CHAPTER 1

The nature and scale of the global mental health challenge

Mirella Ruggeri¹, Graham Thornicroft² and David Goldberg²

¹Department of Public Health and Community Medicine, Section of Psychiatry, University of Verona, Verona, Italy

²Health Service and Population Research Department, Institute of Psychiatry, King's College London, London, UK

Introduction

In the last 20 years, there has been an unprecedented surge of research aimed at identifying improvements in psychiatric treatments and mental health care. This builds upon the earlier foundation of psychiatric epidemiology, which considers the occurrence and distribution of mental disorders across time and place. Yet, increasingly this work has evolved from describing these realities to going even further to understand which interventions deliver real advances in care. However, until relatively recently almost all such studies took place in high-income (HI) countries, even though most of the world's population live in low- and middle-income countries (LAMICs).

The nature of the challenge

The definition of 'Global mental health' appeared for the first time in an Editorial by Eugene Brody published in 1982 on the *American Journal of Psychiatry* [1]. However, the roots of this discipline can be found much earlier, in the field of cross-cultural epidemiology of severe mental disorders. Originally, these studies had the aim of determining the relevance of a biomedical perspective and, later on, to compare psychopathology in different contexts, as a basis for classification and clinical decision-making. This research effort found that mental disorders affect people in all cultures and societies. Since then, a growing body of cross-national research has shown that neuropsychiatric disorders constitute 13% of the world health burden, and demonstrated their substantial impact on disability, on direct and indirect societal costs [2] and the strong association of mental disorders with both societal disadvantage and physical health problems [3].

4 The global challenge

A clear-cut discrepancy in both the resources and treatments availability for mental health between HI countries and LAMICs emerged, with resource allocation for mental health disproportionately low in the latter. This *resource–needs gap* [4, 5] goes in parallel with a *mental health treatment gap*: of all adults affected by mental illnesses, the proportion who are treated is around 30.5% in the United States and 27% across Europe, while more than 90% of individuals with serious mental illness in less-developed countries do not receive treatment for those problems [6, 7]. This stands as disconcerting evidence of a major failure in global health delivery [8–10].

To propose a framework to address the treatment gap, Thornicroft and Tansella have extended their balanced care model (BCM), originally aimed at mental health service planning based on a pragmatic balance of hospital and community care [11], to refer also to a balance between all of the service components that are present in any system, whether this is in a low-, medium- or high-resource setting, and identified three sequential steps relevant to different resource settings [12].

According to this model, in low-resource settings, the crucial resource allocation decisions will be how to balance any investment in primary and community care sites against expenditure in psychiatric hospitals. Following the World Health Report 2001 recommendations [13], in these countries, an optimal balance between resources and response to population needs can be given by promoting mental health service delivery within the primary care system. Different forms of collaboration between psychiatric and primary care setting should be pursued, stemming from the less to the most expensive and elaborate ones. In rural areas in many low-income countries, the nearest mental health service may be very far away, and it is necessary for the primary care service to take the lead in providing basic mental health care. In places where it is practicable to refer some patients to the mental health service, then some form of stepped care should be adopted (see Chapter 7). The provision of mental health training to primary care staff is therefore of the greatest importance. Several studies have shown that these kind of mental health services based in primary care are less stigmatising, more accessible, efficacious and cost-effective [10, 14–17].

In medium-resource settings, the BCM approach proposes that services are provided in all of the five main categories of care: outpatient clinics, community mental health teams, acute inpatient services, community residential care and work/occupation.

In high-resource settings, these complex choices apply to an even greater extent, as there are even more specialized mental health teams and agencies present, resulting in a greater number of possibilities for resource investment to achieve a more balanced mix of services, as long as there is a strong emphasis upon primary health care, and attention is paid to the training needs of primary care staff. In these countries, primary care should be the priority setting especially for patients with a combination of anxious, depressive and somatic symptoms, while major disorders could benefit from more specialised and dedicated interventions [18]. *A research gap* between HI countries and LAMICs has also clearly been identified, showing that 94% of research takes place in countries that cover 10% of the population. This treatment deficit cannot be resolved by extending presently available services alone. The adaptation of treatments will thus be an essential accomplishment, as well as the development of service-delivery models with greater local relevance and the provision of a robust empirical base supporting their local effectiveness and feasibility [19, 20]. Innovative approaches to mental health services are thus required, including interventions that encompass both clinical and social domains of action. Finally, in-country research and training are necessary, and clinical infrastructure and capacity must be built [21].

