Call for a comprehensive National Mental Health Plan to respond to the novel coronavirus (COVID-19) Pandemic

To:	The Hon **Greg Hunt** MP, Minister for Health; Professor **Michael Kidd,** Principal Medical Advisor, Commonwealth Dept of Health; Ms. **Christine Morgan**, CEO and Ms. **Lucy Brogden,** Chair, National Mental Health Commission; The Hon **Chris Bowen** MP, Shadow Minister for Health.

CALL TO ACTION: We urgently call on all Australian Governments to implement a comprehensive National Mental Health Plan to respond to the COVID-19 pandemic.

Context

- We welcome the well-timed and targeted first wave of mental health response from the National Cabinet, and States and Territory Governments, to the COVID-19 crisis.
- This initial package of funding has appropriately focused upon the whole population through crisis lines, and also on pivoting MBS funded primary and specialist mental health care to telehealth.
- We also acknowledge the relevant national guidance on mental health aspects of COVID-19 Pandemic from the Commonwealth Government and National Mental Health Commission. We also appreciate the decisive and unprecedented steps taken by the Federal Government to preserve livelihoods through the crisis via various economic stimulus packages. The safety nets that have been established are crucial to prevent loss of jobs, which harshly impact on people with more severe forms of mental illness.
- There is now an urgent need to move the focus to people with moderate to severe and/or complex mental illness, whose numbers will swell as the crisis unfolds.

Key issues

- The needs of people with moderate to severe mental illness were poorly served prior to the pandemic, as evidenced by a series of inquiries and most recently through the Victorian Royal Commission and the Productivity Commission Inquiry. This represents a pre-existing crisis and makes the system extremely at risk.
- Many people with mental illness and psychosocial disability were already existing on the margins of the economy and society, and are extremely vulnerable to an economic recession, and high levels of unemployment. Many are isolated or living with families in need of support themselves, and are at high risk of suicidal behaviour. At particularly high risk are Indigenous people, homeless people, non-citizens, and international students. Their need for acute care will swell during this crisis.

- A substantial rise in suicide risk is building, as in all economic recessions, and it will be more severe this time because of the scale and depth of the global disaster of COVID-19. The suicide prevention field and the National Mental Health Commission has been rightly emphasising the power of social determinants of suicide. The impact will be difficult to counter or moderate in the medium term. Our response therefore must turn much more strongly to freely accessible expert clinical care.
- In the shock of the initial phase of this pandemic, public mental health and many NGO services for people with mental illness have seen a sharp drop in face-to-face care, and a withdrawal from home based and assertive outreach modes of providing such care, just when these are most needed for a wider range of patients. In part this is related to a lack of availability of protection equipment and justifiable concerns about service-user and staff safety. It is also sometimes due to inconsistencies of clinical leadership and central policy direction, and loss of in-person clinical back-up for NGO support services in the community.
- The system is weakest at a point where it needs to be strongest in the context of COVID-19, namely in its capacity to work upstream with timely community interventions to prevent excessive emergency department presentations, and hospital admissions of acute mental illness.
- As with any disaster, and particularly one of the unprecedented scale in which we are now immersed, there will be a surge of new demand and need for care.
- Mental health services, including hospital facilities, will be overwhelmed if we do not intervene early, and intensively, with people we know to be at risk of acute episodes and suicide.
- The key solution is to urgently deploy evidence based mobile assertive community-based mental health services, including home based care with dynamic integration with digital and telehealth platforms.
- We call on all Australian Governments to ensure that national mandated policy guarantees an optimal balance between online and telehealth services, in-person mobile outreach community services, and hospital inpatient services. The focus of the next wave of policy and investment must shift to ensure the safety and optimal care of people with moderate to severe or complex mental illness.

Key Recommendations

1. Expand evidence-based mobile outreach community mental health services. The Hospital in the Home model of care is a key innovation that will help to prevent likely access block at hospitals and should play a central part in the next wave of mental health responses.
2. Further enhance digital and Telehealth technology to help minimise unnecessary person-to-person contact on safety grounds.

