

guidelines recommend against the use of benzodiazepines in the treatment of adults with GAD and/or PD. These drugs should only be used for severe, acute anxiety symptoms and only as a very short-term measure (3-7 days). Finally, the guidelines recommend the consideration of collaborative care for adults with depression and/or anxiety and physical health conditions.

The GDG highlighted a number of key considerations in making these recommendations. First, the GDG emphasized that the WHO's process for guideline development does not intend to make recommendations that cover the totality of interventions proven effective in a given area⁷. Instead, the process focuses on areas or interventions where evidence is most substantial or where there have historically been controversies or the need for a policy change. Thus, the GDG noted that these initial guidelines may not encompass the totality of interventions that have been proven effective for GAD or PD.

Additionally, the GDG noted a limitation in the fact that the majority of evidence available comes from research conducted in high-income countries, and highlighted the need for increased distribution of research funding to institutions in low- and middle-income countries. It also noted considerable evidence for models of care, such as task-sharing and training and supervision of non-specialists, that are particularly appropriate for those countries. However, the GDG also specifically noted the challenges in human resources and health worker time and capacity to deliver certain interventions, particularly structured psychological interventions or collaborative care models.

Third, the GDG noted the need for further research to explore the longer-term impact of interventions on symptoms, functioning and other key outcomes, while also recognizing the substantial evidence for symptom reduction in medium to short term. Fourth, the GDG made particular note of the need to consider cultural variability and individual preferences in applying recommendations in practice. For instance, the GDG highlighted the value of physical exercise for anxiety disorders generally, while also noting the need to consider daily habits of communities receiving care, such as when physical exertion is already a part of their daily life (e.g., farmers, manual labor workers).

Fifth, the GDG emphasized the need to ensure adequate training and follow-up supervision for non-specialists in any setting.

Sixth, the GDG discussed the frequent over-prescription of benzodiazepines for anxiety symptoms, particularly in non-specialist care settings, and emphasized the risks associated with these prescriptions. Lastly, the GDG described the importance of adaptation for delivery of these interventions, including the use of innovative and digital technologies.

To date, there were no evidence-based guidelines for managing common anxiety disorders in non-specialized care settings focusing on low- and middle-income countries. These recommendations were produced to fill this gap and will serve as a foundation for forming a new module in the mhGAP Intervention Guide, a tool frequently used to operationalize the mhGAP guidelines. Extensive work will be needed to scale up capacities in countries to act on these mhGAP recommendations and ensure effective management of anxiety disorders globally.

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Genetics for mental health clinicians: a call for a globally accessible and equitable psychiatric genetics education

The field of psychiatric genetics has evolved rapidly over the past decades, leading to major advancements in our understanding of the genetic architecture of mental disorders. Dozens of genes have been definitively linked to neurodevelopmental disorders (NDDs), and hundreds of genetic loci have been significantly associated with psychiatric diseases and/or traits (e.g., schizophrenia, neuroticism), potentially shining light on underlying biological

cal disease processes and possible routes for targeted treatment¹. Despite this progress, psychiatric genetics education for mental health clinicians remains fragmented and inconsistent across the globe², which has major implications for the quality of care that patients receive and the ability of mental health professionals to effectively incorporate genetics into clinical practice.

First and foremost, basic counseling about the genetic com-

ponent of the etiology of many mental disorders – as part of the broader psychoeducation mission – can help reduce stigma, guilt and misunderstanding about what mental illness is³. It can help families and patients focus on identifying resilience factors to counteract genetic risk, such as improved sleep, diet and exercise³. Effective counseling can be provided in almost any setting without additional resources or technologies.

A genetic diagnosis can be made in 25-40% of patients with NDDs⁴. For this patient population, genetic diagnoses have well-established clinical benefits, such as ending the diagnostic odyssey that many families face, informing family planning, enhancing prognostic counseling, offering the opportunity for earlier intervention to support neurodevelopment, and providing access to relevant clinical trials and support networks of other families with similar genetic conditions⁴. Furthermore, with the advancement of precision genetic therapies, there is now the possibility of disease-modifying treatment for NDDs.

