

Positive Psychiatry: Its Time Has Come

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ABSTRACT

Traditionally, *psychiatry* has been defined and practiced as a branch of medicine focused on the diagnosis and treatment of mental illnesses. Based on growing empirical evidence, we believe that this definition warrants expansion to include the concept of positive psychiatry. In the present article, we provide a critical overview of this emerging field and a select review of relevant scientific literature. *Positive psychiatry* may be defined as the science and practice of psychiatry that seeks to understand and promote well-being through assessment and interventions involving positive psychosocial characteristics (PPCs) in people who suffer from or are at high risk of developing mental or physical illnesses. It can also benefit nonclinical populations. Positive psychiatry has 4 main components: (1) positive mental health outcomes (eg, well-being), (2) PPCs that comprise psychological traits (resilience, optimism, personal mastery and coping self-efficacy, social engagement, spirituality and religiosity, and wisdom—including compassion) and environmental factors (family dynamics, social support, and other environmental determinants of overall health), (3) biology of positive psychiatry constructs, and (4) positive psychiatry interventions including preventive ones. There are promising empirical data to suggest that positive traits may be improved through psychosocial and biological interventions. As a branch of medicine rooted in biology, psychiatry, especially with the proposed conceptualization of positive psychiatry, is well poised to provide major contributions to the positive mental health movement, thereby impacting the overall health care of the population.

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Psychiatric practice and research have traditionally focused on elucidating the causes of mental illnesses, developing and using safe and effective treatments, and reducing the associated suffering and disability. These components are, however, not sufficient to fulfill the enormous potential of psychiatry to promote human welfare. The World Health Organization has defined *health*, not as an absence of disease or infirmity, but as a state of complete physical, mental, and social well-being.¹ A growing body of research shows that higher levels of positive psychosocial characteristics (PPCs) such as resilience, optimism, and social engagement are associated with objectively measured better health outcomes, including greater longevity, as well as with subjective well-being.^{2,3} Yet, most research on positive mental health has come from outside of psychiatry, with a few notable exceptions including Vaillant,⁴ Blazer,⁵ and Cloninger.⁶ While psychiatrists are experts in “mental health,” the bulk of the field’s attention has been devoted to managing mental disorders. Positive psychosocial characteristics are rarely addressed in psychiatric textbooks or empirical reports, and this omission might have hindered psychiatry’s ability to effect the amount of positive change in patients’ lives. The time has come to integrate positive mental health into psychiatric practice, training, and research and to expand psychiatric expertise to encompass the full spectrum of mental functioning.⁷

In this article, we provide an overview of positive psychiatry, including its definition, brief historical background, key constructs (positive mental health outcomes and the PPCs that foster those outcomes), biological aspects, and its integration into child, adolescent, and geriatric psychiatry), and offer suggestions for the implementation of positive psychiatry in clinical practice and training. We also discuss limitations of positive psychiatry, give recommendations for further research, and offer an emerging picture of positive psychiatry in the future.

WHAT IS POSITIVE PSYCHIATRY?

Positive psychiatry is the science and practice of psychiatry that seeks to understand and promote well-being through assessment and interventions aimed at enhancing behavioral and mental wellness. Key constructs in positive psychiatry include both positive mental health outcomes and PPCs. The main objective is greater well-being, which may be achieved through optimal increase in key PPCs such as resilience and social support. As a branch of medicine, positive psychiatry is rooted in biology and seeks to decipher biological underpinnings of PPCs and eventually promote health and well-being through psychosocial/behavioral and biological interventions. Positive psychiatry is not restricted to specific patient groups (unlike subfields such as child,

- Positive psychological characteristics such as resilience, optimism, and social engagement have been reported to be associated with better health outcomes; yet, they are rarely addressed in psychiatric practice, training, journals, or textbooks.
- Assessment of positive psychological characteristics and use of interventions to enhance them in patients with mental or physical illnesses should become a part of routine clinical practice, education, and research.

geriatric, and addiction psychiatry), but is an approach applicable to all of psychiatry, analogous to psychodynamic or biological psychiatry. The definition of psychiatry should not be limited to specific disorders (mental illnesses), but instead, should focus on the unique skill sets of psychiatric experts, ie, study, assessment, and modification of thinking, feeling, and behavior. Table 1 summarizes salient differences between traditional psychiatry and positive psychiatry.