3. Ensure safety and personal support of all service-users, clinical and NGO providers. Mental health providers must be assured that there will be no retractions of community staffing or their outreach capacity, with strong and compassionate management support, thorough safety training, adequate supplies of personal protective equipment, regular supervision and pastoral mentoring, in full consultation with their industrial representatives.

Thank you for taking our growing concerns into account. We offer to help with all Australian Governments on the urgent implementation of these recommendations.

Signatories

- Professor Alan Rosen, Institute of Mental Health, University of Wollongong, Brain & Mind Centre,University of Sydney, Chair,Transforming Australia's Mental Health Service System [TAMHSS].
- Professor Patrick McGorry, University of Melbourne, Executive Director, Orygen.
- Professor Helen Herrman, President, World Psychiatric Association [WPA], University of Melbourne, Former Director, St Vincent's MHS, Melbourne.
- Dr Tony Bartone, President, Australian Medical Association [AMA].
- A/Prof John Allan, President, Royal Australian & New Zealand College of Psychiatry [RANZCP].
- Ms. Melanie Cantwell, Acting CEO, Mental Health Australia.
- Professor Fiona Stanley, Patron, Telethon Kids Institute, UWA.
- Professor Ian Hickie, Executive Director, Brain & Mind Centre, University of Sydney.
- Ms Irene Gallagher, CEO, BEING: NSW Consumer Advisory Group-Mental Health, Inc.
- Mr Jack Heath, CEO, SANE Australia, formerly Founding CE, ReachOut.
- Professor Luis Salvador-Carulla, Director, Centre for Mental Health Research, ANU.
- Ms.Vivienne Miller, Executive Director, The Mental Health Services (TheMHS) Learning Network.
- Ms Lisa Sweeney, Chair, Australians For Mental Health [AFMH]
- Dr. Frances Dark, Chair, (Qld)
- Professor Carol Harvey, Secretary,(Vic)

- Professor Lisa Brophy, Treasurer, (Vic)
- A/Prof Richard Newton, Executive,(Vic)

  World Association of Psychiatric Rehabilitation (Australia) [WAPR(Aus)].
- Dr Andrew Howie**,** immediate past Chair, RANZCP Rural & Remote Psychiatry Section, Adult Psychiatrist, Indigenous MH.
- Adjunct Professor Tom Callaly, Director of Medical Services, Mildura Base Hospital, Vic.
- Professor Patricia Dudgeon, Poche Centre for Indigenous Health, School of Indigenous Studies, University of WA.
- Associate Professor Roger Gurr, Transcultural Community & Young Persons' MH & Trauma, Chair, STARTTS, NSW.
- A/Prof Elizabeth Scott, Psychiatrist, Young Persons' MH, Notre Dame University.
- A/Prof Neeraj Gill, Adult Psychiatrist, Human Rights, Qld MHS.
- Dr. Michael Dudley, Adolescent MH, Refugee & Asylum Seeker MH, UNSW.
- Dr Paul Fanning, former CEO of LHD, former Area Director MHS, Epidemiologist, MH Nursing.
- A/Prof Peter McGeorge, Adolescent & Adult Psychiatrist, UNSW & Notre Dame University, NSW.
- Dr Sebastian Rosenberg, Brain & Mind Centre, University of Sydney.
- Mr.Tom Brideson, Indigenous Mental Health, NSW & National.
- Mr Kevin Kidd, MH Executive and MH Nursing, ACT Health.
- Mr Douglas Holmes, Super CRO Lived Experience Project.
- Dr Neil Phillips, Consultant Psychiatrist, Indigenous MH, NSW.
- Dr Steve Baily, Adult Psychiatrist, WA MHS.
- Ms. Sandy Jeffs, consumer advocate/writer.
- Dr. Margaret Leggatt, OT, former President, World Federation of Mental Health [WFMH], member, TANDEM - Victoria's Mental Health Carers.
- Professor John Hurley, Professor of Mental Health and Director of Higher Degree Research, Southern Cross University, Community MH Nursing.
- Professor Graham Meadows, Dept of Psychiatry, Monash University, Vic.
- Dr Elsa Bernardi, Director of Clinical Services, Central Coast MHS, NSW.

