aspects of our humanity and, although distinct social, political, historical and economic drivers shape daily experience, there is promise in collective action.

Without deliberate steps toward mental health equity through multiple routes, the global mental health project falters. One route to global mental health equity is through quality mental health research. The increased investment in mental health research in low- and middle-income countries has led to an expanded evidence base on effective interventions now being implemented in diverse sociocultural settings. Greater resources for research and research capacity-building provide opportunities for more diverse ethnic and cultural populations to contribute to the evidence base, to shape research questions and the approaches to answering them, thereby increasing the likelihood that research outcomes will be of relevance to all of us.

Global diversity in mental health research participants will also permit more progress in the search for etiologies of mental illness. Our understanding of the genetic architecture of schizophrenia and bipolar disorder relies largely on Northern European data⁵. Funding flows, partnerships, and opportunities to engage new populations and pursue locally relevant research are far from equitable and this must remain a goal of global mental health.

Equity in improving population mental health outcomes will require a commitment to designing interventions to tackle social problems that limit the effectiveness of care oriented to the individual⁶. Community leadership and empowerment, alongside engagement of service users to help transform service delivery, could be hallmarks of these interventions.

Equity in the production and dissemination of global mental health knowledge requires prioritization of local cultural perspectives. Leveraging global relationships need not negate local experience. Rather, one strategy of the global mental health community should be to make known the innovation and ideas that come from communities which seldom find a global audience. In a recent initiative on suicide prevention among Arctic Indigenous people, a method was developed to build consensus across a diverse group of international stakeholders⁷. Some members of the team called for a parallel process that would use culturally acceptable methods to relay the particular experiences of specific Indigenous communities. The group applied both methods

and integrated the findings in the final report⁷.

Even widely experienced processes, such as deinstitutionalization, provide context-specific lessons about leveraging political opportunities into gains for mental health⁸. In many settings, deinstitutionalization and innovations in community mental health coincided with the establishment of post-colonial governments, the end of military dictatorship, or the entry of democracy. For example, the expansion of community mental health services in Jamaica after its independence developed in alignment with local cultural values, distinct from the colonial era⁸. These creative approaches to mental health care are valued, though not always widely disseminated.

Nevertheless, the influence of innovative approaches to mental health from settings with scarce resources pervades global mental health. Integrating peers, lay health workers, primary care providers, as well as technology, into mental health care adds flexibility to mental health service delivery, breaks down traditional hierarchies, and makes care more accessible⁹. Diverse ethnic and cultural groups in high-income countries that face challenges in access to and engagement in care can make use of such varied approaches.

It is possible that the global reach of the social, emotional and economic shocks of 2020 will thrust communities around the world into innovation that benefits mental health. If so, the movements, resources and networks that represent people and projects engaged in global mental health may become increasingly widely accessible. The field offers a transnational community for diverse stakeholders with distinct perspectives who value its aims.

Pamela Y. Collins

Department of Psychiatry and Behavioral Sciences and Department of Global Health, University of Washington, Seattle, WA, USA

- 1. Patel V, Prince M. JAMA 2010;303:1976-7.
- 2. Patel V, Saxena S, Lund C et al. Lancet 2018:392:1553-98.
- 3. Collins PY, Patel V, Joestl SS et al. Nature 2011;475:27-30.
- 4. Koplan JP, Bond TC, Merson MH et al. Lancet 2009;373:1993-5.
- Stevenson A, Akena D, Stroud RE et al. BMJ Open 2019;9:e025469.
 Burgess RA, Jain S, Petersen I et al. Lancet Psychiatry 2020;7:118-9.
- Burgess RA, Jain's, Petersen Fet al. Lancet Psychiatry 2020; 7:116-3.
 Collins PY, Delgado RA Jr, Apok C et al. Psychiatr Serv 2019;70:152-5.
- 8. Hickling FW. Transcult Psychiatry 2020;57:19-31.
- 9. Chibanda D. Lancet Psychiatry 2017;4:741-2.

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Optimizing personalized management of depression: the importance of real-world contexts and the need for a new convergence paradigm in mental health

In this issue of the journal, Maj et al¹ have revisited a fundamental tenet of psychiatric medicine, namely, that more precise clinical characterization of patients with depression will enhance the provision of personalized management – and the likelihood of optimal outcomes. The authors have conducted a comprehensive and balanced review of relevant domains, including clinical

symptoms, severity of illness, depression subtypes, functional status, staging of illness, neurocognition, medical and psychiatric comorbidities, early life adversity, personality dysfunction, and environmental stressors. They have highlighted the importance of measurement-based assessment and care via the use of instruments both psychometrically sound and amenable to im-

plementation in practice.

Although not aiming to deal specifically with biomarkers, the authors suggest that progress in the identification and clinical use of biomarkers will be facilitated through multidimensional clinical assessment. It is indeed plausible that biomarkers will be found to correlate more closely with dimensions of psychopathology than with categorical diagnostic measures, which often hide important treatment-relevant aspects of illness. As such, biomarkers may become more useful as predictors, modifiers and mediators of response variability.

An analogy with diabetes mellitus seems appropriate: finding an abnormal blood glucose (like a positive screen for depression) mandates a clinical workup across a number of dimensions to inform appropriate clinical management, aided by the use of laboratory tests that facilitate monitoring of progress in response to treatment and in prevention of adverse sequelae.