The landmark series of papers on global mental health published in the *Lancet* between 2007 and 2012 [8, 22–31] has been influential in contributing to a social movement for global mental health, and the number and quality of studies to evaluate mental health treatment and care in the developing world is now steadily improving.

As a further contribute, this book brings together many of the world's leading practitioners and researchers active in the fields related to improving mental health care. The primary aim of the book is to present clear information arising from scientific research for a concerned readership about care and treatment for people with mental illness in community settings in relation to the global challenge to improving mental health care. The book consists of 24 chapters, with experts in each chapter area invited to give structured accounts of knowledge in that field, extensively referenced, to include critical appraisals of the strength of the evidence and the robustness of the conclusions that can be drawn.

Under the overall umbrella of the global challenge to improving mental health care and to understanding how to provide more and better mental health care worldwide, up-to-date knowledge in the following fields is included in these chapters: clinical trials, epidemiology, global mental health, health economics, health services research, implementation science, needs assessment, physical and mental co-morbidities, practitioner–patient communication, primary health care, outcome measures, pharmaco-epidemiology, public understanding of science, the recovery paradigm, spatial analyses, stigma and discrimination, and workplace aspects of mental health.

The scale of the challenge

If the *why* of the global mental health challenge has become self-evident in the last two decades, the *what* needs to be done and the *how* this approach should be scaled up are issues that deserve greater conceptual framing and operational implementation [32–34].

Using the Delphi method, the *Grand Challenges in Global Mental Health Initiative Study* – funded by the US National Institute of Mental Health, supported by the Global Alliance for Chronic Diseases – has identified priorities for research in the next ten years that will make an impact on the lives of people living with mental, neurological and substance abuse (MNS) disorders [35]. A 'grand challenge' was defined as 'a specific barrier that, if removed, would help to solve an important health problem. If successfully implemented, the intervention(s) it could lead to would have a high likelihood of feasibility for scaling up and impact'. Twenty-five grand challenges were identified, which capture several broad themes, which can be summarised under four main issues.

First, the results emphasise the need for research that uses a life-course approach; this approach acknowledges that many disorders manifest in early life, thus efforts to build mental capital could mitigate the risk of disorders.

Second, the challenges recognise that the suffering caused by MNS disorders extends beyond the patient to family members and communities, thus, health-system-wide changes are crucial, together with attention to social exclusion and discrimination.

Third, the challenges underline the fact that all care and treatment interventions – psychosocial or pharmacological, simple or complex – should have an evidence base to provide programme planners, clinicians and policy-makers with effective care packages.

Fourth, the panel's responses underscore important relationships between environmental exposures and MNS disorders: extreme poverty, war and natural disasters affect large areas of the world, and we still do not fully understand the mechanisms by which mental disorders might be averted or precipitated in those settings.

It is thus clear that more investment in research into the nature and treatment of mental disorders is needed, and that this research must be carried out in both HI countries and LAMICs. The mental health Gap Action Programme (mhGAP) promoted by the WHO with the mandate of producing evidence-based guidelines for managing MNS disorders identified eight groups of 'priority conditions' due to their major global public health impact: depression; schizophrenia and other psychotic disorders (including bipolar disorder); suicide prevention; epilepsy; dementia; disorders due to use of alcohol and illicit drugs; and mental disorders in children [36, 37]. The first product of this programme, launched in 2010, is a 100-page manual – the World Health Organization mhGAP intervention guide for mental, neurological and substance use disorders in non-specialised health settings: mental health - Gap Action Programme (mhGAP-IG) [38] - which contains case findings and treatment guidelines, whose main focus was what can be done in routine mental health care by non-specialist health workers. This manual is based on the assumption that task sharing – that is, a rational distribution of tasks among health professionals teams – might be a powerful answer to the scarcity of human personnel resources which is a barrier to the delivery of efficacious treatments in the LAMICs, but is also an emerging challenge in the HI countries in times of economical crisis [39, 40].

Evidence shows that lay people or community health workers can be trained to deliver psychological and psychosocial interventions for people with depressive and anxiety disorders, schizophrenia and dementia [17]. In a 'collaborative' model of care, a mental health specialist's task should be to train these people appropriately and provide continuing supervision, quality assurance, and support. In the new world of global mental health, where an increasing proportion of mental health care is shared with non-specialist health workers, psychiatrists and other mental health practitioners will need to be proficient in skills for training and supervising non-specialist health workers, be engaged in monitoring and evaluation for quality assurance of mental health-care programmes and acquire the management skills essential for leading teams of health workers [21].

