

Special Report

Urgent Need for Improved Mental Health Care and a More Collaborative Model of Care

James Lake, MD; Mason Spain Turner, MD

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ABSTRACT

Current treatments and the dominant model of mental health care do not adequately address the complex challenges of mental illness, which accounts for roughly one-third of adult disability globally. These circumstances call for radical change in the paradigm and practices of mental health care, including improving standards of clinician training, developing new research methods, and re-envisioning current models of mental health care delivery. Because of its dominant position in the US health care marketplace and its commitment to research and innovation, Kaiser Permanente (KP) is strategically positioned to make important contributions that will shape the future of mental health care nationally and globally.

This article reviews challenges facing mental health care and proposes an agenda for developing a collaborative care model in primary care settings that incorporates conventional biomedical therapies and complementary and alternative medicine approaches. By moving beyond treatment delivery via telephone and secure video and providing earlier interventions through primary care clinics, KP is shifting the paradigm of mental health care to a collaborative care model focusing on prevention. Recommendations are to expand current practices to include integrative treatment strategies incorporating evidence-based biomedical and complementary and alternative medicine modalities that can be provided to patients using a collaborative care model. Recommendations also are made for an internal research program aimed at investigating the efficacy and cost-effectiveness of promising complementary and alternative medicine and integrative treatments addressing the complex needs of patients with severe psychiatric disorders, many of whom respond poorly to treatments available in KP mental health clinics.

INTRODUCTION

Existing models of care and available treatment approaches fail to adequately address the global crisis of mental health care. Mental illness accounts for about one-third of the world's disability caused by all adult health problems, resulting in enormous personal suffering and socioeconomic costs.¹ Severe mental health problems including major depressive disorder, bipolar disorder,

schizophrenia, and substance use disorders affect all age groups and occur in all countries, including the US, Canada, the European Union countries, and other developed and developing countries. Mental illness is closely associated with poverty, wars, and other humanitarian disasters, and in some cases, leads to suicide, one of the most common causes of preventable death among adolescents and young adults. Mental illness is the pandemic of the 21st century and will be the next major global health challenge. Despite the increased availability of antidepressants during the past few decades, limited efficacy, safety issues, and high treatment costs have resulted in an enormous unmet need for treatment of depressed mood. It is estimated that 350 million individuals experience depression annually.² On average, it takes almost 10 years to obtain treatment after symptoms of depressed mood begin, and more than two-thirds of depressed individuals never receive adequate care.³ Enormous psychological, social, and occupational costs are associated with depressed mood, which is the leading cause of disability in the US for individuals aged 15 to 44 years with annual losses in productivity in excess of \$31 billion.⁴

Suicide is currently the second leading cause of death in 15 to 29 year olds, resulting in enormous social disruption and losses in productivity. Between 10 and 20 million depressed individuals attempt suicide every year and approximately 1 million complete suicide. In response to these alarming circumstances, in 2016 the World Health Organization declared depression to be the leading cause of disability worldwide.⁵

More than 85% of the world's population lives in 153 low- and middle-income countries.² Poverty is linked to a higher burden of mental illness, with variables such as education, food insecurity, housing, social class, socioeconomic status, and financial stress exhibiting a strong association.⁶ Most of these countries allocate scarce financial resources to mental health care needs and have grossly inadequate professional mental health services. A recent comprehensive survey of European Union member countries found that 38.2% (approximately 165 million people) met criteria for a psychiatric disorder, with fewer than one-third receiving any treatment at all.⁷ Disorders of the brain, including psychiatric disorders, were found to be the largest contributor to the all-cause morbidity burden as measured by disability-adjusted life years. In response to shared global concerns over the crisis in mental health

James Lake, MD, was a Staff Psychiatrist at the Oakland Medical Center in CA at the time this article was written, and is a founding member and former Chair of the American Psychiatric Association Caucus on Complementary and Alternative Medicine. He is the author of four books on integrative mental health care. E-mail: jameslakemd@gmail.com. Mason Spain Turner, MD, is the Director of Outpatient Mental Health and Addiction Medicine for Regional Mental Health Services for The Permanente Medical Group, the Chief of the Department of Psychiatry at the San Francisco Medical Center, and an Assistant Clinical Professor at the University of California, San Francisco. E-mail: mason.turner@kp.org.

care, in 2012 the World Health Organization published “Mental Health Action Plan 2013-2020”⁸ and set forth 4 major objectives:

- more effective leadership and governance for mental health
- the provision of comprehensive, integrated mental health and social care services in community-based settings
- implementation of strategies for promotion and prevention
- strengthened information systems, evidence, and research.

