mental illness who have gained weight while receiving treatment with SGAs. The program is designed to assist these individuals in making long-lasting lifestyle and behavioral changes that will have a positive effect on weight loss, overall health, and well-being. Healthy Living was tested[14,38] in 31 individuals with schizophrenia (N = 20) and schizoaffective disorder (N = 11) who were participating in day treatment programs. The control group consisted of 16 patients who were also enrolled in day treatment programs and received their usual care. All patients had been treated with an SGA for a minimum of 3 months and had a BMI greater than or equal to 26 or a self-reported weight gain of at least 2.3 kg (5 lb) within 2 months of beginning SGA treatment.

The study protocol included nutritional counseling, exercise, and behavioral interventions designed to help adults with schizophrenia implement healthy lifestyle changes. The Solutions for Wellness materials, which were previously mentioned in this report, were utilized as part of the intervention. Behavioral strategies included self-monitoring of eating and physical activity (e.g., subjects were encouraged to keep food diaries), stress management, stimulus control, problem solving, and social support. Motivational counseling strategies also were utilized, and subjects were helped to increase self-efficacy (i.e., the ability to make healthier eating and physical activity choices on their own). A "small steps" approach to everyday living for people challenged by socioeconomic conditions was employed. For instance, participants were encouraged to begin a walking program and make small everyday choices, such as reducing the amount of soda they drank or switching to water or beverages without sugar.

The 12-month intervention consisted of the following 4 phases:

- An assessment phase
- An intensive 12-week weight control program, with group meetings twice per week and one 15-minute individual session per week
- A 12-week step-down, less intensive, weight control phase, with a group meeting once per week and one 15-minute individual session per month
- A 6-month weight-maintenance extension phase, with a group meeting once per week and one 15-minute individual session per month

Of the 31 subjects in the intervention group, 20 completed the program. At 12 months, utilizing the last-observation-carried-forward methodology, the intervention group showed a mean weight loss of 3.0 kg (6.6 lb) compared with a mean weight gain of 3.2 kg (7.0 lb) in the control group ($p = .02$).[14] A subsequent analysis of the data that considered only those who completed the program (as discussed at the beginning of this article) increased the mean weight loss in the intervention group to 3.7 kg (8.1 lb).[14]

Similarly, BMI decreased from 34.32 to 32.5 (5.1%) in the intervention group and increased from 32.2 to 34.6 (8.1%) in the control group ($p = .01$) (Figure 1).[14,59] Statistically significant improvements in hemoglobin A_{1c} (HbA_{1c}) levels ($p < .001$) and exercise levels ($p < .003$) also were seen (Figure 2).[14] Secondary measures of diastolic ($p < .001$) and systolic ($p < .05$) blood pressure, nutrition knowledge ($p < .0001$), and stage of readiness to exercise ($p < .0001$) and lose weight ($p < .008$) were significantly improved as well in the intervention group compared with the control group.[14]

As this was the first study to provide long-term data that showed that patients being treated for schizophrenia or schizoaffective disorder on various SGAs were willing to attend and benefited from a structured weight control program, Healthy Living was awarded the American Psychiatric Nurses Association 2003 Best Practice Award in the Treatment of Schizophrenia.

RISING TO THE CHALLENGE OF CHANGE

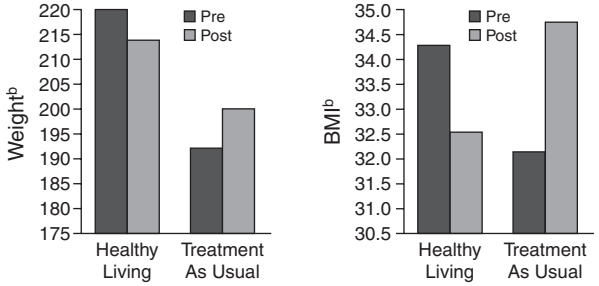
The transformation from the current mental health care system to a system that integrates physical and mental health care will not occur without challenge. In any such vast undertaking, there are always those who resist change. Lack of leadership, communication, and follow-up and a host of implementation issues are but a few of the potential obstacles to bridging the gap between physical and mental health that currently exists.

Organizational change of this magnitude requires knowledge, planning, and practice. The successful transformation to an integrated system of mental and physical health care will necessitate a thorough understanding of how individuals and organizations adopt change, how change moves through populations, and how leaders can facilitate change.