Contact: Alan Rosen

MDedge Psychiatry
Keeping you informed. Saving you time.

Climate changes are leading to 'eco-anxiety,' trauma

Publish date: April 22, 2020

It is difficult right now to contemplate issues other than battling COVID-19. However, we must not lose sight of another worldwide crisis that, unless we confront it head-on, will be with us long after the pandemic is behind us. That crisis is climate change. Increased susceptibility to pandemics is likely to be a consequence of it. Unlike pandemics, climate change poses an even more long-term and pervasive existential threat to both our mental and physical health, and our existences. Many more of us who live in Australia now fear that climate change is upon us and here to stay.

Daniiielc/iStock/Getty Image

Droughts, no stranger to Australians, often are punctuated by dramatic floods, and we are now dealing with extended summer seasons filled with bushfires. We are experienced in managing them. These fires are usually limited to a few different states, so fire crews typically help one another out as they are controlled and extinguished. Australians pull together with great community spirit and resilience under these circumstances.

But the last two fire seasons have been different. They have become unseasonably long, more severe, and often uncontrollable and overwhelming. We have experienced two uncharacteristically prolonged droughts, more recently creeping across most of our continent. Last spring, wild fires took hold very early and were ubiquitous, increasing during the unusually high summer heat. Climate change already had worsened our accustomed pattern of droughts, fires, and floods.

Meanwhile, the Australian federal government repeatedly ignored advice from highly respected meteorological, environmental, scientific, and economic experts.[1]

Warnings from experts

The state fire commissioners had formally warned our government of increasing vulnerability via climate change to bushfires. This occurred in the context of government inaction, lack of national

investment (for example, insufficient water bombing equipment), and the absence of national preparation for the predicted catastrophic fire season. Prime Minister Scott Morrison declined to meet with them, minimizing the role of climate change. He provided no extra resources, emphatically leaving the responsibility to state governments.[2]

Distinguished economist Ross Garnaut <https://www.rossgarnaut.com.au/> concluded that Australia could lead the world in renewable energy production and harness it for industries and employment, if only the government chose to invest in our ample renewable sources. Sadly, our conservative government and its corporate sponsors maintain an addiction to fossil fuels, arguing that they protect employment. Meanwhile, the economic "trickle-down" benefit from massive coal and gas exports has been illusory. Socioeconomic inequities have widened, with profits favoring the mega-rich, while mining automation takes jobs.

With the fire emergency crisis at its height, Mr. Morrison sent his energy minister to the U.N. Madrid Climate Change Conference <https://www.un.org/en/climatechange/> with the goal of preventing meaningful CO_2 reductions, in collaboration with Brazil, Saudi Arabia, and the United States.

Dr. Alan Rosen

The sustained drought and desiccated vegetation, the escalating fuel load growth, and early hot weather led to super-hot fires, with catapulted ember attacks and fireballs falling from the sky, which burned down thousands of homes and incinerated livestock. The fires led to numerous human fatalities and overloaded hospital burn units. The unprecedented fire season duration and uncontrollable fires exhausted voluntary fire crews. There have even been fires in cool damp rain forests – the usual refuge/reservoir of endangered flora and fauna species.

The simultaneous droughts, unusual heat, and pervasive smoke also badly affect major cities, and intense fires terrorized the entire nation. Consequently, regional firefighting teams were unable to help other regions. Huge, unquenchable fires created spiraling micro-weather systems, with

thunderstorms spitting dry lightning, sparking new fires and twisters, tornadoes, and updrafts hurtling heavy fire trucks into the air, which caused terrible injuries and death to fire crews. Ultimately, the federal government had to supply large-scale sea and air evacuations, and call up military reservists for civic duties.

