# Global mental health and the treatment gap: A human rights and neuroethics concern

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## Introduction

Mental health and human rights are both global concerns that have been shaped by two complementary discourses: the human rights of mental health patients, and mental health care as a human right. Both discourses have influenced the development of strategies to better understand and address—at a global scale—the mental health treatment gap.

The mental health treatment gap refers to the discrepancy between the level of mental health treatment that is required and the actual level of mental health that is provided (WHO, 2016a, 2018a). In many ways, then, the mental health treatment gap represents the schism between theory and practice, and between words and action (White & Sashidharan, 2014).

The current persistent and significant global mental health treatment gap has prompted mental health advocates to focus on several implicated factors, including the macroenvironment (which includes political-economic and social determinants) and the microenvironment (which addresses family-community and individual biopsychosocial determinants) (Baingana, al'Absi, Becker, & Pringle, 2015; Kirmayer & Pedersen, 2014; White & Sashidharan, 2014). In these multidisciplinary efforts, mental health has been positioned as an important part of the global human rights agenda, and the promotion of mental health and prevention and treatment of mental disorders have become a priority in and for global public health.

Indeed, several international organizations, including the United Nations (UN) and the World Health Organization (WHO), have called for universal mental health coverage to be legally and socially protected (UN, 2006; WHO, 2018b), and for the framework of human rights to be used to develop international mental health legislation, as stated in the Convention on the Rights of Persons with Disabilities (CRPD), and in the Mental Health Action Plan (UN, 2006; WHO, 2013), among others.[a] Although the UN Universal Declaration of Human Rights (UDHR) (UN, 1948) does not specifically include mental health when addressing to the right to health, the CRPD states

[a] International Covenant on Economic, Social and Cultural Rights (ICESCR), International Covenant on Civil and Political Rights (ICCPR), Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment (CAT), Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), Convention on the Rights of the Child (CRC, etc., (UN, 2016)).

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that disabled individuals—including those with mental disabilities—must enjoy all human rights and fundamental freedoms (UN, 2006). This explicitly weaves together the discourses on mental health and human rights, positioning mental health as a focal dimension of human rights (Dhanda & Narayan, 2007; UN, 2016).

The WHO goes further, including the notion of mental health in the definition of "health," and has engaged in multiple efforts to pursue and attain global mental health and mental well-being. The WHO has emphasized that such efforts must appreciate the inequalities of resources and services that shape the reality and disparities of international health (WHO, 2013, 2016a, 2016b). Similar sentiments have been expressed in key collaborative efforts in global mental health, including the Lancet Global Mental Health Group (Horton, 2007), the Global Mental Health Movement (Movement for Global Mental Health, 2019), and more recently, the Lancet Commission on Global Mental Health and Sustainable Development (Patel et al., 2018).

These global endeavors have likely contributed to improved allocation, delivery, and quality of mental health care resources and services. Nevertheless, disparities in mental health care between western, educated, industrialized, rich and developed countries (WEIRD) and low and middle-income countries (LMIC) remain significant. To illustrate, on average 76–85% persons with mental disorders globally do not receive treatment or receive inadequate mental health services (Saxena, Thornicroft, Knapp, & Whiteford, 2007; WHO, 2017a). Although numbers in WEIRD countries are better than in LMIC, they are not particularly encouraging: 35–50% persons with mental disorders in WEIRD countries do not receive treatment (Saxena et al., 2007; WHO, 2017a).

These data reflect both the mental health treatment gap (even though access to mental health services is a human right), and the fact that this gap in the assessment and care of mental illness is not simply restricted to LMIC countries where social determinants of such illness and resource constraints are more obvious (Saxena et al., 2007; WHO, 2017a). It is therefore important to position the mental health treatment gap as a global issue that remains to be tackled successfully, aspiring to achieve the advances that have been made on other global health issues such as maternal-child mortality, malaria, tuberculosis and HIV (WHO, 2016c, 2017b, 2017c, 2017d, 2018c).

The persistence of the mental health treatment gap raises the question of whether other factors are relevant to the ongoing lack of attention to and stigmatization of mental health services. In this chapter I wish to propose that it is crucially important to understand the neurocognitive processes involved in perceiving and evaluating mental health-related concepts, as these may play a key role in decision-making about mental health issues and so contribute (positively or negatively) to the mental health treatment gap. I wish to argue that in order to achieve the vision of the WHO's Mental Health Action Plan 2013–20 (a "*world in which mental health is valued*" (WHO, 2013)), every person must acknowledge and correctly understand the importance and benefits of mental health and mental health-related concepts.