Mental health clinicians should also understand the basic principles of pharmacogenetics (e.g., how an individual's genetic make-up affects his/her response to medications). Pharmacogenetic testing may allow for the selection of psychiatric medications that have fewer side effects⁵. For instance, pharmacogenetic testing for HLA class I variants can prevent serious cutaneous adverse reactions (e.g., Stevens-Johnson syndrome, toxic epidermal necrolysis) in individuals starting on carbamazepine or oxcarbazepine⁵. Moreover, a recent controlled, cluster-randomized crossover study demonstrated that a 12-gene pharmacogenetic panel (including the liver enzyme cytochrome P450 genes, *CYP2D6* and *CYP2C19*, which are responsible for the metabolism of most psychotropic medications) reduced the incidence of adverse drug reactions across diverse European health-care system organizations and settings⁶.

Given the relatively low cost of pharmacogenetic testing and the high burden of adverse psychotropic drug effects, global implementation is plausible. Widespread psychiatric pharmacogenetic education can prepare mental health workforces to implement pharmacogenetic testing more rapidly and efficiently as access grows. However, education initiatives will need to emphasize the large variation in allele frequency of pharmacogenes between populations of different ancestries, to ensure that clinical approaches are tailored accordingly⁶.

Moreover, although not yet rigorously validated for clinical use in mental disorders, polygenic risk scores (PGS) have great potential as a future tool in psychiatric care⁷. A PGS is a measure that represents the combined effects of many common genetic variants associated with a complex trait or disease⁷. In psychiatry, PGS are being explored on their own and in combination with other risk factors as predictors of disease onset, such as schizophrenia in a population at high risk for psychosis⁷. Despite the need for ongoing research, an individual may already request his/her own psychiatric PGS from direct-to-consumer companies for a relatively small fee, highlighting the tension between clinical utility and industry profit. In fact, 10% of US-based child and adolescent psychiatrists report that they have had a patient or family member bring PGS results to them for interpretation⁸.

There is an imperative for mental health clinicians to be able

to counsel patients on the interpretation of psychiatric PGS. Without sufficient education and understanding, there is a significant risk for misinterpretation and misguidance, as occurred over the last decade with direct-to-consumer psychiatric pharmacogenetic testing in North America. Due in part to a lack of pharmacogenetics education in mental health training, many clinicians struggled to recognize the limitations (and potential harms) of the test results that patients brought to them, until the Food and Drug Administration started issuing cease-and-desist letters to commercial labs in 2019 for misleading marketing practices.

If similar widespread misuse of psychiatric PGS were to occur, there could be significant consequences. For example, PGS testing in pre-implanted embryos (i.e., “polygenic embryo screening”) for psychiatric and cognitive traits is already offered by some private companies without a full understanding of the individual or societal implications. Indeed, the process of genetically selecting for “desirable” psychiatric traits, whether through PGS or otherwise, has a dark history associated with the eugenics movement, which has motivated human atrocity, including the Holocaust. In response, many professional societies, including our Society, have issued statements urging restraint and thoughtful consideration⁹. It is critical that mental health clinicians are sufficiently educated in genetics to take a nuanced approach to clinical testing, understanding when it is highly evidence-based and clinically informative (e.g., diagnosis in NDDs) and when it risks causing harm if misused (e.g., polygenic embryo screening).

How can we ensure inclusive psychiatric genetics education for all mental health clinicians, beyond just psychiatrists in well-resourced settings? We can start by utilizing existing high-quality, free online resources, such as the National Neuroscience Curriculum Initiative (<https://nncionline.org>), which offers interactive learning modules on diagnostic genetic testing for NDDs and pharmacogenetics. Other accessible resources include an easy-to-understand animated video on autism genetics (www.precisionmedicineinautism.org) and the National Human Genome Research Institute's comprehensive resources (www.genome.gov). Additionally, learning and implementing the “jar model” of psychiatric genetic counseling (<https://genomicare.ca>) can help clinicians effectively integrate genetic counseling into their practice³.

Ultimately, medical education should empower trainees as independent learners, driven to acquire new knowledge that benefits their patients. In accordance with psychiatric genetic counseling principles, we must aim to impart foundational knowledge on the heritability of mental illness to all clinicians, reducing stigma and misconceptions while empowering patients to lead fulfilling lives. This is a call to action for our community to collaborate and strive for an accessible, equitable psychiatric genetics education for all.