In developed countries, elderly individuals, minorities, low-income groups, uninsured persons, and residents of rural areas are less likely to receive adequate mental health care, and most people with severe mental health problems receive either no treatment or inadequate treatment of their disorders.⁸

In the US the situation is even worse in large metropolitan areas, where most of the Kaiser Permanente (KP) outpatient mental health clinics are located. For example, in the San Francisco Bay area where one of the authors (JL) worked as a staff psychiatrist at a large KP mental health clinic at the time this article was written, there is a large and growing gap between mental health care needs of the population and available resources. This gap is becoming ever wider in suburban, semirural, and rural areas throughout the US and is related to the fact that the medical subspecialty of psychiatry is one of the oldest workforces in medicine, with many psychiatrists nearing or past the age of retirement. Combined with increasing vacancies in psychiatry residency training programs, the staffing pipeline for psychiatrists is shrinking.⁹ Relying exclusively on specialty mental health practitioners to solve the problem of improved access to mental health care is clearly not the best or most realistic approach. Training other health care practitioners in basic psychotherapy techniques and prescribing psychopharmacologic regimens for common psychiatric disorders will become an essential future strategy for expanding access to mental health care in the US and other developed countries.

In addition to limited access to mental health care caused by scarce mental health resources and financial hardship, social stigma associated with seeking specialty mental health services prevents many individuals with depressed mood or other severe mental illnesses from seeking and obtaining adequate care. A large percentage of KP members seeking care for a mental health problem have complex needs that are difficult to adequately address in the current model of care. We feel strongly that these circumstances define an agenda for further refining KP’s existing model of care into a truly collaborative care model in which patients receive medical and mental health care in the same clinic setting.

“Integrated care” and “collaborative care” are models of care that refer to the same kind of health care delivery system and are used interchangeably. In this article, we use the term *collaborative care* to avoid confusion. The Agency for Healthcare Research and Quality defines *collaborative care* as “the care that results from a practice team of primary care and behavioral health clinicians, working together with patients and families, using a systematic and cost-effective approach to provide patient-centered care for a defined population. This care may address mental health and substance abuse conditions, health behaviors (including their contribution to chronic medical illnesses), life stressors and

crises, stress-related physical symptoms, and ineffective patterns of health care utilization.”¹⁰

Increasingly, small community-based mental health clinics are shifting the context in which mental health care takes place to services aimed at wellness and prevention in primary care settings. Starting from its existing care delivery system, KP is uniquely positioned to develop and implement a collaborative care model at the national level aimed at patient-centered care focusing on primary prevention and wellness. Implementing a program on this scale would allow research and academic study of the most effective means of primary prevention of mental illness, data that would be invaluable in designing effective programs in collaborative care settings. Leveraging collaborative care in primary care settings throughout geographic regions that KP already serves and providing individualized interventions that prioritize specialty mental health care for the most severely ill and impaired patients will improve both medical and psychiatric outcomes. The results will likely be more cost-effective solutions to complex mental health problems, reduced stigma associated with seeking mental health care, and enhanced overall health of the population.

Efficacy and Safety Concerns Affect Conventional Mental Health Care

Widely used treatments in the current model of conventional mental health care include psychotropic medications, psychotherapeutic techniques such as insight-oriented therapy and cognitive behavioral therapy, electroconvulsive therapy, and transcranial magnetic stimulation. Psychotropic medications comprise an important part of mental health care, especially for severe mental illness. Many individuals diagnosed with bipolar disorder, major depressive disorder, and schizophrenia depend on medications to function and be productive members of society. However, after decades of research and billions of dollars of industry funding, the evidence supporting pharmacologic treatments of major depressive disorder, bipolar disorder, and other psychiatric disorders is not compelling.¹¹⁻¹⁸ Recently KP expanded its range of mainstream treatments by establishing several ketamine clinics where patients with severe refractory depressed mood are being successfully treated using ketamine intravenous infusion therapy, resulting in improved quality of life and reduced disability. In fact, internal, nonpublished data from within KP demonstrate that ketamine infusion therapy is rapidly being shown to have superior efficacy to more traditional antidepressants, although some patients report improvements in mood of shorter duration. Expanding the reach of this important treatment intervention in both specialty care and primary care settings will be essential for alleviating symptoms associated with the most severe forms of depression.

