Challenges and Opportunities to Meet the Mental Health Needs of Underserved and Disenfranchised Populations in the United States

Francesca Mongelli, M.D., Penelope Georgakopoulos, Dr.P.H., Michele T. Pato, M.D.

This article investigates the gap in access to and quality of mental health care in the United States. This work first discusses how minority populations are most affected by the treatment gap. It summarizes recent literature on the topic for better understanding the needs of psychiatrically underserved and disenfranchised populations and the causes of mental health disparities. It reviews some of the barriers to behavioral health care, including lack of insurance coverage, lack of community-based interventions, unequal access to evidence-based practices, stigma, mental health workforce shortages, and geographical maldistribution of

providers. Second, it reviews opportunities to address these disparities. The article provides examples of effective interventions that researchers worldwide have already implemented to address the gap of mental health services within the collaborative care model and global mental health initiatives. Telepsychiatry and improvements in training of the mental health workforce are also listed as useful implementations to overcome the treatment gap for patients seeking mental health care.

Focus 2020 18:16-24; doi: 10.1176/appi.focus.20190028

Mental disorders are among the leading causes of disability worldwide (1). The treatment gap refers to the difference in the proportion of people who have a disorder and those individuals who receive care. This gap for people with mental disorders exceeds 50% in all countries in the world and reaches nearly 90% in low-income countries (2). In the United States, despite the reduction in the number of uninsured Americans since implementation of the Affordable Care Act (ACA) in 2010, there are still 28 million Americans lacking any type of health insurance (3). A recent report states that the weighted mean for the treatment gap in North America for moderate to severe mental disorders is 65.7% (4). In addition, primary care providers (PCPs) are delivering mental health care to up to 60% of patients with a psychiatric disorder (5), so they, as well, should be included in any educational strategy to improve care. Barriers to behavioral health care include lack of insurance coverage, stigma, mental health workforce shortage, and geographical maldistribution of providers. This article summarizes recent literature on the topic for a better understanding of the needs of psychiatrically underserved and disenfranchised populations, the causes of mental health disparities, and effective interventions that researchers worldwide have already implemented to address the gap of mental health services.

CHALLENGES

Challenges faced by underserved populations can be divided in several ways.

Racial-Ethnic Minority Groups: Challenges and Barriers to Accessing Mental Health Care

Populations in racial-ethnic minority groups represent a considerable proportion of the entire population in the United States, yet they experience major mental health disparities: They often have less access to health care, and the available care is frequently of poorer quality than that available to the white population (6, 7). The goal of decreasing mental health disparities between minority groups is currently a national effort. The implementation of the ACA (Medicaid, Medicare, and other government safety-net programs) has contributed to a reduction in the odds of an individual with mental illness not being able to afford mental health care, lower barriers in accessing treatments, and a reduction in the delay in seeking help among African Americans, Latinos, and other minority populations—but the gap is not yet closed (8).

The problem is multifaceted. It includes a lack of community-based interventions, unequal access to evidence-based practices, and a lack of resources to fund health services.

Overall, the literature shows that individuals in racial-ethnic minority groups also receive less-than-optimal care in the following ways. These individuals are 20%-50% less likely to initiate mental health service use and 40%-80% more likely to drop out of treatment prematurely (9). They are more likely to utilize psychiatric emergency services, to enter emergency treatment by means of law enforcement, and to be involuntarily hospitalized. Despite the utilization of emergency services and inpatient facilities, they are less likely to receive regular outpatient care after discharge. They are also less likely to experience symptom remission and less likely to improve their global functioning to return to work (7, 10).

Unconscious bias and stereotypes, as explained in this issue by Moreno and Chhatwal (11), have a major impact. For instance, African-American patients are more likely to receive a schizophrenia-spectrum diagnosis than a bipolar diagnosis and more likely to have higher rates of severe depression yet lower rates of treatment, compared with the white population. Misdiagnosis has significant implications in limiting the opportunity for adequate treatment. Reports also suggest that these differences are mainly attributable to racial-ethnic bias or misattribution of psychotic symptoms

Studies suggest that culturally competent treatment regimens in populations with different sociocultural backgrounds may help address racial bias in diagnosis formulation and lead to more appropriate treatment recommendations. Culturally sensitive interventions (as an integration of awareness of culture, acquisition of knowledge about cultural aspects, and capacity to distinguish between culture and pathology) reduce the levels of perceived stigma, increase treatment seeking among individuals from racialethnic minority groups, increase treatment duration, and improve outcomes for individuals from these groups (14). For instance, the cultural formulation model, addressed in this issue by Jarvis and colleagues (15), aids practitioners in rendering accurate psychiatric diagnoses and formulating treatment across cultural boundaries. Mental health services that are culturally sensitive and consider the needs of individuals from racial-ethnic minority groups may increase service utilization in both the medical and the community settings (7). Addressing language barriers may also decrease the possibility of diagnostic assessment bias, diagnostic errors, and errors in management as well as increase retention in depression care (16).

Additionally, studies show that underrepresentation and limited participation of individuals from racial-ethnic minority groups are present in research as well. Individuals in racial-ethnic minority groups are less likely to be included in important genomic studies, leading to a gap in representation in biological research. This disparity in research represents a missed opportunity to address individuals from underserved and underrepresented minority groups (17). For instance, individuals of African and Latin American ancestry and native or indigenous peoples represent less than

4% of the 35 million samples included in the Genome-Wide Association Study (GWAS) catalog (18). Various reasons, including lack of transparency and research malpractice, spread mistrust and justified individuals' unwillingness to share personal health information, including DNA, with the research community (19). However, larger and more inclusive GWASs are necessary to ensure that advances in genomic medicine, including improved risk prediction, benefit all of humanity (20).