But the challenge to scaling up mental health treatments should also deal with the violation of human rights and pervasive stigma against those who are suffering from mental disorders, for which mental health staff should serve as advocate [41–43] and catalysts for the entire community, and fight the often rather weak commitment of politicians, administrators and the other community stakeholders in the understanding of the benefits that could take place worldwide if a global mental health approach is pursued [44].

And, finally, a major barrier relates to the imperfections in our current state of knowledge about the nature of mental disorders and the armamentarium of effective treatments. What is needed is a more finely tuned understanding of the interplay between biological, psychological, relational and environmental factors [45], and also of those political, economic and cultural barriers that have for so long impeded global mental health care and that have caused a serious disadvantage to people suffering from mental illness worldwide.

From evidence to practice

Few initiatives in the health field have received the level of attention being given to 'evidence-based practice'. Growing concerns in recent years for underutilization of evidence-based practice in health-care systems have been raised. Most of the problems derive from the barriers that prevent a continuous flow from efficacy to effectiveness.

Efficacy refers to the use of experimental standards for establishing causal relationships between interventions and positive outcomes. *Effectiveness* relates to outcomes that can be achieved in real-world practice in representative cohorts of patients, and a broader set of implementation issues involving patient's representativeness, professional consensus, generalisability, feasibility and costs.

Bridging the gap between efficacy and effectiveness implies first of all a concrete intention to test the advantages and the disadvantages of an intervention's implementation in the frame of the routine care. There is the need for

investing resources in the development and use of implementation strategies and methods that are grounded in research and elaborated through accumulated experience and sensitisation on its beneficial effects as well as to develop ongoing, long-term partnerships with researchers.

The action of health service researchers should be firmly grounded in the promotion of studies that can increase knowledge about this process and offer practical guidance for both policy-makers and service providers. In particular, core intervention components of evidence-based practices should be clearly identified, field-based approaches should be used to assess the effectiveness of implementation procedures that have been put into practice, proper outcome measures to monitor these practices should be developed and operationalisation of these processes should be clarified [46].

There is also a need for studying organizational as well as broader sociopolitical factors that influence and sustain innovation implementation [47–49]. To this extent, an increase in the awareness that the models used in comparatively better resourced settings have little chance of addressing the huge treatment gaps in LAMICs is needed. It is also necessary to promote actions that increase awareness that investing resources to improving service delivery is essential but in itself not sufficient: a continuing commitment to implementation of evidence-based practice is vital for long-term patient benefit.

Various factors shape the process and outcomes of innovation implementation: the 'multi-level' complexities involving not only financial resources and the effectiveness of interventions but also training process and fidelity, staff clinical skills and motivation, organisations and systems characteristics, organisational climate, managerial support, long-term managerial determination and high-level policy support [50].

'Routine practice' is the culmination of such successful implementation and service consolidation. Progression through each stage is usually not rigidly linear. Indeed, there are cyclical phases of progress with setbacks involved; these dynamics represent the most vulnerable 'points of impact' for many of these change factors.

Innovations that pass these stages successfully tend to become standard 'practice' and should bring improvements to patient care. If this is accomplished, it is important that ongoing monitoring of effectiveness indicators be established and that continued attention be given to organisational functioning and continuing assessments of the costs of care.

To increase the probability that this process can penetrate in mental health service research and care, long-term investment in training and capacity development is necessary. Capacity building, in turn, requires leadership, resources and sustained commitments, if global expertise and experience are to respond effectively to local priorities and needs.

The implementation of innovative care must face problems that are different whether this task is undertaken in HI countries or in LAMICs; however, the experience developed in these two contexts can occur to allow transferrable learning with the potential to generate research questions that are more attuned to some crucial, yet unanswered, questions posed by the global mental health challenge [51–53].

Conclusions

We have clustered the chapters in this volume into the three unified sections of the book: those that deal with the specificity of mental health care in the LAMICs, those more focused on the effectiveness of interventions at the level of primary care and/or specialised services, and those which propose innovative methodologies to fully capture the complexities of mental health research. The contributions of the authors are influenced by the book's commitment to producing evidence that can be useful to pursuing the goals mentioned in this chapter, converting them into practice, and in so doing assessing how best to achieve such translation. Lively examples of the complex interactions of policy-makers, service user and carer advocacy, research findings and service provider practices are provided. The underlying thrust of the contributions can be stated plainly: *to understanding how to provide more and better mental health care worldwide*.