In short, I propose that the way such concepts are understood will influence the value given to mental health-related services and will influence decision-making (e.g., cost/benefit choices) and so to some extent (a) the mental health treatment gap, (b) the human rights of mental health patients and (c) mental health care as a human right.

It is sometimes taken for granted that every stakeholder (from macro to microenvironment agents) equally understands and values mental health-related issues; but more attention need to be paid to neurocognitive processes involved in perceiving and evaluating mental health-related issues. Simply put, to achieve an adequate and equitable global mental health care within a human rights framework, there is a need to address both resource *and* attitudinal barriers. The problem of inadequate mental health care represents a global and multi-disciplinary issue, with the cognitive sciences able to provide a key perspective.

## Barriers in and between countries: Resources and attitudes

As discussed earlier, much of current analysis of the mental health treatment gap focuses on factors such as socio-economic considerations, and the role(s) played by governmental and non-governmental institutions in achieving and maintaining global mental health, using public policies and legislation that is supported by a human rights framework (Schulze, 2016). In this light, it would seem evident that an emphasis on human rights is important to any consideration of health, health care and their role in human survival and flourishing (Dhanda & Narayan, 2007). Health care refers to the right to accessible and effective health care, within an integrated system that is supported by political and legal systems (Clapham, 2007; Howell, Mills, & Rushton, 2017), and that helps promote freedom of choice and self-determination (Williams, 2016). More specifically, the provision of services and treatment, and protection from discrimination and violence, can be regarded as instrumental to the human right to life and personal freedoms, especially for vulnerable communities such as mental health patients.

However, even though the availability of mental health *resources* is explicitly a priority as seen in the WHO assertion of: "No health without mental health" (Prince et al., 2007; WHO, 2016a), and that significant advances in brain and cognitive sciences have afforded improved understanding of psychiatric disorders as medical and biological entities, there are persistent attitudinal concerns such as stigmatization, discrimination, and even violence against individuals with mental illness. For example, societal issues are not only relevant given that mental illness often impairs functioning in society, but also because mental illness often leads to stigmatization of affected individuals, their families and their treating institutions (Barnabas, Patel, Farmer, & Lu, 2015; Charlson, Dieleman, Singh, & Whiteford, 2017; Movement for Global Mental Health, 2019; Saxena et al., 2007; White & Sashidharan, 2014; WHO, 2016a, 2016b, 2018a). Biases toward treatment institutions—called "ultimate stigma" (Saxena et al., 2007)—are found in both LMIC and WEIRD countries, as well as within particular communities of some WEIRD countries.

Hence, these *attitudes* towards mental health, psychiatric conditions and their treatment may result in separate and disparate resource allocation between mental health and health in general. As a result, investment in mental health care seems unaffordable

(Prince et al., 2007) or even unnecessary, and compromises the possibility of addressing mental health care efficiently and diligently within a human rights framework. Thus, social perceptions and evaluations can foster and sustain unfavorable attitudes toward the utilization of available and affordable mental health resources, affecting the type and extent of the mental health treatment gap. Thus, the treatment gap is not only about *availability*, but also about *receptiveness* of resources and services.

Moreover, it is important to be mindful of additional factors that foster attitudinal barriers such as (a) the view that socioeconomic determinants of mental distress do not require pharmaceutical intervention and so cannot be framed within a biomedical model (Howell et al., 2017), (b) the view that it is important to resist the "over-extension of (Western) psychiatric power" within global mental health (Howell et al., 2017), including the utilization of emerging neuroscientific and neurotechnological tools and techniques, and (c) the view that a focus by global mental health on evidence-based medicine may undermine an emphasis on sociocultural determinants (Baingana et al., 2015; Bemme & D'souza, 2014; Jain & Orr, 2016; Patel, 2014).

Thus, addressing the mental health treatment gap requires also giving some thought to subtly shaped attitudes that affect the understanding and evaluation of mental health-related issues. This caveat is particularly true when focusing on local health authorities (e.g., governments) and society's attitudes to mental health services, as well as on impairments in patients' decision-making regarding whether or not to approach and/or accept mental health treatment. In each case, erroneous attitudes may worsen the treatment gap and ignore human rights.