Mental health implications

In 2007, Australian Glenn Albrecht defined "solastalgia <https://www.newcastleherald.com.au/story/5974175/albrecht-puts-a-name-to-environmental-pain/> " as the emotional pain, existential distress, loss, and grieving derived from rapid and severe changes in one's geophysical environment or familiar habitat.[3] Studies now support its existence worldwide in communities suffering great environmental change, indicating its contribution to climate change's psychosocial impacts.[4] Mental health studies also recognize the reality of "eco-anxiety," defined as "a chronic fear of ecological doom" for self, family, community, future generations, and our planet.[5]

Other climate-derived psychiatric consequences include trauma, which leads to lifelong consequences for survivors of fires; grief associated with lost lives, homes, and livelihoods; posttraumatic hyperarousal; hypervigilance, re-experiencing, and rekindling; anxiety; depression; substance misuse; and long-term cognitive impacts of poor air quality. These effects are all borne from anticipated and actual loss, uncertainty about the future, and distrust in the capacity of leadership to aid recovery or prevent future recurrences. The Australian government has announced <https://www.health.gov.au/health-topics/emergency-health-management/bushfire-information-and-support/australian-government-mental-health-response-to-bushfire-trauma> commendable, but long overdue, funds for psychological first aid, counseling, telepsychiatry, and support for developing community cohesion and resilience for first responders, young people, and badly affected rural families and communities. However, those efforts do nothing to prevent the ongoing shift of resources away from rural community mental health services, which results in severe depletion of community mental health teams, often in the very locations and communities that are suffering most from bushfires. This forces affected communities to rely on less reliable and time-limited telehealth assessments and other online services conducted by strangers, rather than more familiar and engaging in-person services – thus betraying community expectations of continuity of care and support.

While we observe our country's path to a fateful rendezvous with an rapidly accelerating climate emergency, we can only hope that Australia and the world beyond can awaken to its reality, immediacy, extremity, and persistence and to the compelling need for serious constructive

responses. It is finally dawning on the easy-going and complacent Australian public that climate change is here to stay, fully formed, as a runaway, spiraling vicious cycle – unpredictable and uncontrolled. This is not "the new normal": It can only get worse, unless and until the nations of the world move collaboratively beyond their denial to ensure the survival of the planet and our species.

So, rather than just exemplifying a tragic casualty of rampant climate change for the world, maybe we can transform this catastrophe into an opportunity to collectively wake us up. Only then, can Australia ultimately become a positive example of developing a full national awareness of the reality and severity of the threat. Hopefully, we Australians will then commit ourselves to a full share of the global effort needed to effectively address our climate's dire last-ditch warnings to us all.

References

1. Easton S. " 'Ignored and trivialized': Experts warned Australian government before catastrophic blazes." NBCnews.com. 2020 Feb 9 <https://www.nbcnews.com/news/world/ignored-trivialized-experts-warned-australia-government-catastrophic-blazes-n1132326> .

2. Rouse A. "Scott Morrison defends why he refused to meet former fire chiefs who warned him about horror season – as he defends his handling of bushfire crisis." Daily Mail Australia. 2020 Jan 3 <https://www.dailymail.co.uk/news/article-7848239/Scott-Morrison-defends-decision-not-meet-former-fire-chiefs-saying-talks-current-ones.html> .

3. Albrecht G et al. Australas Psychiatry. 2007;15 Supp1:S95-8 <https://journals.sagepub.com/doi/abs/10.1080/10398560701701288> .

4. Prescott SL et al. Int J Environ Res Public Health. 2019 Nov 5;16(21) <https://www.ncbi.nlm.nih.gov/pubmed/31694316> .