In addition to concerns about their efficacy, many commonly prescribed psychotropic medications including antidepressants and antipsychotics are associated with serious adverse effects, including weight gain, increased risk of diabetes and heart disease, neurologic disorders, and sudden cardiac death.¹⁹ Metabolic syndrome associated with weight gain and increased risk of diabetes and coronary artery disease is a well-documented adverse effect of antipsychotics and other psychotropic agents. Poor treatment

outcomes owing to limited efficacy of antidepressants, mood stabilizers, antipsychotics, and other psychotropic medications result in long-term impaired functioning, work absenteeism, and losses in productivity.²⁰⁻²⁴

In addition to concerns about efficacy and safety of conventional treatments, the current mainstream model of care is limited by disparities in the delivery of mental health services to different socioeconomic classes and the lack of integration of mental health services into primary care and other medical subspecialties.²⁵ The limitations of the mainstream model of care invite open-minded consideration of collaborative care models capable of more adequately addressing mental illness in primary care settings, taking into account complex medical, psychological, social, and cultural factors. Numerous studies show that collaborative care models reduce health care disparities in patients from different socioeconomic and ethnic backgrounds²⁶⁻²⁹ and are more effective than conventional care models for treatment of depressed mood, anxiety disorders, bipolar disorder, and schizophrenia.³⁰⁻³⁴ Practitioners and patients report high levels of satisfaction with the management of depressed mood in collaborative care settings^{30,35} Finally, collaborative care is more cost-effective than usual care in all categories measured, including medication costs and inpatient, outpatient, and mental health specialty care,³⁶ as well as for the management of depressed patients with comorbid medical disorders,³⁷ severe anxiety disorders,³⁸ and serious chronic mental illness.³⁹⁻⁴¹

Increasing Use of Complementary and Alternative Treatments in Mental Health Care

In the context of the limitations of available conventional biomedical treatments, accumulating research findings are providing evidence for both safety and efficacy of select complementary and alternative (CAM) treatments of depressed mood, anxiety, and other mental health problems, including select pharmaceutical-grade natural products, lifestyle modifications (Lifestyle Medicine), mind-body approaches, and nonallopathic whole-system approaches such as traditional Chinese medicine and Ayurveda. Examples of natural supplements being investigated as nonpharmacologic therapies include S-adenosyl methionine for depressed mood; the adjunctive use of nutraceuticals (ie, botanicals and other natural product supplements) in combination with psychotropics such as omega-3 fatty acids, folic acid (especially its active form l-methyl-folinic acid), 5-hydroxytryptophan, and n-acetyl cysteine for mood disorders; a standardized extract of the herbal kava; and the amino acid l-theanine.⁴² In addition to nutraceuticals, evidence is emerging in support of acupuncture for treatment of generalized anxiety and depressed mood, and of mindfulness training for improvement of negative symptoms of schizophrenia, anxiety, and mood disorders.⁴³ Lifestyle modifications such as regular exercise, healthy diet, sufficient sleep, and reducing alcohol and nicotine use also enhance mental and emotional well-being while reducing the relapse risk for many psychiatric disorders.⁴⁴ The concept of a wellness-focused model of mental health care gained momentum in 2011 with publication of the UK Public Health White Paper emphasizing the fundamental importance of prevention and health improvement through lifestyle changes.⁴⁵

Large population surveys confirm that consumer use of CAM globally has remained high and in some countries has steadily increased⁴⁶; however, estimates of CAM use vary significantly with respect to how CAM is defined. In this broad context uses of CAM to treat mental illness are growing rapidly. Survey findings suggest that 43% of patients with an anxiety disorder⁴⁷ and 53% of depressed⁴⁸ individuals use 1 or more CAM treatments. Individuals with severe mental illnesses who use CAM therapies to treat their symptoms feel strongly that such nonpharmacologic treatments improve their physical, emotional, cognitive, social, and spiritual functioning; reduce the severity of their symptoms; and enhance overall wellness.⁴⁹ Widespread use of CAM by patients who are concurrently receiving conventional treatments such as psychotropic medications and psychotherapy is driving a trend toward increasingly integrative mental health care in North America, Europe, Australia, and other world regions. Findings of a survey published by the Bravewell Collaborative⁵⁰ support that integrative treatment strategies incorporating pharmaceuticals and evidence-based CAM therapies are often beneficial for common medical and psychiatric disorders, and this survey highlights depressed mood and anxiety as among the top 5 health concerns for which CAM and integrative approaches are most beneficial.