BRIEF HISTORICAL BACKGROUND

The concepts of positive psychiatry date back at least to 1906 when William James, a physician and psychologist, argued for a new approach to study and apply psychological principles underlying the success of the so-called “mind-cure,” which referred to the purported healing powers of positive emotions and beliefs.⁸ These views were largely ignored until the humanistic psychology movement of Maslow and colleagues in the mid-20th century, which was concerned with understanding healthy, creative individuals and their growth. Positive psychiatry traces its most immediate lineage to the positive psychology movement pioneered by Seligman and colleagues in the late 1990s. In his 1998 presidential address to the American Psychological Association, Seligman called for “a reoriented science that emphasizes the understanding and building of the most positive qualities of an individual: optimism, courage, work ethic, future-mindedness, interpersonal skills, capacity for pleasure and insight, and social responsibility.”⁹ Since then, Seligman has continued to lead the remarkable growth of the positive psychology movement.¹⁰ Positive psychology has become an international movement with organizations such as the International Positive Psychology Association. Positive psychology and positive psychiatry are not competitors, but allies, partially overlapping in their concepts and goals, but each bringing its unique training background and skills. Psychiatrists are first trained as physicians, an applied biologically rooted profession focused on treating diseases and disabilities.

POSITIVE MENTAL HEALTH OUTCOMES

The following outcomes represent some of the dimensions and targets of a positive psychiatry approach:

Well-being. Well-being is not an absence of mental and physical disorders, but the presence of a positive psychological state such as life-satisfaction and happiness.

Table 1. Main Differences Between Traditional Psychiatry and Positive Psychiatry

Variable	Traditional Psychiatry	Positive Psychiatry
Targeted patients	Those with mental illnesses	Those suffering from or at high risk of developing mental or physical illnesses
Assessment focus	Psychopathology	Positive attributes and strengths
Research focus	Risk factors Psycho/neuropathology	Protective factors Psycho/neuroplasticity
Treatment goal	Symptom relief and relapse prevention	Recovery, increased well-being, successful aging, posttraumatic growth
Main treatments	Medications and, generally, short-term psychotherapies for symptom relief and relapse prevention	Psychosocial/behavioral (and increasingly, biological) interventions to enhance positive attributes
Prevention	Largely ignored	Important focus across the lifespan

It contains elements of eudaimonic well-being, including purpose in life and self-acceptance. Well-being is associated with greater longevity.² In modern economics, well-being is considered a measure of national development.¹¹

Low level of perceived stress. Perceived stress indicates the degree to which an individual believes that his/her contemporary demands or challenges exceed his/her ability to cope. Perceived stress is reportedly more critical than objective measures of stress in its impact on biomarkers such as telomere length.¹²

Successful psychosocial aging. Older adults consider the ability to adapt to circumstances and a positive attitude toward the future to be more important than an absence of physical disability.^{13,14} This may explain a well-documented paradox of aging: even as physical health declines, self-rated successful aging tends to be higher in later life.^{15,16}

Posttraumatic growth. Severe stress is sometimes followed by posttraumatic stress disorder (PTSD). However, some stressed individuals experience personality growth. Posttraumatic growth reflects an individual’s resilience in the face of severe stress and may be manifested by greater appreciation of life, altered priorities, closer interpersonal relationships, greater sense of personal strength, and recognition of new possibilities for one’s life.¹⁷

Recovery in serious mental illnesses. Even among seriously mentally ill individuals, there can be “wellness within illness.”¹⁸ Although professional versus consumer definitions of recovery differ in terms of requiring symptom remission, both acknowledge the importance of independence and reduction of the impact of the illness on one’s life. Many individuals struggling with mental illness have led outstanding lives of courage, dignity, and contribution to society. We have found that people with nonremitted chronic schizophrenia can still experience happiness.¹⁹

Prevention of mental illness. Prevention has a long history in the field of community psychiatry, including primary, secondary, and tertiary prevention.²⁰ Such efforts have mainly focused on youth but have recently expanded

to adults in areas such as postpartum psychosis, poststroke depression, PTSD, and even dementia.