Furthermore, as treatment research becomes more focused on polygenic risk scores, not having this data on individuals from racial-ethnic minority groups means that more effective treatment regiments for these individuals will not be developed. For this reason, The African Ancestry Genomic Psychiatry Cohort is already supporting a large expansion of the Genomic Psychiatric Cohort (GPC) network of individuals of African ancestry (21). More initiatives, such as the All of Us research program as the cornerstone of the larger Precision Medicine Initiative, seek to overcome these obstacles and truly engage underrepresented populations as partners in genomic research (https://allofus.nih.gov/).

Sexual and Gender Minority Groups: Stigma **Experienced Within Mental Health Services**

Approximately 10 million people in the United States identify as lesbian, gay, or bisexual, and 700,000 adults are transgender (22, 23). LGBTQ+ individuals have been historically marginalized within society and may encounter a range of stressors such as prejudice, discrimination, and stigma. Meta-analysis data have found that populations in a sexual and gender minority position experience a considerably greater prevalence of depressive episodes, substance misuse, and suicidal ideation and attempts, compared with the general population (24). The greater risk for LGBTQ+ individuals of developing severe mental illnesses has been directly associated with exposure to discrimination, social isolation, and violence based on sexual and gender identity (25).

State legislation legalizing same-sex civil unions is associated with lower levels of stigma, perceived discrimination, depressive symptoms, and hazardous drinking, especially among individuals experiencing multiple marginalized statuses. Research on the topic strongly supports the finding that policies for civil rights that are LGBTQ+ inclusive have a great and long-term positive effect on mental health outcomes in LGBTQ+ populations (26).

Additionally, there is growing evidence that the mental health services available to LGBTQ+ individuals are often scarce and that they might offer inadequate and stigmatizing treatments (27). In fact, although it has been more than 30 years since the American Psychiatric Association (APA) removed homosexuality as a diagnosis in the DSM and recognized it as a normal variant of human sexuality, today "reparative" or "conversion" therapies are still suggested by some mental health professionals (28, 29). Authoritative professional organizations such as the World Psychiatric

Association (30), American Psychoanalytic Association (31), and the APA (32) have stated that interventions aimed at changing sexual orientation are unethical and harmful for patients.

With the transition to the *ICD-11*, the transgender identity is also no longer considered a mental disorder and has been renamed as "gender incongruence" and moved from the mental disorders chapter to the new sexual health chapter. Gender incongruence is not proposed for elimination in the *ICD-11* because, in many countries, access to relevant health services is contingent on a qualifying diagnosis (33). Still, therapists often lack the skills to work effectively with transgender clients and are often ignorant and insensitive toward transgender issues (34, 35).

Reports show that these negative and stigmatizing attitudes toward LGBTQ+ clients are influenced by antigay prejudice or, more commonly, by lack of knowledge about individuals from sexual minority groups. These results suggest the need for more efforts in promoting training for mental health service providers about sexual and gender identity as well as increasing cultural competence. Reducing stigma, especially in mental health care settings, would also create a more sensitive, welcoming, and understanding environment that will allow more LGBTQ+ patients to seek care (35, 36). Affirmative practice, as explained in this issue by Mendoza and colleagues (37), is the way to provide knowledgeable and unbiased services to LGBTQ+ individuals. In the long term, we expect greater mental health improvements where inclusive policies for civil rights are implemented (26).

Underserved Urban Communities: Individuals Experiencing Homelessness or Incarceration, Individuals With Severe Mental Disorder, Individuals With a Drug Addiction, and Immigrant Populations

A growing body of data are available on the extreme health inequities among populations who experience considerable exclusion from mainstream society, such as those experiencing homelessness or imprisonment, those with severe mental disorders, and those experiencing drug addiction, extreme poverty, or both. The systematic review and meta-analysis led by Aldridge and colleagues (38) highlights that these inequities across a wide range of health conditions persist not only in low-income countries but also in high-income countries.

The National Law Center on Homelessness and Poverty (39) currently estimates that, each year, at least 2.5 to 3.5 million Americans sleep in shelters, transitional housing, and public places not meant for human habitation. An additional 7.4 million have recently lost their own homes because of economic necessity, lack of affordable housing, unemployment, poverty, mental illness, and substance abuse as well as the lack of community-based support services and long-term availability of psychiatric hospital beds (40). Homeless individuals have a mortality rate three times higher than that of the general population. The average

homeless person has a life expectancy of only 47 years, compared with an average of 77 years for the general population. Many factors affect the higher mortality rates among homeless adults: increased risk for mental illness, trauma, suicide, and medical comorbidities, as well as excessive alcohol and substance use. Approximately 33% of adults who are homeless suffer from some form of severe and persistent mental illness (41).

Housing First is an effective community-based approach that provides permanent housing, which is considered as a right and not something that should be earned through compliance with psychiatric treatment or abstinence from drugs. People are offered, in parallel with housing, support from a multidisciplinary team. Studies have demonstrated that the Housing First program yields quicker and more sustained housing retention, compared with the ubiquitous continuum of care model, in which treatment is a requirement as a precondition for housing (42, 43).

Mobile outreach teams, in which professionals move around a city bringing services to people, are another approach that is considered a good practice. As a rule, services need to move toward people rather than wait for people to move toward them. Engagement is the key: Any contact with homeless individuals is an opportunity to connect them with services and provide necessary care (44).

Additionally, randomized controlled trials (RCTs) have shown that peer navigator programs (PNPs) had a positive impact on the health of participants and on their domicile and insurance coverage status as people who received services provided by professionals or paraprofessional staff. Participants perceived that peer navigators (i.e., individuals with similar life experiences) have better empathy for members, are more emotionally present, and are better listeners than nonpeer providers (45).

Another underserved and disenfranchised population is the over 20 million Americans who are currently inmates or have been incarcerated in the past. The United States is the world leader in incarceration, which disproportionately affects black communities. Mass incarceration also shapes inequality in health.