5. Usher K et al. Int J Ment Health Nurs. 2019. Dec;28(6):1233-4 <https://onlinelibrary.wiley.com/doi/full/10.1111/inm.12673> .

Dr. Rosen, an officer of the Order of Australia, is affiliated with the Brain & Mind Centre, University of Sydney, and the Institute of Mental Health at the University of Wollongong, Australia. He also is a community psychiatrist in New South Wales, Australia. Dr. Rosen has no conflicts of interest. In Part 2, he discusses the impact of the fires on Australia's indigenous population.

MDedge® Psychiatry
Keeping you informed. Saving you time.

Coronavirus News Center

COMMENTARY

For Indigenous communities, climate crisis could prove calamitous

Drought, fires, and pandemics lead to anxiety, depression, trauma

Publish date: May 13, 2020

By Alan Rosen, AO, MBBS

Clinical Psychiatry News

Kind wishes and donations worldwide came to help Australian communities and wildlife affected by the extreme drought and uncontrollable bushfires. Indeed, Australians have become a warning beacon for the planet to recognize how factors associated with global warming can morph rapidly into runaway national emergencies.

Little attention, however, has addressed the extreme vulnerability of Australia's First Nations people, the Aboriginal & Torres Strait Islander <https://humanrights.gov.au/our-work/education/face-facts-aboriginal-and-torres-strait-islander-peoples> communities, to the climate crisis. U.N. reports conclude that "Indigenous people with close emotional and ancestral ties to the land are also likely to be disproportionately affected by environmental change and extreme weather events."[1]

Dr. Alan Rosen

In fact, Indigenous peoples, whether living traditionally or assimilated, are among the first to be adversely affected by climate change. This is because, in part, of extreme poverty, inadequate housing, unemployment and other social determinants, transgenerational cultural losses of life and culture, dislocations, traumatic experiences of child removal, overrepresentation in the prison system, and chronic diseases already leading to dramatic disparities in life expectancy and other health outcomes.

Research confirms that rural and remote Aboriginal communities will be Australia's first mass climate refugees. "Without action to stop climate change, people will be forced to leave their country and leave behind much of what makes them Aboriginal."[2] This is because of hotter temperatures, poorly built and unstable homes more vulnerable to heat, and longer and drier droughts. Their communities, in fire-prone townships, are running out of water. Abject poverty severely limits their options, aggravated by government inaction because of ideological climate change denialism. And now we have the overlay of COVID-19 threatening these communities.[3]

Human pandemics are potentially more likely to occur with climate change. Pandemics also are more apt to be associated with population growth, human settlement encroaching on forests, increasing wild animal or intermediary vector contact, and growth in global travel.

Subsequently, our Indigenous communities have had the most to lose if COVID-19 is let loose in their midst. Spatial separation is difficult in overcrowded, multigenerational households. It is hard to keep your hands washed with soap where reliable water supply is sometimes only communal. Their health workers' access to protective and lifesaving ICU equipment and expertise may be extremely limited or erratic.

Much of the population is classified as highly vulnerable to COVID-19 because of chronic health disorders (for example, cardiovascular, respiratory, and renal issues; diabetes, and suicidality) and preexisting much shorter life expectancies. Their health workers' access to protective and lifesaving ICU equipment and expertise is extremely limited. There are fears that, if COVID-19 gains a foothold, they may lose a whole generation of revered elders, who often are also the last fluent tribal language speakers and carriers of life-enhancing cultural stories, traditions, and rites. More urban-living Indigenous families may yet have a rough time avoiding these ravages.