POSITIVE PSYCHOSOCIAL CHARACTERISTICS

Positive outcomes are at least partially mediated by PPCs, which include positive psychological traits and positive environmental factors.

Positive Psychological Traits

Empirical research supports a model in which positive psychological traits interact with and feed into each individual's evaluation of his or her degree of well-being and are a stronger predictor of well-being than is physical health. Several such traits have been shown to have a positive impact on longevity, with effect sizes that rival or exceed those of well-established health risk factors such as smoking, hypertension, and obesity.³

Resilience. *Resilience* refers to ready recovery from or positive adaptation to illness or other adversities. Resilience and optimism are associated with a lower risk of all-cause mortality.²¹ Among physically ill patients, resilience is associated with improved physical health, health-related quality of life, self-care, and treatment and exercise adherence.²² Resilience is also associated with better emotional health and well-being²³ and less pain and better health-related quality of life in older adults.²⁴ Among people in their 90s, those who endorsed higher levels of resilience had a 43% greater likelihood of living to 100 years.²⁵

Optimism. *Optimism* reflects a tendency to expect good outcomes. Optimism has been studied in the context of serious medical conditions, including cardiovascular disease, and has been shown to be associated with less illness-related distress, higher quality of life and satisfaction, and lower incidence of depression.²⁶ Meta-analysis of 83 studies of optimism found a significant relationship between optimism and better health outcomes, including cardiovascular outcomes, physiological markers (including immune function), cancer outcomes, and outcomes related to pregnancy, pain, and mortality.³ Optimistic adults are more likely to engage in healthy behaviors than pessimists.²⁷

Personal mastery and coping self-efficacy. *Personal mastery* denotes one's expectations of personal effectiveness in achieving desired outcomes. In the context of chronic life stress, personal mastery may promote specific, adaptive, goal-oriented behaviors, as well as aid in the maintenance of those behaviors, despite ongoing stresses. Personal mastery seems to protect individuals from the negative health effects of stress and poor health.²⁸ A related concept, *coping self-efficacy*, refers to self-perceived ability to activate specific coping strategies to overcome life challenges and to influence outcomes.

Social engagement. *Social engagement* refers to how well integrated a person is into a social network, including the number and quality of close relationships, frequency of socialization, and the degree to which one finds pleasure from social integration/interactions. Quality and quantity of one's social relationships are associated with health

outcomes across a range of medical populations.²⁹ Meta-analysis of 148 studies (N > 300,000) found a 50% increased likelihood of survival among participants with strong social relationships compared to others with weak social relationships, across different groups based on age, gender, initial health status, cause of death, and follow-up period.³⁰

Spirituality and religiosity. *Spirituality* refers to the degree to which one's personal beliefs, thoughts, and behaviors focus on transcendent topics such as the meaning of life, belief in a higher being, and power or level of consciousness. *Religiosity* is usually reserved for reference to organized religion and has an inherent social connotation, whereas spirituality can be personalized. Religious and spiritual practices are associated with greater well-being as well as better health outcomes throughout one's lifespan.³¹ Proposed mechanisms include emotional support and optimism derived from religious communities, but spirituality may remain a significant determinant even when controlling for these factors.³²

Wisdom. Despite variability among definitions of wisdom, common elements include prosocial behaviors (compassion, empathy, altruism), social decision-making, insight, decisiveness, acknowledgment of uncertainty, emotional regulation, tolerance of divergent value systems, openness to new experience, spirituality, and a sense of humor.³³ What unites these components is their usefulness for the self and for others. Greater wisdom may be important for an older adult's ability to survive, and even thrive, in spite of worsening physical health; similarly, wisdom transmitted to younger generations may provide a fitness advantage and help to neutralize the loss of fertility in old age—the so-called Grandma hypothesis.³⁴

Positive Environmental Factors

Environment also plays a critical role in ensuring positive health outcomes.