Nearly one in three black men will be imprisoned in their lifetime. In addition, nearly half of black women currently have a family member or extended family member who is in prison. For white women, the risk of having an incarcerated family member is only one quarter as high, at 12%, as opposed to nearly 50% (46, 47). Considering the indirect health consequences of incarceration, having an incarcerated family member also harms the mental and physical health of nonincarcerated female partners and children. In fact, parental incarceration leads to increased drug and alcohol use among children, affecting subsequent generations and the entire community (47–49).

For the inmates themselves, the correctional facilities have become a front line for mental health care. Almost half of inmates have been diagnosed with a mental illness, of whom approximately 25% had a serious mental illness; rates

range from two to four times the rates of the general population (50). About 75% of prisoners who have a mental health problem meet the criteria for substance dependence or abuse and often are incarcerated for nonviolent crimes related to illegal substances (51, 52). As a result, there are now 10 times more individuals with serious mental illness in U.S. prisons and jails than there are in state mental hospitals. Inmates with a mental illness are also at greater risk for recidivism, hospitalization, and suicide on release (52-55).

Public policies addressing homelessness and improved care modalities for substance abuse disorders will go a long way toward diminishing the incarceration rates of those with mental illness. An increasingly global and complex challenge is also represented by the opioid overdose crisis associated with high rates of morbidity and mortality (56). Given the high rate of relapse and overdose deaths after prison release, it is essential to establish tighter coordination between the health and criminal justice systems to ensure prevention measures and treatment programs during and after release (57). Access to comprehensive, evidence-based, and quality treatment for opioid use disorders in a continuum of care model has proved to be a key strategy to address this crisis. Appropriate services should be provided: from low-threshold outreach interventions to multistage rehabilitation and social reintegration programs, including treatment for medical and psychiatric comorbidities. Participants had fewer convictions, fewer days in jail, and more days in outpatient mental health treatment (58). Increasing community access to outpatient psychiatric services after incarceration should also be the cornerstone of any mental health reform.

Severe mental disorders (SMD) (e.g., schizophrenia and bipolar disorder) are emerging as a prominent health disparity category, given estimates that individuals in this group die 10–20 years younger that the general population. Persons with SMD often have limited access to general health care and are more likely to be poor and at risk for homelessness (59). From our dataset of individuals participating in the GPC (21), they are also at greater risk of developing PTSD (Blanck C, Georgakopolous P, Pato MT, unpublished manuscript) and at an increased risk of smoking, heavy alcohol use, heavy marijuana use, and recreational drug use than the general population (60). Delivering appropriate care is extremely important for overlapping marginalized groups as shown from the link between mental illness, homelessness, drug abuse, and incarceration.

Immigrants may bring with them experiences of racism, trauma, war, economic hardship, enforced relocation, or homelessness to their new country. In modern times, when high-income countries are absorbing a massive influx of refugees, the condition in which they are welcomed, the acceptance by the host society, and administrative support are fundamental to preventing serious social exclusion (61). Clinicians, policy makers, and service providers need to be aware of specific needs that migrants may have to avoid disparities if these needs are not met adequately (62). Policies should recognize the root causes of exclusion and the

structural disadvantages experienced by people, households, and communities living in persistent or recurrent poverty. Health inequalities result from social inequalities, with the worst effects on people who experience the most extreme forms of material deprivation (63).

OPPORTUNITIES

Opportunities to improve care across these various groups can be divided in several ways as well.

Collaborative Care: Partnership With Community **Primary Care Services**

The United States is currently facing a significant shortage and maldistribution of physicians, particularly among PCPs and mental health professionals in rural and low-income urban areas. Recent reports reveal that approximately 20% of the U.S. population currently lives in rural areas; and 40% of them live in federally designated health professional shortage areas (HPSAs; an area physician:population ratio=<1: 3,500). Patients living in such underserved areas represent a significant proportion of the U.S. population and face disproportionally unfavorable health outcomes. This is partially due to their inability to easily access preventive and maintenance health services (64).

Up to 60% of patients with a psychiatric disorder are currently only seen by PCPs. Unfortunately, frequently, PCPs fail to recognize psychiatric disorders, and only 13% of the mental health care delivered is considered to be "minimally adequate." The reasons reported are over- or underprescribed psychotropic medications, rarely being provided structured counseling, and infrequent referral of patients for mental health services (5). PCPs themselves identified multiple barriers to mental health referrals, including patient's resistance, stigma, and inadequate insurance coverage. For this reason, collaborative models of care were developed. including the embedded psychiatric consultation model (5). In this model, a consultant psychiatrist is available onsite to assist the PCP to recognize psychiatric disorders, prescribe psychiatric medications, and develop management strategies. Improved psychiatric education for PCPs has also appeared to shift referrals toward more complex patients, increase PCPs' comfort with medication management, and improve interprofessional communication and education (5).

Collaborative care is a systemic, team-based approach to the management of psychiatric disorders in medical settings. It is a cost-effective approach that allows clinicians to effectively and efficiently treat psychiatric illness in medical populations, avoiding interruptions in clinical referral (65). Community-based mental health services could have an effect on the perception of mental health and contribute to the improved use of services in this population, avoiding stigma and helping reach underserved populations (66).

It has been shown that adults with mental illness lack insurance coverage at significantly higher rates that those without mental illness. According to a recent survey of patients with psychiatric conditions, 61% of those not receiving mental health care listed cost as a barrier (52, 67). Implementations of innovative care models were found to provide cost-saving, more feasible and effective pharmacologic treatment and antidepressant adherence; improve depression outcomes; and improve satisfaction for patients and clinicians (68).