In Australia, COVID-19 has been largely held at bay so far by state and territory governments that have closed borders, restricted nonessential travel, and discouraged or excluded outsiders from visiting remote Indigenous communities wherever possible. There have been complaints that such restrictions occasionally had been applied in these communities in a heavy-handed way by police and other authorities, and may be resisted if enforced unilaterally. They will work only if applied with cultural sensitivity, full Indigenous community consultation, and collaboration. So far, COVID-19 infection rates have been kept very low, with no Indigenous deaths. In Brazil, by contrast, infections and deaths are more than double the national average, itinerant missionaries have only just been excluded from Amazonian tribal lands so far by independent judicial intervention, while loggers and miners come and go freely, as sources of contagion.[4] Some Indigenous peoples in the United States <https://www.iwgia.org/en/usa.html> have experienced among the highest COVID-19 infection and death rates in the country (for example, the Navajo Nation in New Mexico, Arizona, and Utah), amounting to catastrophic loss and grief.

RELATED
Climate changes are leading to 'eco-anxiety,' trauma

"Black Lives Matter" marches protesting the filmed police killing of George Floyd in the USA have spread worldwide, in the wake of ultra-high rates of police brutality and killings with impunity of non-white individuals.

Many Australians, including considerable numbers of Indigenous people, marched here in sympathy, despite their infective risk and vulnerabilities. They were also protesting the excessive rates of Aboriginal imprisonment, deaths in custody, and police killings without consequences. Both internationally and here, there was an apparent sense of release of pent-up anger and frustrations at both these injustices and the extra susceptibility of poor and non-white people to severe illness, death and dire economic consequences because of the pandemic. It is a deceptive myth that "we are all in this together." So it is encouraging that there is also forming a widespread sense of collective purpose and determination to get governments to address these iniquities and inequities at last.*

I have worked as a community psychiatrist in Barkinje Aboriginal tribal lands of the Far West region of New South Wales (NSW) regularly for 35 years, much of this time while also leading Royal North Shore University General Hospital & Community Mental Health Services in Sydney. Barkinje translates as "River People," but local media mainly talk about the impact of prolonged drought on farmers and ranchers, who certainly are deeply affected by it. However, the media rarely mention the calamitous impacts on Aboriginal communities. The drought effects are exacerbated by multinational corporate irrigators that divert and allegedly steal river water with tacit encouragement from ostensibly responsible government ministers. The rivers dry up into algal ponds with millions of bloated, rotting dead fish, and entire communities' water supplies fail.

Researchers have reported on the mental health impacts of prolonged drought and diversion of river water on rural and remote indigenous communities throughout the state of NSW.[5] We have heard Barkinje and neighboring Wiradjuri people say, "if the land is sick, we are sick," and, "if the river dries up, there's nowhere to meet." Fishing, a popular recreational activity and source of nutrition is now denied to these communities. Unlike farmers, they receive no governmental exceptional circumstance compensation payments during droughts. Instead, they lose their farming jobs, so there is no disposable income and loss of capacity to travel to connect to their extended kinship system and cultural roots (e.g., for funerals or football matches) in other remote townships. Such droughts exacerbate wildfires, loss of fish and birdlife, some of which are sacred spiritual totems; dying of traditional "lifeblood" rivers, decimating precious ancient red-river gumtrees that line the shores; and irreversible damage to other sacred sites (e.g., melting ancient rock art).

So, loss of sustainable food sources, meaningful livelihood, and cultural and leisure pursuits could create an existential threat to Aboriginal identity. However, rural Indigenous communities also told us "whatever you do to us, we will survive and persist, as we have done in the past."[6] This is comparable with the tenacity and resilience of other ancient cultures that have suffered genocidal persecution

and discrimination in the past, and have stubbornly regrown and persisted and regrown into the future.

They yearn to care for their lands, rivers, and seas of their traditions and upbringing, whether as "saltwater" coastal or "freshwater" inland peoples. They value their extended families, honor their elders and their collective wisdom, while also living in "two worlds." They often encourage their children to get educated and pursue individualistic aspirations to help their communities by training as tradespeople and professionals who may be better trusted to look after their own. As Charles Perkins <http://charles-perkins.yolasite.com/> , a most celebrated Aboriginal role model for living in both worlds, famously said: "We know we can't live in the past, but the past lives in us."