Family dynamics. There is considerable literature on the impact of family dynamics and support on symptom severity, treatment response, and possibility of recovery for a number of neuropsychiatric and physical disorders.³⁵

Social support. *Social support* refers to the degree to which other people are available for emotional and physical support. Strong social support is associated with reduced depression, anxiety, substance use disorders, hypertension, cardiovascular disease, and dementia, as well as longer survival.³⁶

Other environmental determinants of psychosocial functioning. There is no health without mental health; at the same time, mental health depends, to some extent, on general health. Therefore, availability of regular medical care; opportunities for physical, cognitive, and social activities; and provision of adequate nutrition are necessary for positive mental health. Such factors illustrate the importance of positive psychiatrists reclaiming and embracing their roles as physicians in addition to their roles as mental health professionals. There is also evidence that social planning and community environment affect mental health.³⁷

BIOLOGY OF POSITIVE PSYCHIATRY CONSTRUCTS

Potential Biomarkers of Positive Mental Health

Allostatic load. Allostatic load is a measure of the body's cumulative physiological response to frequent and sustained exposure to environmental stressors, with the downstream result being an increased risk for disease. Allostatic load also is related to cognitive functioning and psychological factors.³⁸ A composite variable of the following parameters of biological functioning has been used in several investigations: systolic and diastolic blood pressure, body mass index, high-density lipoprotein (HDL) cholesterol, total cholesterol/HDL cholesterol, plasma norepinephrine, and plasma epinephrine.³⁹

Telomere length. Telomere length is an indicator of biological age and represents a cumulative index of the number of cell divisions and exposures to genotoxic and cytotoxic processes such as oxidation. Perceived stress is more critical than objective measures of stress in its impact on telomere length.¹² Telomere length is maintained by the enzyme telomerase, and there is preliminary evidence that healthy lifestyle changes as well as psychosocial stress reduction interventions can increase telomerase activity.⁴⁰⁻⁴²

Other mechanisms. Oxidative stress, caused by an overproduction of free radicals or underproduction of antioxidant molecules, damages DNA, protein, lipids, and other macromolecules in many tissues, especially in the brain.⁴³⁻⁴⁷ F₂-isoprostanes are stable molecules that provide an accurate index of whole body oxidative stress.⁴⁸ Prolonged or repeated exposure to oxidative stress may accelerate aspects of biological aging, leading to greater comorbidity and mortality. Similarly, neuroinflammation and immune function are also related to several PPCs as noted below.

General Biology of Positive Psychological Traits

Resilience and optimism. Resilience and optimism are both partially heritable.^{49,50} Candidate genes for resilience include those related to limbic and prefrontal cortex reactivity, such as HPA axis-related genes (*CRHR1*, *FKBP5*), serotonin transporter (*5-HTTLPR*), and others (*COMT*, *NPY*, *BDNF*, *MAO-A*, and *NGFI-A*).⁵¹ Genetic association studies have linked optimism to the oxytocin receptor gene and the *5HTTLPR* variation in *SLC6A4*, a gene responsible for serotonin transport, as well as *CACNA1C*⁵² and the *OXTR* gene.⁵³ Beginning in development, an individual's genes and their interactions with environmental factors (plus stochastic events) may shape the neural circuitry and neurochemical function expressed in psychological traits.⁵⁰ Genetic polymorphisms affect a person's limbic reactivity and prefrontal-limbic connectivity. Adaptive functioning of social-behavior (eg, fear, reward, impulsivity) circuits underlies a resilient person's capacity to face stress. Stochastic, epigenetic changes occurring during brain development that drive resilience promote survival during periods of high stress.