Although it is estimated that more than 50% of all individuals with a diagnosis of mood or anxiety disorder use CAM therapies to manage their symptoms, few disclose CAM use to their psychiatrist, family physician, or other conventional health care practitioner.⁵¹ To complicate matters, many widely used CAM therapies are supported by limited research evidence. Relatively few CAM therapies have been substantiated by consistent positive findings from large, well-designed, placebo-controlled studies. Furthermore, most CAM therapies are limited by incomplete knowledge of mechanisms of action, small study sizes, inconsistent research findings, and—in some cases—safety concerns. Patients who use nutraceuticals or other CAM therapies not supported by strong research place themselves at risk of disappointing outcomes or potentially serious safety problems⁵² when such therapies are used in combination with pharmacologic agents.

Emerging Paradigms of Integrative Medicine and Integrative Mental Health Care

High prevalence rates and unmet treatment needs of patients with severe mental illnesses in both developed and less developed countries underscore the inadequacies of both conventional biomedical and CAM treatments and the limitations of current models of mental health care. These circumstances define an urgent agenda for developing more effective, safer, and more affordable integrative treatment strategies incorporating evidence-based conventional biomedical and CAM modalities and establishing a more integrated model of mental health care delivery in which medical and mental health problems are addressed in a single clinic.

Increasing acceptance of CAM therapies in the US and other economically developed world regions is the result of scientific advances, social trends, and the availability of safe, affordable nonpharmacologic treatments.^{42,44,47} Biomedicine is evolving in response to increasing openness to nonallopathic systems of

medicine among conventionally trained physicians in the context of growing patient demands for a variety of treatment choices that are not presently included in the dominant model of mental health care, as well as more individualized health care.²¹ The result has been the emergence of integrative medicine in response both to patients' needs, practitioners' changing perspectives, and the limitations of the current model of care. Integrative medicine affirms the importance of the relationship between practitioner and patient, focuses on the whole person, is informed by research evidence, and goes beyond the limitations of biomedicine or CAM by incorporating diverse treatment approaches with the goals of achieving optimal wellness, preventing relapse, and improving outcomes.⁵³ Integrative mental health care is an important offshoot of integrative medicine that focuses on the whole person rather than a particular disorder. Like integrative medicine, integrative mental health care emphasizes wellness and healthy lifestyle choices while addressing the range of complex biological, psychological, cultural, economic, and spiritual or religious factors that affect general well-being and mental health. As such, integrative mental health care is an evidence-based, research-driven paradigm that acknowledges the legitimacy of conventional and CAM treatments and recommends specific treatment combinations supported by research findings. (For a more detailed discussion of the history, conceptual foundations, and methods of integrative mental health care, see the article by Lake et al.⁵⁴) We believe that incorporating conventional and CAM therapies that are supported by robust research evidence into KP's existing integrated model of care will address the limitations of currently available treatments, improve outcomes, increase patient satisfaction, and reduce costs.

Need for a Broader Research Agenda in Psychiatry

In addition to the need for a broader range of treatment choices that is inclusive of evidence-based CAM therapies, psychiatry urgently needs a more eclectic research agenda that includes studies on promising CAM and integrative approaches using modern research methods. For decades, conventional psychiatric research has emphasized the development of novel pharmaceuticals and, to a much lesser extent, the role of psychotherapy. Although both treatment modalities are often effective in reducing suffering and disability associated with mental illness, both approaches are resource intensive. Broadening research priorities in psychiatry to include investigations of CAM and integrative approaches will help elucidate the multifactorial causes of psychiatric disorders at the level of social, cultural, psychological, and biological factors. It also will provide a framework for developing individualized treatment protocols addressing complex causes of symptoms on the basis of each unique patient's response to multimodal treatments. More affordable treatment approaches are also urgently needed. Recent studies have reported positive findings for a variety of nonresource-intensive CAM interventions, including the role of lifestyle changes on mental and emotional well-being, mind-body therapies, and select natural product supplements.⁵⁵