Partners for Excellence in Psychiatry: Neuroscience Treatment Team Partner National Training and Consultation Program

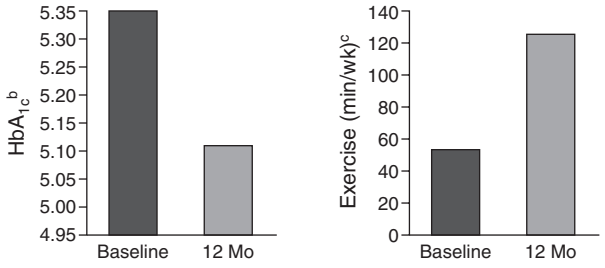
One program[60] that trains behavioral health professionals about how to address the physical and mental health needs of people with major mental illnesses has successfully risen to this

Figure 1. Change in Weight and BMI in SGA-Treated Adults in the 12-Month Healthy Living Weight Control Program Versus Those Receiving Usual Care[a]



[a]Data from Menza et al.[14] and Vreeland and Kim.[59]
[b]31 Subjects; 20 controls: p = .06.
Abbreviations: BMI = body mass index, SGA = second-generation antipsychotic.

Figure 2. Change in HbA_{1c} and Exercise Duration in SGA-Treated Adults in the 12-Month Healthy Living Weight Control Program[a]



[a]Data from Menza et al.[14]
[b]p = .001.
[c]p = .003.
Abbreviations: HbA_{1c} = hemoglobin A_{1c}, SGA = second-generation antipsychotic.

challenge. The Partners for Excellence in Psychiatry (PEP): Neuroscience Treatment Team Partner (NTTP) National Training and Consultation Program[60] is a collaborative effort between UMDNJ and Eli Lilly and Co. It was given the Annapolis Coalition's Innovative Educational Practices Award in 2004, has been featured in *Behavioral Healthcare Tomorrow*[61] and *Psychiatric News*,[62] and has been presented at many professional meetings. The PEP: NTTP program trains behavioral health care professionals in the Complete Wellness (mind/body) psychosocial approach to behavioral health treatment.[60] Complete Wellness is a treatment philosophy that moves the standard of mental health care beyond simply managing symptoms to facilitating reintegration, recovery, and wellness and addressing mental and physical health. Through a variety of training components, the program emphasizes that the psychological and physical domains are equally important when treating people with serious and persistent mental illness.[60] It encourages clinicians to address the whole person, treating them not only from the "neck up," but also from the "neck down." A team of professionals at UMDNJ-University of Behavioral HealthCare and several faculty members from UMDNJ-Robert Wood Johnson Medical School have thus far trained more than 2000 clinicians (from various disciplines, including psychiatrists, nurses, psychologists, and social workers) from over 500 behavioral health care facilities in 47 states across the country. Collectively, these 500 behavioral health care facilities are reaching tens of thousands of people with major mental illness. Each behavioral health care facility sends a multidisciplinary "champion team" to the training program, including the disciplines of psychiatry, nursing, psychology, social work, and others. This multidisciplinary champion team helps to lead the new Complete Wellness initiative back at their facility. In addition to being trained in new psychosocial approaches and given materials such as the Solutions for Wellness program, the champion team is trained in organizational change theory and helps to customize an implementation plan for the new approach at their facility. Follow-up consultation and support services are offered by the UMDNJ-University of Behavioral HealthCare staff to ensure successful implementation of the program. As one chief executive officer who attended the program aptly commented, "The Neuroscience Treatment Team Partner Program has transformed complex information and processes into simple and easy-to-apply technology. If implemented in every community in America, the positive impact on our nation's health could be profound."[61(p26)]

CONCLUSION

The growing problem of increased morbidity and premature death in people with serious mental illness calls for urgent public action to transform the current mental health system. Integration of physical and mental health care must become a national priority. An integral part of behavioral health services will be to ensure that the health status of all individuals is assessed, that there are monitoring protocols in place for people taking SGAs, that each individual has a primary care provider, and that there is an effective mechanism in place for communication between behavioral health and primary care providers. Psychiatric nurses, with their holistic training, are well prepared to work collaboratively with other systems to improve access and referral to primary care for individuals with serious mental illness. In addition, mental health consumers must be empowered to make healthier lifestyle choices, which may help prevent medical problems. Furthermore, behavioral health care professionals need training that can help them broaden their treatment paradigm to address the whole person. The Complete Wellness (mind/body) psychosocial treatment approach, which utilizes a multidisciplinary champion team, has been presented as a way to help bridge the existing gap between mental and physical health. Finally, transforming the nation's mental health care system toward a system that utilizes a coordinated, multidisciplinary, holistic approach will require systems changes that support implementation of new practices at the organizational level. Ultimately, this change may not only effectively bridge the gap between mental and physical health, but also save lives.

Drug name: olanzapine (Zyprexa).

Disclosure of off-label usage: The author has determined that, to the best of her knowledge, no investigational information about pharmaceutical agents that is outside U.S. Food and Drug Administration–approved labeling has been presented in this article.

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