Low optimism has been associated with increased loneliness and inflammation markers.^{54,55} A recent study reported that pessimism (but not optimism) was independently associated with 2 measures of immunosenescence: shorter telomere length and higher interleukin 6 (IL-6) concentrations.

Personal mastery and coping self-efficacy. Reduced personal mastery resulting from chronic stress may provoke excessive activation of the autonomic nervous system, which may affect immune functioning via desensitization of β_2 -adrenergic receptors on immune cells, with implications for peripheral blood mononuclear cell trafficking and cytokine production.⁵⁶ High levels of personal mastery may protect individuals from the negative health effects of stress, including higher concentrations of plasminogen activator inhibitor-1 antigen, which are associated with an increased risk of thrombosis.⁵⁷ In a study of caregivers, greater coping self-efficacy was associated with lower blood pressure and lower pulse pressure.⁵⁸ In another study, subjective stress in caregivers was associated with the proinflammatory IL-6 in individuals with low coping self-efficacy.⁵⁹

Social engagement. A study found that ambivalence about one's social relationships was associated with shorter telomeres.⁶⁰ Several studies reported direct associations of engagement in pleasant events with mental and physical health,^{61,62} including reduced plasma concentrations of inflammatory biomarkers and lower catecholamine response to stress.⁶³

Spirituality and religiosity. Religiosity/spirituality is associated with better lipid profiles, lower blood pressure, better immune function,⁶⁴ and decreased levels of cortisol.⁶⁵

Wisdom (including compassion). A variant of frontotemporal dementia, whose symptoms include loss of behavioral characteristics comprising wisdom, especially compassion and empathy, is associated with a mutation of a gene related to tau protein on chromosome 17.⁶⁶ Investigations of the neurobiology of autism spectrum disorders and antisocial personality may help to understand the biological basis of compassion and empathy.⁶⁷

Neurocircuitry of PPCs

Resilience, or successful coping with stress, has been tied to adaptive changes in brain circuits regulating reward, fear, emotional reactivity, and social behavior.⁵¹ Under threat, low-resilience individuals exhibited prolonged activation in the anterior insula to both aversive and neutral pictures, whereas high-resilience individuals exhibited insula activation only to aversive pictures. These findings suggest that, in threatening situations, resilient people appropriately adjust the level of emotional resources needed to meet the situational demands. Optimism bias is associated with enhanced activation in the amygdala and the rostral anterior cingulate cortex⁶⁸ but reduced activation in the fusiform gyrus and frontal regions.³³ Anterior cingulate cortex and bilateral insula are involved in compassion and empathy.⁶⁷ Neurocircuitry of wisdom may involve the prefrontal cortex (especially dorsolateral, ventromedial, and anterior cingulate) and the limbic striatum.⁶⁷

Animal Models of PPCs

Investigations in rodents complement human studies by identifying the active behavioral, neural, molecular, and hormonal basis of resilience in response to stress. As with humans, chronic stress in rodents leads to development of depression- or anxiety-like behaviors following stress in only a subset of laboratory animals. Krishnan and colleagues⁶⁹ have identified signature molecular adaptations within the mesolimbic dopamine circuit associated with vulnerability to pathological response to stress versus resilience. Therapeutic implications of such findings are considerable.

Empathy may be studied in the behavior of rats,⁷⁰ chickens,⁷¹ and pigeons⁷² in response to observing distress in their peers, indicating that a basis for emotional empathy may be widely conserved across species. Rats have also been reported to act to relieve distress in their peers.⁷³ We have recently developed a relatively simple and fast mouse model of human empathy characterized by the freezing of observer mice to in response to watching the footshock of a subject mouse.⁷⁴ Such “assays” of empathy in a mouse model may allow use of genetic tools to examine neural and molecular substrates of empathic behaviors and their impairment in clinical disorders such as autism, antisocial personality disorder, and frontotemporal dementia.