As previously noted, a large percentage of patients with a diagnosed psychiatric disorder receive medications while

concurrently using one or more CAM treatments. Recent research findings support that select natural products are safe and effective adjuvants when used in combination with antidepressants or other psychotropic medications.⁵⁶ Most studies on conventional biomedical treatments and CAM treatments employ randomized controlled trial designs that examine single interventions in artificial populations that are not representative of the diversity and complex medical and mental health problems of real-world populations. Few rigorously designed, well-powered studies have been done on more complex integrative approaches that combine multiple therapeutic modalities. Important advances will take place in psychiatric research and mental health care delivery when formal research methods are developed that permit rigorous evaluation of complicated patients receiving complex interventions involving multiple therapeutic modalities (which more accurately reflects how patients seek care) to treat real-world clinical populations.

Future clinical trials could examine individually tailored, multiple-component interventions using both quantitative outcome measures (eg, laboratory tests and validated psychometric scales) and qualitative measures (eg, subjective perceptions of improved functioning and placebo and nocebo effects). For example, a controlled trial on patients with diagnosed major depressive disorder could compare "treatment as usual" with a multimodal treatment protocol using a decision-tree algorithm employing specific combinations of evidence-based conventional and CAM modalities. A future research agenda that encompasses CAM treatment modalities will also help clarify the roles of genetic and biochemical individuality, ethnicity, family history, and culture in the pathogenesis of mental illness. Along these lines, Hoenders et al⁵⁷ recently reported the advantages of an innovative research method that uses single-subject time series analysis to examine dynamic real-time relationships between symptom and treatment variables and interactions between treatment modalities in a patient receiving integrative treatment for anxiety. Findings of this "N-of-1" study revealed complex interrelationships between the patient's symptoms and responses to treatment, positive feedback loops between lifestyle behaviors and outcomes, and differential effects of different treatment variables that would potentially have gone unnoticed in conventional group study designs. Future studies investigating CAM or integrative treatments would ideally use standardized forms of high-quality natural product supplements or other nonpharmacologic treatment approaches substantiated by strong data on both safety and efficacy. Other important future research areas should include

- investigating mechanisms of action of single CAM treatments or complex integrative protocols using advanced pharmacogenomic, epigenetic, and neuroimaging approaches
- studies of the impact of lifestyle modification (eg, diet, exercise, and stress management) on mental health aimed both at prevention and treatment
- studies of interactions between specific pharmaceuticals and CAM therapies aimed at elucidating potentially beneficial synergistic effects or potentially dangerous adverse effects as well as toxic or potentially unsafe interactions.

Cost-effectiveness Considerations

Findings from economic modeling research support that although treatment strategies that incorporate CAM and conventional biomedical treatment modalities may initially be costly, downstream savings can be achieved when such integrative strategies yield positive long-term outcomes.^{58,59} Systematic reviews of economic modeling studies on comparative cost-effectiveness of conventional vs CAM or integrative treatments of many medical and psychiatric disorders support that CAM or integrative treatment is cost-effective and may result in cost savings in some cases.⁶⁰ It has been argued that higher upfront costs of CAM or integrative health care may be offset by improved work productivity and increased future quality adjusted life years.⁵⁹ In the same vein, a study done in Australia⁶¹ estimated that switching depressed individuals from a conventional antidepressant to St John's wort (*Hypericum perforatum*) could result in a potential savings of AU\$50 million per annum. The use of economic modeling to estimate cost-effectiveness differences between conventional biomedical treatments, CAM, and integrative treatment protocols warrants further exploration especially when comparing the equivalent efficacy of CAM treatments with conventional biomedical treatments. As noted earlier, collaborative care is more cost-effective than usual care in terms of medication costs and inpatient, outpatient, and mental health specialty care.³⁶ KP is strategically positioned to pursue research on cost-effectiveness in health care delivery that may lead to a more cost-effective collaborative model of mental health care.

Developing Clinical Guidelines for Integrative Mental Health Care

The implementation of CAM and integrative approaches in clinical settings is highly varied and idiosyncratic, reflecting differences in personal values and perspectives of practitioners, and disparate goals and priorities of training programs and clinics or hospitals where integrative approaches are employed. Results of a survey of integrative clinics and training programs suggest that integrative medicine is evolving into a coherent set of values and a consistent model of care delivery and clinical therapeutics, as evidenced by an increase in the peer-reviewed journal literature and a trend toward increasing numbers of affiliations between integrative centers and hospitals, health care systems, and medical and nursing schools.⁵⁰ Integrative mental health care is a strongly collaborative enterprise that fosters cooperation among practitioners from disparate backgrounds and between patients and practitioners.