The passage of the ACA accelerated the development and implementation of innovative care models. One of the most promising new care models is the patient-centered medical home (PCMH), which aims to treat the whole person and is designed to address behavioral health care needs within the primary care setting. The PCMH model presents a unique opportunity for federally qualified health centers (FQHCs), also known as community health centers (CHCs), to further their mission of reducing the health care disparities in medically underserved communities, bringing access to mental health care. Since their establishment over 40 years ago FQHCs and CHCs have been delivering care in underserved areas that are predominantly uninsured or publicly insured (69). The PCMH model emphasizes the provision of comprehensive, multidisciplinary primary care, extensive social services, and behavioral and dental services, regardless of a person's ability to pay.

Global Mental Health: Effective Strategies to Reach Underserved Communities

Global mental health initiatives spearheaded by the World Health Organization (WHO) and the National Institute of Mental Health (NIMH) are joining the effort to reach underserved communities. The common aim is an increased awareness of mental health problems and the provision of cost-effective interventions using local resources, often using nonphysician health extenders (especially in low- and middle-income countries). These practical and cost-effective interventions also can be applied in high-income countries, such as the United States. In fact, given the needs of many communities and the shortage of specialized mental health professionals in this country, many of these interventions should be quickly implemented (70).

The Mental Health Gap Action Program (mh-GAP) is WHO's flagship program on mental health (71). It was launched in 2008 with the mandate of producing evidence-based guidelines for managing mental, neurological, and substance use disorders by nonspecialist health workers in routine health care settings. Additionally, a few years later, in 2010, the mh-GAP Intervention Guide (mh-GAP IG) (72) was created to help implement those guidelines in routine health care delivered by nonspecialist health workers. WHO recommends that mental health care providers contextualize and adapt these programs for each specific setting. Group therapy is also a cost-effective way of delivering mental health services (73); cost-effectiveness needs to always be considered to address the wide gap in most countries between needs and available resources for mental health care.

Even in high-income countries, the shortage of mental health specialists demands a task-sharing approach. This has emerged as a promising strategy for dealing with the mental health personnel shortage. The concept and practice of task sharing are already in place in many developed countries (e.g., Australia, England, United States) where nurses, nurse assistants, and pharmacologists provide services that were once provided by doctors (74, 75). The aim is to strengthen and expand the health care workforce by redistributing the tasks of delivering services to a broad range of professionals to scale up the availability of services (71, 72, 75).

Good recent examples of this task-sharing approach in the United States are the community interventions that involve multisector partnerships, include community members (e.g., lay health workers) as part of the intervention, and involve the delivery of services in community settings (e.g., Mental Health First Aid [MHFA]; Assertive Community Treatment [ACT]; FRIENDS, a school-based cognitivebehavioral therapy prevention program; and Head Start REDI [research-based, developmentally informed] intervention). This reinforces the interplay among mental health, interpersonal relationships, and social determinants of health and promotes mental health and social equity (43). For instance, MHFA is an early intervention training program to raise awareness of mental issues, mitigate stigma, and promote appropriate treatment seeking. In 2012, MHFA obtained federal support in the United States to disseminate the program in rural areas, and it is currently being delivered effectively to a general audience throughout the nation (https://www.mentalhealthfirstaid.org/).

Telepsychiatry and New Technologies: Providing Care Despite the Mental Health Workforce Shortage

The potential role of technology to reach unmet mental health needs is increasingly recognized by patients, practitioners, and researchers. However, its application and implementation are possible only in those areas that have overcome the broadband connection demand and obtained videoconferencing tools. This barrier still persists in some low-resource settings, especially in low-income countries. Currently, the estimated shortage is about 10,000–20,000 psychiatrists around the United States. Only 25% of primary care practices have onsite mental health specialists of any sort, and only 10% of mental health patients are treated by a psychiatrist (76).

Technology should not replace the need of human interaction during the process of care but should be designed to increase human connection and empower mental health professionals to support individuals and communities more effectively. Under these premises, tele-mental health (TMH) makes possible the virtual connections of mental health specialists and PCPs, especially in rural areas and for unemployed and uninsured individuals who often have limited access to specialty care. TMH has multiple applications today, including the delivery of mental health services via

video-based conferencing and also as tele-consultation to PCPs (77).

Telemedicine-based collaborative care is an effective model for TMH. It involves an offsite team of mental health specialists collaborating with onsite PCPs from a centralized location, using telephones, videoconferencing, and electronic health records. Patients and providers uniformly report high levels of satisfaction with videoconferencing, and there is good evidence for the clinical equivalency of psychiatric and psychological treatments delivered via videoconferencing, compared with face-to-face delivery (78). TMH becomes increasingly more cost effective with a larger volume of patients, more usage, and longer travel to care; the minimal volume for savings is estimated around 250 consultations (76).

Some possible disadvantages of TMH include issues around virtual connection, difficulties in detecting nonverbal cues, and the lack of physical proximity in the doctor-patient relationship. Despite concerns, several RCTs have found no difference in the quality of therapeutic alliance, comparing videoconferencing-based psychosocial intervention with face-to-face treatment, and high satisfaction with telepsychiatric services has been noted for patients from various backgrounds (e.g., children, adults, elderly, racial-ethnic minority groups, prison population) and various psychiatric diagnoses (79).

Promising telepsychiatry applications include the model of Project ECHO (Extension for Community Healthcare Outcomes), an effective and potentially cost-saving model that increases participation knowledge and patient access to health care in remote locations through improving the capacity of PCPs to manage more complex health conditions (80). It is designed as weekly one- to two-hour teleconsultation, tele-education, and telementoring sessions with the tele-ECHO clinic, which all interested clinicians attend simultaneously. Participation in the tele-ECHO clinic is free of charge, and CME (continuing medical education) credit is offered to participants. Participant learners include physicians of all specialties and nonphysician providers. Collegial discussions of clinical cases allow for shared interdisciplinary case-based learning (81).