POSITIVE CHILD/ADOLESCENT AND GERIATRIC PSYCHIATRY

Positive Child and Adolescent Psychiatry

The field of child and adolescent psychiatry, steeped in the developmental perspective of mental functioning, should be fertile ground from which principles of positive psychiatry would grow. Many child psychiatrists do incorporate a number of the tenets of a positive psychiatry approach. At the same time, child psychiatry has not escaped the predominant emphasis on a disease model concentrating on psychiatric symptoms, as evidenced by the recent dramatic increase of psychotropic medication use.⁷⁵ The slow pace at which positive psychiatry has been adopted into routine child psychiatry practice has not been for want of scientific research. There is overwhelming evidence that most of the core domains of child psychopathology exist along broad spectrums with few qualitative boundaries either at the phenotypic or the neurobiological level among those with low, average, or high levels of a particular behavior.⁷⁶

Positive Psychiatry of Aging

Contrary to common ageist notions about aging being inevitably associated with progressive functional decline, a number of studies have reported on successful aging.^{4,15,16,77} Furthermore, there is growing evidence from neuroscience research that neuroplasticity, with brain growth and development, can continue into old age, provided that there is optimal physical and psychosocial stimulation.⁷⁸ Mechanisms underlying neuroplasticity include compensation for aging-related degenerative changes (eg, involvement of additional neuronal networks for executing a behavior) as well as increases in the numbers of synapses, dendritic spines, blood

vessels, and even neurons in selected areas of the brain such as the hippocampal dentate gyrus.⁷⁹ Such neuroplasticity is related mainly to behavior and environment, which affect expression of relevant genes. This neuroplasticity most likely enables PPCs to affect individuals' health throughout the lifespan, although the brain is less plastic in later life than in youth. The application of positive psychiatry to aging is also in accord with the goal of the Trans-NIH Geroscience Interest Group to slow aging and improve functioning through multiscale network models.⁸⁰

CLINICAL PRACTICE

Therapists trained in positive psychiatry can expand their range of treatment options and better engage patients in the treatment process. Several positive interventions are reported to help promote wellness and also prevent and treat mental illness. For example, setting personal goals, practicing optimism, and using character strengths have been shown to enhance well-being and relieve depressive symptoms.⁸¹

There are several lifestyle interventions that therapists may explicitly encourage their patients to use. For example, exercise has been found to be as effective as medication for patients with mild to major depression and to have longer lasting results.⁸² Moderate exercise may also help prevent depression.⁸³ Moreover, physical activity has been shown to optimize learning by improving impulse control, attention, and arousal and reducing learned helplessness.⁸⁴ Meditative practices such as tai chi, qigong, and mindfulness meditation also have a place in the clinical setting and have been shown to enhance positive affect, decrease anxiety and negative affect, and have potential benefits across a range of psychiatric conditions.⁸⁵ Similarly, yoga can have a beneficial impact in reducing stress and inflammation and improving immune function and health.^{86,87}

Outside the context of eating disorders and depression, what patients eat is rarely a focus of treatment but is worth more attention. A healthy diet has been shown to reduce the risk of severe depression, while junk food, sugar, and processed meats may increase depressive symptoms.⁸⁸ The Mediterranean diet is associated with decreased risk of late-life depression and cognitive dysfunction.⁸⁹ Likewise, since many psychotropics are associated with weight gain, explicitly counseling patients on healthy dietary habits is an important part of treatment.

Sleep is another important area of focus for clinicians. Sleep problems are not just symptoms; they also contribute to mental health issues. Sleep hygiene can make a difference in quality of sleep and quality of life. Decreasing alcohol, nicotine and caffeine intake; increasing physical activity; and keeping the bedroom dark and free of distractions like a cellphone are well-documented strategies to improve sleep.