A 2012 survey of integrative centers found that integrative approaches are perceived as successful when used to treat both medical and mental health conditions.⁵⁰ Respondents identified consultative care as the most widely used model of integrative medicine in the US today. In this collaborative care model, integrative clinicians work closely with the patient's primary care physician to develop individualized treatment plans. The next most frequently used collaborative care model (in centers surveyed) is comprehensive care in which an expert clinician manages a specific medical condition throughout the course of

treatment. Finally, increasing numbers of integrative centers are using a primary care model in which family medicine physicians, internal medicine physicians, and nurses collaborate to provide medical and mental health care as needed throughout the patient's life span. In all these models, a flexible patient-centered approach was perceived as a major strength of integrative medicine and mental health care compared with conventional models of care. In all collaborative care models, comprehensive clinical assessment of each patient was regarded as the crucial first step to ensure a valid diagnostic formulation. In all centers, surveyed treatment approaches were considered only after a thorough review of published research evidence supporting their use for a specific medical or psychiatric condition and taking into account risks of adverse effects, cost, and availability. It is important that 55% of survey respondents reported that depression and anxiety were successfully treated at their clinics using integrative therapies. Along these lines, Hoenders et al⁶² have developed guidelines for integrative mental health care using algorithms to identify optimal treatment protocols for common psychiatric disorders. Future innovations in mental health care should incorporate evidence-based integrative protocols employing a flexible, patient-centered collaborative care model with the goal of more effectively and more cost-effectively addressing complex medical and psychiatric disorders that respond poorly to available conventional treatments and the usual model of care.

The clinical practice of integrative mental health care in the US and other developed countries will spread rapidly and evolve to a very high standard following the establishment of consensus-driven clinical guidelines. Such guidelines will provide a template for deriving safe, effective, and cost-effective assessment and treatment approaches on the basis of the best available research evidence on efficacy and safety for both conventional and CAM therapies.

Ideally, integrative guidelines should cover

- structure and content of a rigorous integrative clinical evaluation
- selection and interpretation of diagnostic modalities
- overarching treatment protocols that address efficacy, safety, and ethical concerns
- selection and prescription (or recommendations) of multimodal therapeutic interventions
- assessment of therapeutic efficacy using standardized outcome measures
- structure of the therapeutic relationship and appropriate follow-up.

Diagnostic formulations based on the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V) do not provide an adequate framework when one approaches patient care from an integrative perspective; however, clinical practice guidelines based on DSM-V diagnostic categories provide a practical template for interdisciplinary collaboration in assessment and treatment planning. Clinical guidelines employing DSM-V categories and methods also provide a framework for developing economic models that can be used to evaluate the cost-effectiveness of specific integrative approaches.

Need for Integrative Training Programs for Mental Health Care Practitioners

In the US and other developed countries, there are essentially two parallel systems of education as well as clinical care: 1) conventional training programs in psychiatry and the allied mental health fields and 2) CAM-related training programs in naturopathy, herbal medicine, and traditional Chinese medicine. Conventional allopathic medical training programs—including psychiatry residency training programs and MA or PhD psychology programs—include limited coverage of CAM or integrative approaches outlined in this article. Similarly, most CAM training programs offer limited or no opportunities for education, training, and research in the basic sciences, including biochemistry, psychology, pathophysiology, pharmacology, and neuroanatomy (except for naturopathic medicine, which provides rigorous education in these areas). Successful implementation of interdisciplinary education and training programs needed to foster competent integrative clinicians will require a high level of cooperation between academic centers, professional societies, and clinicians across disciplines. The successful implementation of a residency program in integrative medicine has demonstrated that it is possible to develop a rigorous training program in integrative medicine and import it into traditional residency curricula on a large scale.⁶³ At the KP Oakland Medical Center in CA, planning is ongoing for a unique psychiatry residency training program that will emphasize integrative mental health care. In addition to residency and other postgraduate training programs, Web-based education will play an increasing role in the training of future integrative practitioners.