References

- Brody EB. (1982) Are we for mental health as well as against mental illness? The significance for psychiatry of a global mental health coalition. *American Journal of Psychiatry* 139: 1588–1589.
- [2] Baumgartner JN, Susser E. (2012) Social integration in global mental health: what is it and how can it be measured? *Epidemiology and Psychiatric Sciences* 25: 1–9.
- [3] Bauer AM, Fielke K, Brayley J et al. (2010) Tackling the global mental health challenge: a psychosomatic medicine/consultation-liaison psychiatry perspective. *Psychosomatics* 51: 185–193.
- [4] Hu TW. (2003) Financing global mental health services and the role of WHO. Journal of Mental Health Policy and Economics 6: 145–147.
- [5] Gault LM. (2008) Resources for global mental health: too little for too long. Journal of American Academy of Child and Adolescent Psychiatry 47: 841–842.
- [6] Kohn R, Saxena S, Levav I et al. (2004) Treatment gap in mental health care. Bulletin of the World Health Organization 82: 858–866.
- [7] Thornicroft G. (2007) Most people with mental illness are not treated. *Lancet* **370**: 807–808.
- [8] Kleinman A. (2009) Global mental health: a failure of humanity. *Lancet* **374**: 603–604.
- [9] Barbui C, Dua T, Van OM et al. (2010) Challenges in developing evidence-based recommendations using the GRADE approach: the case of mental, neurological, and substance use disorders. *PLoS Medicine* 7: 8.
- [10] Dua T, Barbui C, Clark N et al. (2011) Evidence based guidelines for mental, neurological and substance use disorders in low- and middle-income countries: summary of WHO recommendations. *PLoS Medicine* 8: 1–11.

- [11] Thornicroft G, Tansella M. (2004) Components of a modern mental health service: a pragmatica balance of community and hospital care: overview of systematic evidence. *British Journal of Psychiatry* 185: 283–290.
- [12] Thornicroft G, Tansella M. (2012) The balanced care model for global mental health. *Psychological Medicine* 11: 1–15.
- [13] World Health Organization. (2001) World Health Report 2001: Mental Health: New Understanding, New Hope. Geneva: WHO Press.
- [14] Chisholm D, Lund C, Saxena S. (2007) Cost of scaling up mental healthcare in low- and middle-income countries. *British Journal of Psychiatry* 191: 528–535.
- [15] Kigozi F. (2007) Integrating mental health into primary health care Uganda's experience. South African Psychiatry Review 10: 17–19.
- [16] Jenkins R, Kiima D, Njenga F et al. (2010) Integration of mental health into primary care in Kenya. *World Psychiatry* 9: 118–120.
- [17] Patel V, Weiss HA, Chowdhary N et al. (2010) Effectiveness of an intervention led by lay health counsellors for depressive and anxiety disorders in primary care in Goa, India (MANAS): a cluster randomised controlled trial. *Lancet* **376**: 2086–2095.
- [18] Thornicroft G, Tansella M. (2009) *Better Mental Health Care*. Cambridge: Cambridge University Press.
- [19] Becker AE, Kleinman A. (2012) An agenda for closing resource gaps in global mental health: innovation, capacity building, and partnerships. *Harvard Review of Psychiatry* 20: 3–5.
- [20] Tol WA, Patel V, Tomlinson M et al. (2012) Relevance or excellence? Setting research priorities for mental health and psychosocial support in humanitarian settings. *Harvard Review of Psychiatry* 20: 25–36.
- [21] Thornicroft G, Cooper S, Bortel TV et al. (2012) Capacity building in global mental health research. *Harvard Review of Psychiatry* **20**: 13–24.
- [22] Lancet Global Mental Health Group, Chisholm D, Flisher AJ, et al. (2007) Scale up services for mental disorders: a call for action. *Lancet* **370**: 1241–1252.
- [23] Lancet Global Mental Health Group. (2008) A movement for global mental health is launched. *Lancet* **372**: 1274.
- [24] Lancet Global Mental Health Group. (2009) Movement for global mental health gains momentum. *Lancet* 374: 587.
- [25] Prince M, Patel V, Saxena S et al. (2007) No health without mental health. *Lancet* **370**: 859–877.
- [26] Saxena S, Thornicroft G, Knapp M et al. (2007) Resources for mental health: scarcity, inequity, and inefficiency. *Lancet* 370: 878–889.
- [27] Patel V, Garrison P, de Jesus Mari J et al. (2008) Advisory group of the Movement for Global Mental Health. The Lancet's series on global mental health: 1 year on. *Lancet* 372: 1354–1357.
- [28] Eaton J, McCay L, Semrau M et al. (2011) Scale up of services for mental health in lowincome and middle-income countries. *Lancet* **378**: 1592–1603.
- [29] Lee PT, Henderson M, Patel V. (2010) A UN summit on global mental health. Lancet 376: 516.
- [30] Patel V, Boyce N, Collins PY et al. (2011) A renewed agenda for global mental health. Lancet 378: 1441–1442.
- [31] Hock RS, Or F, Kolappa K et al. (2012) A new resolution for global mental health. *Lancet* 379: 1367–1368.
- [32] Tomlinson M, Rudan I, Saxena S et al. (2009) Setting priorities for global mental health research. *Bulletin of the World Health Organization* **87**: 438–446.
- [33] Patel V, Prince M. (2010) Global mental health: a new global health field comes of age. *Journal of the American Medical Association* **303**: 1976–1977.