ECHO programs have included psychiatric diagnosis, psychoeducation, motivational interviewing, behavioral activation, safety seeking, buprenorphine treatment of opioid use disorder, psychopharmacology management of depression, anxiety disorders, bipolar disorders, psychotic symptoms, substance use and abuse, neurocognitive deficits, pain, and the collaborative care model. The ECHO model appears to provide an important opportunity to promote the expansion of access to treatment for opioid disorder and other substance use disorders, particularly in underserved settings, with an enhanced capacity to treat opioid use disorder from PCPs (82). It has been noted that providers who attended ECHO were more likely to use formal assessment tools and opioid agreements and to refer to behavioral health and physical therapy, compared with control providers (83). A recent systematic review

examining the effect of ECHO across conditions reported a high level of PCP satisfaction; an increase in PCP knowledge, competence, and performance; and improvements in patient health and cost-effectiveness (81, 84). The ECHO model is currently being disseminated in the United States; globally, the next important step is to adapt ECHO to the changing cultures, norms, languages, disease patterns, and socioeconomic conditions. With the government promise to fund and sustain it, ECHO will help to expand professional development, improve clinician performance, and provide best practice care in underserved areas and successful integration of physical and behavioral health.

Education in Mental Health Care and New Frontiers for Psychiatry Residency Training

Rearrangements in psychiatry training during medical school and residency are the focus of recent literature. If addressed, effective changes could answer old and emergent needs among underserved populations. Researchers, academics, practitioners, and patients are encouraging these changes, especially currently, when psychiatry as a career choice seems to be on the decline worldwide. It has been shown that the exposure to psychiatry during medical school can contribute to increase recruitment and retention in the specialty (85). Furthermore, results indicated that medical students with clinical training in underserved areas are almost three times as likely to practice in underserved areas and four times as likely to practice primary care in underserved areas than students who do not have training in those areas. These estimates may help guide medical school administrators and policy makers to expand underserved clinical training programs to help relieve some of the problems associated with access to medical care and psychiatric care among underserved populations (64).

U.S. physician organizations have an increased interest in immigration policy (86). Furthermore, because international medical graduates (IMGs) play an important role in promoting access to medical care, they are more likely to enter primary care specialties (approximately 30% in psychiatry) and practice in lower income rural and urban communities that are underserved by U.S. medical graduates. Federal effort to restrict immigration, coupled with predicted shortages of U.S. physicians, may affect IMGs, their patients, and the medical community, particularly in specialties such as psychiatry with a disproportionate representation of IMGs (87).

Another promising strategy to improve health care workforce distribution for the 21st century are the Teaching Health Center Graduate Medical Education (THCGME) program training sites administered by the Health Resources and Services Administration. THCGME is an ACA funded initiative designed to expand primary care residency training in community-based ambulatory settings; they are predominantly located in federally designated underserved areas and support residency programs for primary care specialties.

Early reports indicate that THCGME graduates are more likely to practice in underserved and rural areas at three to four times the rate of traditional graduates, with almost half planning to practice in FQHCs (88), and feel more prepared to do so. From the survey by Talib and colleagues (89), we learn that more than a third of THC residents expressed confidence in providing care in at least one language other than English. If GME funding for THCs stabilizes and gains recognition (90, 91), it could be a solution to the crisis facing primary care in United States to increase access to well-trained providers, particularly ambulatory settings, for people who are geographically isolated and economically or medically vulnerable.

Another meaningful integration to consider into residency training is tele-mental health (TMH). As literature shows, if trainees see TMH as a routine part of the clinical care that they deliver, they are more likely to integrate it into their own practice on graduation (92, 93). Currently, more residency programs are implementing their curriculum accordingly.

When bias and racism are directly addressed in both medical and residency training, positive changes in professional attitudes have been shown (13). A concrete step toward addressing racism as a social determinant of mental health is the experience within residency training rotations (e.g., shelters and jails). More psychiatry residency programs are already including these rotations, and effective teaching methods are proposed (40).

CONCLUSIONS

The renewed interest and passion from academics, practitioners, communities, patients, and families to address the gap of mental health care is promising. Organizational and financial rearrangements and improvements in training of the mental health workforce are needed steps to overcome these barriers. Academic psychiatrists have the potential to play a major role in gathering information about mental health and in understanding the rapidly evolving needs of more vulnerable populations.

Leading psychiatrists worldwide have identified three strategies as more promising for reducing the treatment gap: increasing the number of psychiatrists and other mental health professionals, increasing the involvement of a range of appropriately trained nonspecialists providers, and the active involvement of people affected by mental disorders (2).

The THCCGME experience, if expanded, represents a model of residency training that could provide both short- and long-term improvements in quality and access to care. In the short term, the establishment of training programs sponsored by community-based ambulatory patient sites in rural and underserved areas is immediately expanding the available workforce. In the long term, expanding primary care residencies in locations where there are underserved communities might attract graduating residents to stay or move to those areas and provide care. The implementation of community-based mental health care programs will also require more mental health professionals. Policy initiations against stigma associated with mental disorders will help

encourage the involvement of service users, family members, and communities as active participants in mental health.

Implementation of telepsychiatry practice and training within the curriculum of psychiatry and other medical residencies, as well as the exposure of residents to diverse settings, develops physicians who are knowledgeable and comfortable with both technology and integrated care models. Residency programs must take reasonable steps to ensure that physicians throughout their careers demonstrate competence with all these diverse practices and settings and express understanding of the potential effect on services for patients and other health care professionals.

As providers of mental health care, we need to advocate for transforming health system and policy responses, integrating mental health into primary care, decentralizing mental health services, increasing financial support, and strengthening public health perspectives in mental health care. The time has come for health providers and policy makers to come together and implement an action plan to improve care for millions of mental health patients in the United States. All these changes will serve the needs of people experiencing mental disorders and advocate for the respect of their human rights.