As anxiety and depression, psychological trauma, drug and alcohol misuse, family and communal violence, ecological grief,and suicidal vulnerability are precipitated or exacerbated by the stress of extreme environmental adversity, significant investment in ameliorating these harms is essential, not just for farmers, town businesspeople and their families, but for all those affected, especially these most vulnerable members of the community.[7] We must provide more essential community services controlled by Aboriginal community members themselves. We must also train and support more Aboriginal mental health workers, healers, mental health educators, peer workers and Aboriginal liaison officers, to work alongside other mental health, and health and social service professionals. Aboriginal people need stable local employment opportunities in their communities. There is a huge opportunity to synergize traditional indigenous fire management with Western techniques, creating and consolidating more valued jobs and respected land management roles for Aboriginal rangers, vital for the future of both Aboriginal and wider communities. Pilot programs are emerging.

Aboriginal communities also need a more preventive, whole-of-life approach to social determinants, lifestyle factors, trauma, and political decisions associated with compromised neurodevelopment, and increased subsequent incidence and severity of mental illnesses in their communities.[7]

As Alexander Solzhenitsyn observed: "On our crowded planet there are no longer any 'internal affairs.' "[8] Climate change is the ultimate form of globalization: What we each do about it affects all others' lives. We can only insist that, alongside adequate resourcing of our most evidence-based methods of fire, water, and climate control, our governments consult and listen to our Indigenous elders about applying climate management methods. These have been demonstrated to be sustainable and effective, possibly over 60,000 years – which is the longest established record of continuous Indigenous culture worldwide.

References

1. Ten impacts of the Australian bushfires. U.N. Environment Programme. 2020 Jan 20 <https://www.unenvironment.org/news-and-stories/story/ten-impacts-australian-bushfires> .

2. Allam L, Evershed N. "Too hot for humans? First Nations people fear becoming Australia's first climate refugees." The Guardian. 2019 Dec 17.

3. National Indigenous Australians Agency <https://www.niaa.gov.au/indigenous-affairs/coronavirus-covid-19> . "Coronavirus (COVID-19)."

4. Phillips D. "Brazil: Judge bans missionaries from Indigenous reserve over COVID-19 fears." The Guardian. 2020 Apr 17 <https://www.theguardian.com/world/2020/apr/17/brazil-judge-bans-missionaries-coronavirus-amazon-indigenous-reserve?CMP=Share_iOSApp_Other> .

5. Rigby CW et al. Aust J Rural Health. 2011 Oct;19(5):249-54 <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1440-1584.2011.01223.x> .

6. Cunsolo A, Ellis NR. Nature Clim Change. 2018 Apr 3;8:275-81 <https://www.nature.com/articles/s41558-018-0092-2> .

7. Gynther B et al. EClinicalMedicine. 2019 Apr 26;10:68-77. <https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(19)30070-7/fulltext>

8. Solzhenitsyn A. "Warning to the West <https://us.macmillan.com/books/9780374513344> ," speech delivered 30 Jun 1975. New

York: Fararr, Straux & Girous, 1976.

Dr. Rosen, an officer of the Order of Australia and a Fellow of the Royal Australian and New Zealand College of Psychiatrists, is affiliated with the Brain & Mind Centre, University of Sydney, and the Institute of Mental Health at the University of Wollongong (Australia). He also is a community psychiatrist in a remote region of New South Wales. Dr. Rosen has no conflicts of interest.

**This article was updated 6/16/2020.*

REVIEW

The future of community psychiatry and community mental health services

Alan Rosen[a,b,c], *Neeraj S. Gill*[d,e], *and Luis Salvador-Carulla*[f,g]

Purpose of review
The aim of this article is to provide a framework and analysis of a series of critical components to inform the future design, development, sustaining, and monitoring of community mental health services.