- [34] Patel V. (2012) Global mental health: from science to action. *Harvard Review of Psychiatry* **20**: 6–12.
- [35] Collins PY, Patel V, Joestl SS et al. (2011) Scientific Advisory Board and the Executive Committee of the Grand Challenges on Global Mental Health: grand challenges in global mental health. *Nature* 475: 27–30.
- [36] Saraceno B. (2007) Advancing the global mental health agenda. International Journal of Public Health 52: 140–141.
- [37] Saraceno B, Dua T. (2009) Global mental health: the role of psychiatry. *European Archives of Psychiatry and Clinical Neuroscience* 259 (Suppl. 2): 109–117.
- [38] World Health Organization. (2010) Intervention Guide for Mental, Neurological and Substance Use Disorders in Non-specialized Health Settings: mental health GAP Action Programme (mhGAP-IG). Geneva: WHO.
- [39] Myers NL. (2010) Culture, stress and recovery from schizophrenia: lessons from the field for global mental health. *Culture, Medicine and Psychiatry* 34: 500–528.
- [40] Fernando GA. (2012) The roads less traveled: mapping some pathways on the global mental health research roadmap. *Transcultural Psychiatry* **49**: 396–417.
- [41] Thornicroft G. (2006) *Shunned: Discrimination Against People with Mental Illness*. Oxford: Oxford University Press.
- [42] United Nations. (2006) *Convention on the Rights of Persons with Disabilities*. New York: United Nations.
- [43] Callard F, Sartorius N, Arboleda-Florez J et al. (2012) *Mental Illness, Discrimination and the Law: Fighting for Social Justice.* Oxford: Wiley-Blackwell.
- [44] Jenkins R, Baingana F, Ahmad R et al. (2011) Social, economic, human rights and political challenges to global mental health. *Mental Health in Family Medicine* **8**: 87–96.
- [45] Ruggeri M, Tansella M. (2009) The interaction between genetics and epidemiology: the puzzle and its pieces. *Epidemiology and Psychiatric Sciences* **18**: 77–80.
- [46] Ruggeri M, Bonetto C, Lasalvia A et al. (2012) A multi-element psychosocial intervention for early psychosis (GET UP PIANO TRIAL) conducted in a catchment area of 10 million inhabitants: study protocol for a pragmatic cluster randomized controlled trial. *Trials* 13: 73.
- [47] Simpson D, Flynn PM. (2007) Moving innovations into treatment: a stage-based approach to program change. *Journal of Substance Abuse Treatment* 33: 111–120.
- [48] Lasalvia A, Bonetto C, Bertani M et al. (2009) Influence of perceived organisational factors on job burnout: survey of community mental health staff. *British Journal of Psychiatry* 195: 537–544.
- [49] Thornicroft G, Lempp H, Tansella M. (2011) The place of implementation science in the translational medicine continuum. *Psychological Medicine* **41**: 2015–2021.
- [50] Ruggeri M, Tansella M. (2011) New perspectives in the psychotherapy of psychoses at onset: evidence, effectiveness, flexibility, and fidelity. *Epidemiology and Psychiatric Sciences* 20: 107–111.
- [51] Summerfield D. (2008) How scientifically valid is the knowledge base of global mental health? *BMJ* 336: 992–994.
- [52] Cutcliffe JR. (2011) Global mental health in an interconnected, reciprocal world. *Archives of Psychiatric Nursing* 25: 307–310.
- [53] Limb M. (2012) US focus on new psychiatric disorders is distracting attention from tackling global mental health problems. *BMJ* 344: e2071.