Viewed from the perspective of someone living with depression, an optimal outcome entails both restoration of a sense of well-being and re-engagement in major social, vocational and family roles. As Maj et al note, these are among the outcomes that matter most to patients. Although reduction in symptom burden is clearly important (because residual symptoms indicate increased risk for a relapsing and chronic course), patients and their family carers hope for the return of pleasure and meaning in life, resumption of major roles, and mitigation of carer burden and its attendant demoralization.

Answering the question "How well is well?" depends, therefore, upon taking both a patient-focused and family-centered approach. Depression does not occur monadically, but more often within a family context. Nor does it occur apart from myriad social, cultural and medical issues. Optimal care involves aiming at more than relief of anguish in the pursuit of personalized management.

To say that depression does not occur "in pure culture" is thus to highlight several real-world contexts in which the more precise clinical characterization of depressed patients needs to occur. Relevant contexts for optimizing depression assessment and management include, among others, sociocultural, medical, and systems-based care-delivery issues. These contexts may be understood as a way of further grounding multidimensional clinical characterization *in vivo*.

With respect to sociocultural context, for example, persons from different racial and ethnic groups vary in their understanding of what depression is, what constitutes acceptable treatment, and even whether treatment is needed at all. For some, "depression" is both stigmatized and stigmatizing. Furthermore, engaging persons living in low-resource settings, very different from high-income countries, may be quite challenging, particularly if family members do not "buy in" to the need for treatment. Using like-ethnic community health workers, as members of a treatment team, can be useful for gaining trust and for promoting engagement in treatment, treatment adherence, and access to community resources needed by impoverished or disadvantaged depressed adults in their journey to full recovery.

Optimizing treatment outcomes, the goal of precise clini-

cal characterization, begs the question of how best to close the world's treatment gap for depression². The treatment gap arises especially from the dearth of mental-health specialty expertise in low- and middle-income countries (as well as in rural areas of high-income countries), where social determinants of ill-health, including depression, may be particularly powerful. Work-force issues further underscore the importance of early interventions to pre-empt or prevent depression in vulnerable people, as Maj et al emphasize in their discussion of staging. The implied analogy to cancer is especially compelling since, as with cancer, early preventive intervention may be curative or at least mitigate down-stream complications. In the case of depression, it may mitigate emergence of treatment resistance, chronicity, and adverse outcomes such as suicide and dementia.

How to leverage mental health expertise broadly in the service of personalized prevention and treatment, therefore, becomes the central question. The use of task-shifting strategies in order to share tasks with primary medical personnel and with community health workers has increasingly found a place in teambased systems of depression prevention and treatment (see, for example, Dias et al³). Sometimes called "coordinated" care, such models facilitate improvements in evidence-based assessment and guideline-based delivery of care, informed by mental health specialists in the "hub" of the system.

Models of coordinated and integrated behavioral and medical services, including the use of telemedicine and telepsychiatry, have enabled greater reach than is possible with traditional office-based treatment for depression and for reduction of suicidal behaviors. Shifts in reimbursement for telepsychiatry, where the psychiatrist does not actually have to see the patient face-to-face, is facilitating this change in practice – made even more important by the COVID-19 pandemic and its progeny of depression, anxiety, and prolonged grief disorder.

Maj et al underscore how the heterogeneity of depression (in pathogenesis, clinical presentation, and response variability) often gives rise to difficult-to-treat illness (and hence the need for multidimensional evaluation to understand the origins of treatment resistance). A particularly important aspect of optimizing depression treatment is the need for guidelines that can inform shared decision-making with respect to augmenting, switching or combining treatment modalities to help people with difficult-to-treat or even treatment-resistant depression.

In this context, since the goal of treatment is not only to avoid adverse effects and to get well, but also to stay well, understanding the long-term efficacy, effectiveness and tolerability of different strategies needs further attention. Different patient characteristics, such as neurocognitive function, the presence of suicidal ideation, and varying degrees of medical and/or psychiatric comorbidity will likely moderate, or influence, the strength of response to acute treatment and the durability of response and recovery in maintenance treatment. Personalizing management of depression depends upon identification of such variables, or moderators, as distinct from more general prognostic indicators. One can anticipate that biomarkers will be identified as response modifiers in depression treatment, as has been the case in oncology.

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In conclusion, multidimensional assessment, as reviewed by Maj et al, is clearly important for personalizing the care of persons at risk for, or already living with, depression. Optimizing shortand long-term outcomes through multidimensional, patient-centered clinical assessment seems more likely when carried out within the broader sociocultural, medical, and care-delivery contexts in which depression occurs in the real world. Needed now, I would suggest, is a new transdisciplinary, convergence paradigm to inform both research and practice in mental health⁴.

Charles F. Reynolds 3rd

University of Pittsburgh School of Medicine, Pittsburgh, PA, USA

- 1. Maj M, Stein DJ, Parker G et al. World Psychiatry 2020;19:269-93.
- Patel V. Where there is no psychiatrist: a mental health care manual. London: Royal College of Psychiatrists, 2002.
- 3. Dias A, Azariah F, Anderson SJ et al. JAMA Psychiatry 2019;76:13-20.
- 4. Eyre HA, Lavretsky H, Berk M et al (eds). Convergence mental health: a roadmap towards transdisciplinary innovation and entrepreneurship. Oxford: Oxford University Press (in press).

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