## Mental health care as a need and a human right…and a cognitive process?

Why the lack of resources for mental health services? What do mental health patients understand by "mental health" and "mental illness"? How do mental health patients understand mental health care as a need, or as a priority? How do they link mental health and human rights? How are these questions relevant to global mental health care and the treatment gap? These are concerns that unfortunately—and frequently—I have confronted throughout more than 20 years of private clinical practice, and they raised the further question: What if part of the underlying attitudinal problem involves neurocognitive processes that are involved in conceptualizing the value of mental health?

### *Concepts, concepts and concepts, but whose perceptions?*

First a comprehensive understanding of concepts of "mental health" and "mental illness" as well as of "the need for mental health care" is required. Mental health is defined by the WHO as *"….a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community*." (WHO, 2018d).

The Diagnostic and Statistical Manual of Mental Disorders 5th edition (DSM-5)—defines a mental disorder as "*[A] syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning*" (American Psychiatric Association, 2013), and the ICD-10 refers to "*… the existence of a clinically recognizable set of symptoms or behaviour associated in most cases with distress and with interference with personal functions.*" (WHO, 1990). Perception of need in mental health care is, however, not addressed in these documents; despite the fact that from a human rights perspective it is crucial to robustly address mental disorders (Eaton, 2012; Fisk, 2000).

Furthermore, mental health patients' perceptions of "need," "emergency" and "priority" of mental health care, might be biased by cognitive processes characteristic of their own mental illness; these might include self-stigma, self-devaluation, and poor insight (Eaton, 2012; Fisk, 2000; Sadler, 2004). Indeed, disruption of mental health (with resulting distress, impairment and disability) is sometimes not recognized as a mental health issue, and those with mental disorders may not be able to appropriately evaluate the risks and benefits of mental health treatment (Eaton, 2012; Fisk, 2000; Sadler, 2004). Such factors may further contribute to the mental health treatment gap.

While recognition of neurodiversity is consistent with a focus on human rights, there are also important risks of simplistically accepting patients' self-concepts and evaluations. For example, some people with mental health problems do not appropriately perceive the need for mental health care (Ali, Teich, & Mutter, 2015; Dezetter et al., 2015; Meadows & Burgess, 2009; Walker, Cummings, Hockenberry, & Druss, 2015), or do not understand that access to mental health care is an important human right (Vijayalakshmi, Ramachandra, & Redd, 2013). Indeed, there is evidence that some individuals with mental disorders do not recognize mental health care as a human right (Radden, 2012; Saavedra & Uchofen-Herrera, 2016), and rather consider such care to be a choice, an optional support net, or a luxury (Henao, Restrepo, Alzate, & González, 2009; Herrman & Swartz, 2007).

Thus, perceptions of mental health-related concepts—and of needs, rights, and prioritization—may influence the approach of individuals with mental disorders to mental health care, and should be a target of public mental health interventions such as destigmatization and psychoeducation (Eaton, 2012). It is important to be mindful of the neurocognitive processes of decision-making (e.g., cost/benefit choices) and how these are impacted by mental illness; the decision to approach a mental health service, could be delayed or postponed for many reasons (resource and/or attitude) until the need for such care is perceived as a priority.

## *Perception of priority plays a causal role in the global mental health treatment gap*

Decision-making is shaped by the *value* granted to specific stimuli or concepts (Glimcher & Fehr, 2014), in the case of mental disorders, decision-making is shaped by the perceived value of mental health, mental well-being and mental health care as a human right. The value given to these constructs may influence perceptions of

need, urgency, and priority, and so will impact decisions about the prioritization of mental health and mental well-being as a human right, and the equitable and prudent allocation of resources. The value of mental health-related concepts is directed by a range of biopsychosocial structures and mechanisms (Glimcher & Fehr, 2014; Todorov, Fiske, & Prentice, 2011), which are in turn impacted by nature and nurture (Evers, 2015; Giordano, 2011). Indeed it is important to more fully delineate the genesis of individual and socio-cultural perceptions and evaluations of mental health-related concepts including need, rights, and priorities.

Accordingly, the *biological* arena includes reference to the brain and different systemic organs (e.g., thyroid gland) and/or systems (e.g., immunologic), including genotype and phenotype, as well as body-states (e.g., hypoxemia, metabolic states, drug-effect, etc.) that are implicated and can alter the normal neurodevelopment and/or continuous functionality of the brain. The *psychological* arena is for the most part, a neurocognitive adaptation of personal experiences of multiple interactions between the internal (e.g., hunger, fear, metabolism, somatic state, sense perceptions, pain, etc.) and external (e.g., socio-ecological stimuli, etc.) environments. These neurocognitive adaptations and coping mechanisms are the result of multiple factors such as personality, experiences, education, preferences, resilience skills, previous reinforcements, etc., that shape perceptions of mental well-being, mental health, mental illness and the use of neuroscience and neurotechnology as humane. Within the *social* arena, culture, human relationships, roles, gender, age, rituals, beliefs, traditions, trends, global issues, politics, economy, etc., are key.