Education Committee, International Society of Psychiatric Genetics (ISPG)

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The dynamic paradigm of illness in psychopathology

Medical thought oscillates between two representations of illness. According to the first, illness enters or leaves the organism as through a door, by either adding something that should not be there, or removing something that should be there. Infection is the paradigm of illness as a pathogenic addition; haemorrhage is the paradigm of illness as a pathogenic removal of something which is needed. This representation of illness, called “ontological”¹, is to some extent reassuring: what the organism has lost can be restored, and what has entered can be removed.

A different representation of illness is called “dynamic”¹. According to this view, illness is not an accident that arrives from outside and upsets the state of equilibrium of an otherwise healthy organism. Humans are intrinsically vulnerable beings who fall ill when they respond incongruously to what they perceive as a threat for the unstable and vulnerable equilibrium characterizing their condition. This threat must not necessarily be an objective noxious entity; it is enough that it is subjectively experienced as such.

Are there good arguments to support the dynamic paradigm? Contemporary research in clinical phenomenology appeals to the notion of “position-taking” to provide a framework for the investigation of the person’s attempts at healing as a fundamental component of the dialectics of symptom formation². Psychotic symptoms, for instance, are understood as the expression of the person’s efforts at making sense of “strange” self- and world-experiences. These basic uncanny experiences and the patient’s resources to cope with them face one another. The manifestation and course of the illness can be understood as emerging from the person’s efforts at fighting against or adapting to the existential challenges associated with the onset of the above uncanny self- and world-experiences³.

This approach has the potential to address oft-neglected troubling experiences without threatening the person’s epistemic agency. The recognition of psychopathological conditions from the viewpoint of a dynamic representation of illness is the gateway to a radical extension of our human perspective on mental disorders and in general on *humana condicio*. It helps thinking of the vulnerability to mental disorders as an *intrinsic* property of being human. Persons affected by mental symptoms may be closer than ourselves to the core of the human condition⁴. From this viewpoint, any research on psychopathological symptoms becomes an exploration of their meanings and an attempt to answer the question “What does it mean to be human?”. Our research in psychopathology can become a means to investigate the core of human existence. This dynamic representation of mental symptoms

can be integrated into a new medical, anthropological, technological and socio-political understanding of psychopathology.

Should we assume that uncanny self- and world-experiences are common to all, or at least most, human beings? The point is not whether an extrinsic stressful event facilitates the emergence of these experiences – this should be considered a fact. The question is whether these experiences emerge from a vulnerability intrinsic to the human condition. From this perspective, what comes from outside is at most the *occasion* for the unleashing of pathology, but not its *cause*.

Is there any evidence that occasional experiences of unreality of self, body and world are common to most human beings? We could tentatively refer to two kinds of “evidence”: one derived from psychopathological research, and another that could be called “cultural”. Regarding the former, epidemiological surveys document that transient depersonalization/derealization experiences occur rather frequently in the general population⁵, and are common among adolescents without a psychiatric diagnosis⁶. These findings may be taken to suggest that feeling unreal, cut-off from the world; detached from oneself, one’s thoughts and one’s memories; seeing oneself from without, feeling like an “automaton”, notwithstanding their color of “strangeness”, are “quasi-physiological” experiences.

Coming to the “cultural” evidence, it is a common argument in the philosophical, anthropological and spiritual literature that what characterizes the human condition is its being “a work of indefinite nature”⁷. “Nothing has received more universal confirmation than the proof that the universe is a creation of chaos, life an epiphenomenon, and man an accident”⁸. To protect ourselves from the anxiety that comes with the awareness of being so intrinsically vulnerable, we seek refuge in our social identity and common-sense beliefs. But these defensive “housings” are precarious; they do not provide a secure shelter.

The acute awareness of our vulnerability typically arises during *limit-situations* which may take place in everyday life⁹. These are situations in which the “housing” of everydayness and common-sense assumptions is jeopardized. Our basic trust breaks down. During these limit-situations, we experience human basic “anxieties”, e.g., unavoidability of guilt, inescapability of freedom, fragility of our body, loneliness of our existence, vertigo of unreality, meaninglessness. These feelings may unsettle some individuals, breaking them out of their common-sense beliefs, identifications and social bonds. States of depersonalization and derealization may emerge, together with an overall condition of bewilderment, from which psychopathological symptoms or growth opportunities may arise.