AUTHOR AND ARTICLE INFORMATION

Institute for Genomic Health, Department of Psychiatry, College of Medicine (Pato), and Institute for Genomic Health (Georgakopoulos), SUNY Downstate, Brooklyn, NY; Department of Biomedical, Metabolic and Neural Sciences, University of Modena and Reggio Emilia, Modena, Italy (Mongelli). Send correspondence to Dr. Pato (michele.pato@downstate.edu).

The authors report no financial relationships with commercial interests.

REFERENCES

- Rehm J, Shield KD: Global burden of disease and the impact of mental and addictive disorders. Curr Psychiatry Rep 2019; 21:10
- Patel V, Maj M, Flisher AJ, et al: Reducing the treatment gap for mental disorders: a WPA survey. World Psychiatry 2010; 9:169–176
- Berchick ER, Emily H, Barnett JC: Health Insurance Coverage in the United States: 2017. Current Population Reports. Report no. P60-264. Washington, DC, U.S. Government Printing Office, 2018. https://www.census.gov/content/dam/Census/library/publications/ 2018/demo/p60-264.pdf
- Kohn R, Ali AA, Puac-Polanco V, et al: Mental health in the Americas: an overview of the treatment gap. Rev Panam Salud Publica 2018; 42:e165
- Butler DJ, Fons D, Fisher T, et al: A review of the benefits and limitations of a primary care-embedded psychiatric consultation service in a medically underserved setting. Int J Psychiatry Med 2018: 53:415–426
- Mental Health: Culture, Race, and Ethnicity. A Supplement to Mental Health: A Report of the Surgeon General. Rockville, MD, Substance Abuse and Mental Health Services Administration. 2001
- Maura J, Weisman de Mamani A: Mental health disparities, treatment engagement, and attrition among racial/ethnic minorities with severe mental illness: a review. J Clin Psychol Med Settings 2017; 24:187–210
- Novak P, Anderson AC, Chen J: Changes in health insurance coverage and barriers to health care access among individuals with serious psychological distress following the Affordable Care Act. Adm Policy Ment Health Ment Health Serv Res 2018; 45:924–932

- Aggarwal NK, Pieh MC, Dixon L, et al: Clinician descriptions of communication strategies to improve treatment engagement by racial/ethnic minorities in mental health services: A systematic review. Patient Educ Couns 2016; 99:198–209
- Eack SM, Newhill CE: Racial disparities in mental health outcomes after psychiatric hospital discharge among individuals with severe mental illness. Soc Work Res 2012; 36:41–52
- 11. Moreno FA, Chhatwal, J: Diversity and inclusion in psychiatry: the pursuit of health equity. Focus 2020; 18:2–7
- Smedley BD, Stith AY, Nelson AR (eds): Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare. Washington, DC, National Academies Press, 2003
- Medlock M, Weissman A, Wong SS, et al: Racism as a unique social determinant of mental health: development of a didactic curriculum for psychiatry residents. MedEdPORTAL 2017; 13:10618
- Bernal G, Sáez-Santiago E: Culturally centered psychosocial interventions. J Community Psychol 2006; 34:121–132
- 15. Jarvis GE, Kirmayer LJ, Gómez-Carrillo A, et al.: Update on the Cultural Formulation Interview. Focus 2020; 18:40–46
- Garcia ME, Ochoa-Frongia L, Moise N, et al: Collaborative care for depression among patients with limited English proficiency: a systematic review. J Gen Intern Med 2018; 33:347–357
- Akinhanmi MO, Biernacka JM, Strakowski SM, et al: Racial disparities in bipolar disorder treatment and research: a call to action. Bipolar Disord 2018; 20:506–514
- 18. Popejoy AB, Fullerton SM: Genomics is failing on diversity. Nature 2016; 538:161–164
- Claw KG, Anderson MZ, Begay RL, et al: A framework for enhancing ethical genomic research with Indigenous communities. Nat Commun 2018: 9:2957
- Bigdeli TB, Genovese G, Georgakopoulos P, et al: Contributions of common genetic variants to risk of schizophrenia among individuals of African and Latino ancestry. Mol Psychiatry 2019. (Epub Oct 7 2019).
- Pato MT, Sobell JL, Medeiros H, et al: The Genomic Psychiatry Cohort: partners in discovery. Am J Med Genet B Neuropsychiatr Genet 2013; 162B:306-312
- Gates GJ: In U.S., More Adults Identifying as LGBT. Gallup, Jan 11, 2017. http://www.gallup.com/poll/201731/lgbt-identification-rises. aspx
- McNamara MC, Ng H: Best practices in LGBT care: a guide for primary care physicians. Cleve Clin J Med 2016; 83:531–541
- King M, Semlyen J, Tai SS, et al: A systematic review of mental disorder, suicide, and deliberate self harm in lesbian, gay and bisexual people. BMC Psychiatry 2008; 8:70–87
- 25. Mongelli F, Perrone D, Balducci J, et al: Minority stress and mental health among LGBT populations: an update in the evidence. Minerva Psichiatr 2019; 60:27–50
- 26. Everett BG, Hatzenbuehler ML, Hughes TL: The impact of civil union legislation on minority stress, depression, and hazardous drinking in a diverse sample of sexual-minority women: a quasinatural experiment. Soc Sci Med 2016; 169:180–190
- King M: Attitudes of therapists and other health professionals towards their LGB patients. Int Rev Psychiatry 2015; 27:396–404
- 28. Lingiardi V, Nardelli N, Tripodi E: Reparative attitudes of Italian psychologists toward lesbian and gay clients: theoretical, clinical, and social implications. Prof Psychol Res Pr 2015; 46:132–139
- Mallory C, Brown TNT, Conron KJ: Conversion Therapy and LGBT Youth: Executive Summary. https://williamsinstitute.law. ucla.edu/wp-content/uploads/Conversion-Therapy-LGBT-Youth-Jan-2018.pdf
- Bhugra D, Eckstrand K, Levounis P, et al: WPA position statement on gender identity and same-sex orientation, attraction and behaviours. World Psychiatry 2016; 15:299–300
- 31. Position Statement on Attempts to Change Sexual Orientation, Gender Identity, or Gender Expression, New York, NY, American Psychoanalytic Association, 2012. http://www.apsa.org/content/