While most effectiveness studies of positive mental health have been conducted in patients with depressive or anxiety disorders, evidence is emerging for their value in conditions such as schizophrenia. For example, a pilot study found that group-based positive psychotherapy may improve

psychological well-being, hope, savoring, psychological recovery, self-esteem, and psychiatric symptoms in schizophrenia.⁹⁰ In certain cases, positive interventions may complement medication or psychotherapy when there is a partial response. Positive interventions are convenient and cost-effective, and there is much less stigma associated with them. Positive interventions may also play a role in helping to buffer against relapse. Of note, choosing the right intervention is important, and therapists are uniquely positioned to weigh in on these decisions. Motivation, outcome expectations, person-activity fit, and social support may impact the success of positive interventions.

There is accumulating evidence that emphasis on wellness and other domains of positive psychiatry can improve the functioning of children without or with significant psychopathology. The positive impact of exercise on ADHD and depression,⁹¹ positive parenting techniques on oppositional behavior,⁹² and healthy diets on externalizing behavior⁹³ are but a few examples. Including elements of positive psychiatry in clinical approaches gives the clinician a number of new avenues of intervention beyond psychiatry's traditional tools of medications and psychotherapy. Being effective, however, requires that the PPCs be attended to from the initial evaluation through ongoing follow-up. One such model is the Vermont Family-Based Approach, which strives to expand the focus of care from illness to wellness and from the individual child to the entire family environment.⁹⁴ Assessments include not only the traditional components and evaluations of symptoms and criteria for disorders but also aspects such as physical activity, nutrition, parenting practices, sleep, community and sport involvement, screen time, and involvement in the arts. Parents of the presenting child are also assessed for their own levels of emotional-behavior problems not simply to provide a more accurate diagnosis of the child but to identify parental psychiatric disturbance that could potentially be treated to the benefit of the entire family. These remain active areas of intervention for the child psychiatrist and other clinical providers such as family wellness coaches trained in these models.

TRAINING IN POSITIVE PSYCHIATRY

For the principles of positive psychiatry to take hold, it is essential that they be explicitly taught and modeled within each step of the medical education process. Psychiatrists need to be inspired to perceive that their required knowledge base extends well beyond the purview of mental illness so that it encompasses the full range of health, including mental health. Such a perspective implies, for example, that the understanding of depression is incomplete without additional knowledge of happiness or that knowledge of child trauma and abuse is incomplete without learning about the elements of positive and growth-promoting parenting. Positive psychiatry needs to be an integral component of the didactic and clinical learning experiences of each trainee. In addition to initiatives such as new didactic courses,⁹⁵ concerted efforts need to be made to weave these principles into existing rotations and to reinforce them during

supervision. For written treatment plans in evaluation and progress notes, trainees should be taught to include aspects of positive psychiatry, perhaps as a separate category to be addressed.

The Accreditation Council of Graduate Medical Education (ACGME) recently delineated specific milestones that need to be achieved and assessed for all psychiatry residents across a number of important competencies.⁹⁶ Positive psychiatry principles were not specifically described in these milestones for general psychiatry, but many of the milestones are sufficiently broad so that resident evaluation forms could logically include these principles. The milestones for child psychiatry are currently in development and will hopefully include more specific language with regard to positive psychiatry and wellness. The presence of positive psychiatry-related milestones would be one mechanism through which psychiatry officially announces that the boundary of this field extends across the entire spectrum of mental functioning. Similar considerations would also apply to the training of nonphysician professionals involved in mental health care.

LIMITATIONS OF THE CONCEPT OF POSITIVE PSYCHIATRY

There are potential social/political and ethical implications of unbridled promotion of PPCs.⁹⁷ For example, one may object to the notion that optimism should be universally promoted through biological or other interventions. Does the use of amphetamines to improve performance by students facing a test or by fighter pilots engaged in a military maneuver fall within the ethical boundaries of positive psychiatry? Stein^{98(p108)} cautions that, whereas there is consensus about the need to treat many physical and mental disorders, "there is less agreement about what constitutes positive mental health, and about which clinical interventions may be efficacious." Such issues will require ongoing discussions involving multiple stakeholders including clinicians, ethicists, advocacy groups, and policy makers.