Given the diversity of factors driving the emerging field of integrative medicine and integrative mental health care as well as the broad range of interests and perspectives of postgraduate training programs in family medicine, psychiatry, psychology, and allied health fields, it is likely that disparate postgraduate training programs will emphasize different areas of specialization. After completing formal training, many family physicians and psychiatrists seek out continuing education and mentorship opportunities in areas such as mind-body medicine, including mindfulness-based stress reduction, pain medicine, palliative care, biofeedback, or hypnotherapy, whereas others procure training in acupuncture or in prescribing nutraceuticals. In the same way that conventional residency training programs in family medicine and psychiatry currently incorporate training in specialized clinical areas, we envision that residency training programs in family medicine and psychiatry will increasingly emphasize integrative mental health care by including validated CAM approaches in their curricula.

Advancing a Kaiser Permanente Agenda for Innovation in Mental Health Care

The alarming statistics reviewed in this article suggest that most people with mental illness in the US and globally probably receive inadequate care, and widely used conventional biomedical treatments and CAM treatments have limited efficacy against depression, bipolar disorder, schizophrenia, and other psychiatric disorders. Survey findings confirm that integrative mental health

care using both conventional and CAM treatments is currently being practiced by many mental health professionals and pursued by our patients and the public at large.^{21,50,53} However, as noted in this article, the implementation of collaborative models of care in primary care clinics is limited by the absence of consensus on research priorities and clinical practice guidelines, few residency training programs addressing CAM and integrative medicine, the paucity of reliable safety and efficacy information on many CAM and integrative modalities, and limited involvement of relevant government agencies in shaping health care policy reform. Together, these circumstances define an urgent agenda for KP and other health care delivery organizations to proactively address the limitations of the current model of mental health care delivery and conventional pharmacologic treatments of mental illness.

As previously described, given the philosophy of whole-person care that KP embodies, the tradition of translating research into clinical applications and operational improvements in care delivery, and the wealth of data available to our clinicians regarding the total health of the patient, KP is uniquely positioned to lead and innovate in the field of integrative medicine and to improve mental health care for the populations and communities we serve. Concentrating on areas where there are fewer mental health clinicians, such as rural or semi-rural service areas, while prioritizing the development of collaborative models of care in primary care clinics will permit KP to reach a larger population of patients in need. In this process, flexible and innovative technologies that allow for self-care and psychoeducation about illness will be crucial (psychoeducation is a term used to denote training in self-care for patients who are receiving mental health care).

CONCLUSION

Currently available conventional biomedical treatments, CAM treatments, and the dominant model of care used in the US and other world regions fail to adequately address the complex biological, social, cultural, and spiritual dimensions of mental illness. These circumstances define an urgent agenda for broadening the current paradigm of mental health care to include evidence-based integrative treatments incorporating conventional and CAM modalities and implementing a collaborative care model on a large scale in primary care settings aimed at wellness, prevention, and treatment of specific psychiatric disorders. Accumulating research evidence supports that lifestyle modifications including changes in diet and exercise, mindfulness meditation and mind-body practices, and select natural products are beneficial, safe, and affordable interventions for many common mental health problems that can be safely combined with pharmacologic and psychotherapeutic interventions and can easily be incorporated into mainstream mental health models of care. In this article, we have argued that doing so will probably result in improved outcomes, enhanced patient satisfaction, and more cost-effective care over the long term.

Because of its strong research base and commitment to innovation, KP is positioned to transform mental health care. We offer this article as a work in progress to invite dialogue, debate, and consensus building among KP physicians and allied health care practitioners and administrators on novel collaborative models of

care delivery, with the goal of achieving safer, more effective, and more cost-effective mental health care. We hope this article will guide future policy discussions within KP and stimulate internal research programs on promising CAM and integrative treatment approaches addressing mental illness in complex patient populations. A collaborative model of care incorporating conventional biomedical treatments and evidence-based CAM treatments will result in a broader range of choices addressing common psychiatric disorders while providing patients with practical, affordable resources for optimal wellness and relapse prevention. We believe that innovations taking place in KP will translate into improved mental health care in the US and potentially on a global level. Through KP's commitment to the communities we serve and to alleviating suffering for our members and those outside our walls, KP is illuminating a path forward in expanding mental health care for all global citizens. ❖

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Disorder

A mental disorder is a medical disorder.

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