- $2012\hbox{-position-statement-attempts-change-sexual-orientation-gender-identity-or-gender}$
- Position statement on therapies focused on attempts to change sexual orientation (reparative or conversion therapies). Am J Psychiatry 2000; 157:1719–1721
- 33. Reed GM, First MB, Kogan CS, et al: Innovations and changes in the ICD-11 classification of mental, behavioural and neurodevelopmental disorders. World Psychiatry 2019; 18:3–19
- 34. Shipherd JC, Green KE, Abramovitz S: Transgender clients: identifying and minimizing barriers to mental health treatment. J Gay Lesbian Ment Health 2010; 14:94–108
- McCann E, Sharek D: Mental health needs of people who identify as transgender: a review of the literature. Arch Psychiatr Nurs 2016; 30:280–285
- 36. Kidd SA, Howison M, Pilling M, et al: Severe mental illness in LGBT populations: a scoping review. Psychiatr Serv 2016; 67:779–783
- 37. Mendoza NS, Moreno FA, Hishaw GA, et al.: Affirmative care across cultures: broadening application. Focus 2020; 18:31–39
- 38. Aldridge RW, Story A, Hwang SW, et al: Morbidity and mortality in homeless individuals, prisoners, sex workers, and individuals with substance use disorders in high-income countries: a systematic review and meta-analysis. Lancet 2018; 391:241–250
- Homelessness in America: Overview of Data and Causes. Washington, DC, National Law Center on Homelessness and Poverty,
 https://nlchp.org/wp-content/uploads/2018/10/Homeless_Stats_Fact_Sheet.pdf
- Stovall J, Fleisch SB, McQuistion HL, et al: Ethics and the treatment of the mentally ill, homeless person: a perspective on psychiatry resident training. Acad Psychiatry 2016; 40:612–616
- 41. Ojo-Fati O, Joseph AM, Ig-Izevbekhai J, et al: Practical issues regarding implementing a randomized clinical trial in a homeless population: strategies and lessons learned. Trials 2017; 18:305
- Tsemberis S, Gulcur L, Nakae M: Housing First, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. Am J Public Health 2004; 94:651–656
- Castillo EG, Ijadi-Maghsoodi R, Shadravan S, et al: Community interventions to promote mental health and social equity. Curr Psychiatry Rep 2019; 21:35
- 44. Hwang SW, Burns T: Health interventions for people who are homeless. Lancet 2014; 384:1541–1547
- 45. Corrigan PW, Pickett S, Schmidt A, et al: Peer navigators to promote engagement of homeless African Americans with serious mental illness in primary care. Psychiatry Res 2017; 255:101–103
- Lee H, McCormick T, Hicken MT, et al: Racial inequalities in connectedness to imprisoned individuals in the United States. Du Bois Rev 2015; 12:269–282
- 47. Wildeman C, Wang EA: Mass incarceration, public health, and widening inequality in the USA. Lancet 2017; 389:1464–1474
- 48. Fazel S, Baillargeon J: The health of prisoners. Lancet 2011; 377: 956–965
- Massoglia M, Pridemore WA: Incarceration and health. Annu Rev Sociol 2015; 41:291–310
- 50. Incarceration nation. APA Monitor on Psychology, October 2014. https://www.apa.org/monitor/2014/10/incarceration
- James DJ, Glaze LE: Mental Health Problems of Prison and Jail Inmates. Washington, DC, U.S. Dept. of Justice, Office of Justice Programs, Bureau of Justice Statistics, 2006
- Halmer TC, Beall RC, Shah AA, et al: Health policy considerations in treating mental and behavioral health emergencies in the United States. Emerg Med Clin North Am 2015; 33:875–891
- 53. Al-Rousan T, Rubenstein L, Sieleni B, et al: Inside the nation's largest mental health institution: a prevalence study in a state prison system. BMC Public Health 2017; 17:342
- 54. Mulvey EP, Schubert CA: Mentally ill individuals in jails and prisons. Crime Justice 2017; 46:231-277
- Hirschtritt ME, Binder RL: Interrupting the mental illnessincarceration-recidivism cycle. JAMA 2017; 317:695–696