As such, individual *perceptions* are strongly influenced by internal and external environmental factors and dynamics (that are not unique to LMIC), such as neurodevelopmental issues, poverty, hunger, violence, pain, discrimination, imminent life-threatening health issues, natural disasters, and education and gender equality among others. There is neurocognitive diversity, with a range of perceptions and values given to concepts, including the "need and right" and "urgency and prioritization" of mental health care and well-being. Unfortunately, in environments with long-standing lack of resources, and inadequate socio-legal and economic frameworks, mental health may not be given appropriate value, so further exacerbating the treatment gap. Can we address this vicious cycle? I would argue that this is a question about education and about how to create the conditions that will promote and enhance such awareness.

## Education: The bridge in the gap?

Global mental health and human rights expose not only a biomedical concern, but also a social problem, that requires a robust integrative and collaborative approach. Thus, it is necessary to acknowledge the many possible factors that contribute to this binominal issue (health-right, right-health), and the interdisciplinarity required to reduce the global mental health treatment gap within a human rights framework. Notwithstanding the relevance of current endeavors in the macro and micro environment (e.g., top to bottom and bottom to top), a complementary intervention using the

cognitive sciences may improve these efforts. The understanding of perceived needs and how this affects the neurocognitive process of decision indicates the importance of re-directing current global, domestic and individual educational strategies. For instance, what are the specific variables selected by the brain in a cost/benefit choice? What are the perceived and expected cost(s) and benefit(s)? What are the perceived affected dimensions? Are the effects of choices perceived as temporal or permanent?, etc.

The brain, as a complex organ, is significantly affected by experience and learning, and will attend to personal preferential values that affect decision-making (Evers, 2015; Glimcher & Fehr, 2014; Todorov et al., 2011). Put differently, the nature via nurture dynamic interrelation, adapts neuronal connectivity in accordance with changes in its internal and external environment (Buchanan, Grindstaff, & Pravosudov, 2013; Evers, 2015; Giordano & Gordjin, 2010; Rese, 2016; Riffell & Rowe, 2016; Sherry, 2006). This means that biopsychosocial interactions impact synaptic connectivity, and contribute to the formation of a variety of patterns of neural activity which might be proactively shaped through correct learning, including of the value of mental health-related concepts.

Given that psychobiological mechanisms underlie attitudinal barriers, education may have a particularly important role and responsibility in addressing the mental health treatment gap. The cognitive sciences could enable educational campaigns that empower patients, diminish stigma, strengthen leadership and governance, provide comprehensive, integrated and responsive mental health and social care, and lead to implementation of strategies for promotion and prevention, and so possibly to improved global mental health consistent with the WHO's Mental Health Action Plan 2013–20 (WHO, 2013). Further research is of course needed to fully validate the claims made here.

## Conclusion

As discussed, distinctions in mental health care between LMIC and WEIRD countries come into stark relief when examining accessibility and affordability of health resources and services. The treatment gap is based on a range of factors including resource constraints, lack of political will, and an inadequate understanding and acceptance of mental disorders as medical entities. Importantly, however, the mental health treatment gap in and between countries, is also a human rights concern that is not restricted to LMIC.

Global strategies focused on diminishing structural barriers to mental health services may be enhanced by including the cognitive sciences to address a common barrier found in both, WEIRD and LMIC: The attitudinal barrier. Special attention should be given to the neurocognitive processes related to the perception and evaluation of concepts such as "mental health," "the need for mental health care," and "mental health care as a human right." Such an approach may address the resistance of many stakeholders to acknowledging that mental health care is a key part of health care, and that acknowledgment is key for safe-guarding human rights.

I argue that the value associated with mental health-related concepts may influence the prioritization of resources for mental health, and that the neurocognitive process of decision-making (e.g., cost/benefit choices) related to mental health impacts both the mental health treatment gap and the respect for the human rights of individuals with mental health problems. In addition, I propose the use of current methods in education to harness and leverage global efforts focused on resource allocation, in an attempt to address the mental health treatment gap within a human rights framework. In sum, I advocate that the treatment gap is not only about *availability* but also about *receptiveness* of resources and services and accordingly, both structural and attitudinal barriers must be globally addressed.

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