Larger funding agencies tend to be oriented toward illnesses and so the ability to generate data on positive outcomes may be limited. There is no clinical mandate to define these constructs (such as with coding of illnesses such as depression), which slows the progress of positive psychiatry in the field. Empirical data are required to answer these questions. There is also the potential for adverse effects of positive psychological interventions. For example, in an Internet study of over 750 volunteers, participants who were described as "needy" felt reduced self-esteem following gratitude exercises that involved listening to uplifting music. Therefore, choosing the right intervention, and the match between patient characteristics and specific interventions, is an important consideration for clinical practice. Indeed, some authors believe that well-being should not be defined by hedonic feelings (positive emotions such as pleasure, contentment, and joy) but rather by promoting eudemonic experience such as self-actualization and meaning.⁹⁹

There are obvious pragmatic barriers to achieving and sustaining true change in the scope of a large field such as psychiatry. However, the recent growth of positive psychology points to the feasibility and viability of the concepts and aspirations of positive psychiatry. Success will depend on the outcome of empirical research and a combined effort and commitment from researchers, clinicians, and funding agencies, as well as public support.

SUGGESTIONS FOR FURTHER RESEARCH

Empirical psychiatric and neuroscience research in positive psychiatry is a recent phenomenon. The potential for further progress is tremendous. The first step should be better operationalization and assessment of positive psychosocial outcomes and PPCs, using measures with strong psychometric properties. The interactions of various constructs also warrant attention; as noted by Cloninger,⁶ equivalent personality traits may lead to distinct health outcomes, whereas distinct personality traits can result in similar health outcomes. Additionally, it would be helpful to develop a strength index for an individual, based on his/her PPCs, which could be considered alongside commonly used risk indices such as the Framingham index for cardiovascular risk or scales for assessing suicide risk. This strength index could include some of the items from the character strengths inventory described by Park and colleagues.¹⁰⁰ Investigations to understand the neurobiology underlying PPCs are critical for conceptualizing, creating, and testing novel interventions to enhance positive traits and outcomes.

By strengthening the development of positive traits through psychotherapeutic, behavioral, social, and biological interventions, positive psychiatry has the potential to improve health outcomes and reduce morbidity as well as mortality. It should become an important approach to enhancing the general well-being of individuals and communities alike, thereby decreasing the general costs of health care.

EMERGING PICTURE OF POSITIVE PSYCHIATRY

Under the umbrella of positive psychiatry, clinicians and educators would have rather different roles from today. Clinicians will evaluate not just the symptoms and diagnoses but also the levels of well-being and PPCs among their patients and employ psychotherapeutic/behavioral (and in the future, biological) interventions to enhance those traits, focusing on positive outcomes such as improved well-being and recovery. They also will train their counterparts outside mental health in implementing similar interventions in people suffering from or at high risk for physical illnesses. With greater emphasis on positive outcomes, attributes, and strengths, the stigma against mental illness may be reduced, which would also help in recruiting trainees into psychiatry.

If effective interventions to strengthen PPCs were provided to all psychiatric patients, we could see a significant increase in the number of seriously mentally ill people achieving recovery. Similarly, through well-designed and implemented preventive strategies, positive psychiatry has the potential to improve health outcomes and reduce morbidity as well

as mortality in the population at large. Instead of being narrowly defined as a medical subspecialty restricted to the management of mental illnesses, psychiatry of the future will develop into a core component of the overall health care system. Psychiatrists will thereby more explicitly reclaim their role as physicians in addition to their roles as mental health professionals. Clearly, much more work is needed to make positive psychiatry a norm in psychiatric practice, but it is time to start that process.

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