- World Drug Report 2018. Vienna, United Nations Office on Drugs and Crime, 2018. https://www.unodc.org/wdr2018/prelaunch/ Pre-briefingAM-fixed.pdf
- 57. Volkow ND, Icaza MEM, Poznyak V, et al: Addressing the opioid crisis globally. World Psychiatry 2019; 18:231–232
- 58. Kouyoumdjian FG, McIsaac KE, Liauw J, et al: A systematic review of randomized controlled trials of interventions to improve the health of persons during imprisonment and in the year after release. Am J Public Health 2015; 105:e13–e33
- Liu NH, Daumit GL, Dua T, et al: Excess mortality in persons with severe mental disorders: a multilevel intervention framework and priorities for clinical practice, policy and research agendas. World Psychiatry 2017; 16:30–40
- Hartz SM, Pato CN, Medeiros H, et al: Comorbidity of severe psychotic disorders with measures of substance use. JAMA Psychiatry 2014; 71:248–254
- Navarro-Lashayas MA, Eiroa-Orosa FJ: Substance use and psychological distress is related with accommodation status among homeless immigrants. Am J Orthopsychiatry 2017; 87:23–33
- 62. Bhugra D, Gupta S, Bhui K, et al: WPA guidance on mental health and mental health care in migrants. Focus 2015; 13:469–477
- 63. Luchenski S, Maguire N, Aldridge RW, et al: What works in inclusion health: overview of effective interventions for marginalised and excluded populations. Lancet 2018; 391:266–280
- 64. Raymond Guilbault RW, Vinson JA: Clinical medical education in rural and underserved areas and eventual practice outcomes: a systematic review and meta-analysis. Educ Health (Abingdon) 2017; 30:146–155
- 65. Beach SR, Walker J, Celano CM, et al: Implementing collaborative care programs for psychiatric disorders in medical settings: a practical guide. Gen Hosp Psychiatry 2015; 37:522–527
- 66. Haynes TF, Cheney AM, Sullivan JG, et al: Addressing mental health needs: perspectives of African Americans living in the rural South. Psychiatr Serv 2017; 68:573–578
- 67. Martinez ME, Cohen RA: Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, Jan–June 2014. Hyattsville, MD, National Center for Health Statistics, 2014
- Rossom RC, Solberg LI, Magnan S, et al: Impact of a national collaborative care initiative for patients with depression and diabetes or cardiovascular disease. Gen Hosp Psychiatry 2017; 44: 77–85
- Community Health Centers Lead the Primary Care Revolution, Washington, DC, National Association of Community Health Centers, 2010. http://www.nachc.org/wp-content/uploads/2015/ 06/Primary_Care_Revolution_Final_8_16.pdf
- 70. Escobar JI: Global mental health. Focus 2015; 13:401-402
- 71. mhGAP: Mental Health Gap Action Programme. Scaling Up Care for Mental, Neurological and Substance Abuse Disorders. Geneva, World Health Organization, 2008, https://www.who.int/mental_health/mhgap_final_english.pdf
- 72. mhGAP Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-specialized Health Settings. Geneva, World Health Organization, 2010, https://apps.who.int/iris/bitstream/handle/10665/44406/9789241548069_eng.pdf;jsessionid=ACE03AA7542FDDB7B983D8C74A56F7EE?sequence=1
- Bolton P, Bass J, Neugebauer R, et al: Group interpersonal psychotherapy for depression in rural Uganda: a randomized controlled trial. JAMA 2003; 289:3117–3124

- 74. Patel V: Global mental health: from science to action. Harv Rev Psychiatry 2012; 20:6–12
- Kazdin AE: Addressing the treatment gap: A key challenge for extending evidence-based psychosocial interventions. Behav Res Ther 2017; 88:7–18
- Bashshur RL, Shannon GW, Bashshur N, et al: The empirical evidence for telemedicine interventions in mental disorders. Telemed J E Health 2016; 22:87–113
- 77. Hubley S, Lynch SB, Schneck C, et al: Review of key telepsychiatry outcomes. World J Psychiatry 2016; 6:269–282
- Adaji A, Fortney J: Telepsychiatry in integrated care settings. Focus 2017; 15:257–263
- Chakrabarti S: Usefulness of telepsychiatry: a critical evaluation of videoconferencing-based approaches. World J Psychiatry 2015; 5: 286–304
- Arora S, Kalishman SG, Thornton KA, et al: Project ECHO: a telementoring network model for continuing professional development. J Contin Educ Health Prof 2017; 37:239–244
- 81. Hager B, Hasselberg M, Arzubi E, et al: Leveraging behavioral health expertise: practices and potential of the Project ECHO approach to virtually integrating care in underserved areas. Psychiatr Serv 2018; 69:366–369
- 82. Komaromy M, Duhigg D, Metcalf A, et al: Project ECHO (Extension for Community Healthcare Outcomes): a new model for educating primary care providers about treatment of substance use disorders. Subst Abus 2016; 37:20–24
- Anderson D, Zlateva I, Davis B, et al: Improving pain care with Project ECHO in community health centers. Pain Med 2017; 18: 1882–1889
- 84. Zhou C, Crawford A, Serhal E, et al: The impact of Project ECHO on participant and patient outcomes: a systematic review. Acad Med 2016; 91:1439–1461
- 85. Pinto da Costa M, Dima K, Ng RMK: Undergraduate psychiatric education: a snapshot of medical students across the world. World Psychiatry 2019; 18:243–244
- 86. AMA Adopts New Policies to Improve Health of Immigrants and Refugees, Chicago, American Medical Association, 2017. https://www.ama-assn.org/press-center/press-releases/ama-adopts-new-policies-improve-health-immigrants-and-refugees
- Ahmed AA, Hwang WT, Thomas CR Jr, et al: International medical graduates in the US physician workforce and graduate medical education: current and historical trends. J Grad Med Educ 2018; 10:214–218
- Barclift SC, Brown EJ, Finnegan SC, et al: Teaching Health Center Graduate Medical Education locations predominantly located in federally designated underserved areas. J Grad Med Educ 2016; 8:241–243
- 89. Talib Z, Jewers MM, Strasser JH, et al: Primary care residents in teaching health centers: their intentions to practice in underserved settings after residency training. Acad Med 2018; 93:98–103
- Gravel JW Jr: Uncertainty in teaching health center (THC) funding: still crazy after all these years. J Am Board Fam Med 2017; 30:275–278
- 91. Durfey SNM, George P, Adashi EY: Permanent GME funding for teaching health centers. JAMA 2017; 317:2277–2278
- 92. Saeed SA, Johnson TL, Bagga M, et al: Training residents in the use of telepsychiatry: review of the literature and a proposed elective. Psychiatr Q 2017; 88:271–283
- 93. Goldbloom D, Gratzer D: Telepsychiatry 2.0. Can J Psychiatry 2017; 62:688-689