Recent findings
Many mental health services remain too hospital centric, often without adequate outreach services. On the basis of outcome evidence, we need to shift the balance of mental health services from hospital centered with community outreach when convenient for staff, to community centered and mobile, with in reach to hospital only when necessary. Too few training programs emphasize the macroskills of public advocacy, working with service users, families, social movements, and the media to improve mental health and wellbeing of regional and local communities.

Summary
We should adopt a health ecosystems approach to mental healthcare and training, encompassing nano to macrolevels of service in every region. Catchment mental health services should be rebuilt as community centric mental health services, integrating all community and inpatient components, but led and integrated from community sites. Community psychiatrists and mental health professionals of the future will need to be well trained in the nano to macroskills required to take responsibility for the mental health and wellbeing of their catchment communities and to provide leadership in service planning, management, and continuing revision on the basis of rigorous evaluation. These approaches should be the core of all training in psychiatry and all mental health professions prior to any subspecialization.

Keywords
community mental health services, digital mental healthcare, future of community psychiatry, healthcare ecosystems, psychiatric training

INTRODUCTION

Psychiatry is facing an identity crisis [1]. Factors behind this crisis include questioning of the dominance of biological foundations of psychiatric disorders, the validity, and heterogeneity of diagnoses and symptoms [2▪▪], the efficacy and safety of psychotropic drugs, and the effectiveness of psychotherapy and other interventions [3]. Deinstitutionalization has shifted to transinstitutionalization in some countries [4], and in many others, the national health systems or substantial parts thereof have been carved out and shifted to competitive markets [5]. Meanwhile, the care gaps and coverage of unmet needs (e.g., untreated prevalence) have broadened in recent years. There has been an overall failure of mental healthcare systems to provide adequate care in the context of demands for codesign and digitalization of the whole support system. Psychiatry has failed to make an impact on other sectors such as justice and social care (e.g., care for homeless individuals and those with the disabilities). Psychiatry may also have lost its way in the face of fragmentation and unbridled privatization of catchment services, leading to concerns about 'met unneed' or treated nonprevalence [6].

[a]Illawarra Institute of Mental Health, University of Wollongong, Wollongong, [b]Brain and Mind Centre, Sydney Medical School, University of Sydney, Sydney, [c]Far West NSW LHD Mental Health Services, Broken Hill, New South Wales, [d]School of Medicine, Griffith University Gold Coast, [e]Mental Health and Specialist Services, Gold Coast Health, Gold Coast, [f]Centre for Mental Health Research, Research School of Population Health, ANU College of Health and Medicine, Australian National University, Canberra and [g]Menzies Centre for Health Policy, University of Sydney, Sydney, Australia

Correspondence to Neeraj S. Gill, MD, FRANZCP, School of Medicine, Griffith University, Office 8.17, G40, Hospital Boulevard, Southport, QLD 4215, Australia. Tel: +61 7 5678 0113; e-mail: neeraj.gill@griffith.edu.au

Curr Opin Psychiatry 2020, 33:375–390
DOI:10.1097/YCO.0000000000000620

KEY POINTS

- Systems thinking approach should be used for evaluation and planning of the future community mental health services, which should be reframed as complex healthcare ecosystems.
- Balance of care should quantify funding and provision tailored to the local context, between hospital and community services; health and social care; primary to tertiary care; generic to specialized care; and public, non government and private care.
- These perspectives have significant implications for the major drivers of community mental health: person centeredness, recovery, human rights, and challenging stigma and discrimination.
- Combined in person and digital approaches will facilitate codesign and transform access and delivery of hybrid, person centered integrated community mental health services.
- Skills and competence in both micro and macrocomponents of community mental health services are essential for future psychiatric training.
- Setting priorities for community mental healthcare systems must be followed by an action plan derived from a multifaceted metacommunity model.

'Mental Health' services may have also retreated from their implied promises to engage with whole communities to improve their wellbeing and mental health and from promoting full membership of the community as citizens for those living with severe mental disorders and disability.

Can psychiatry revive itself with a new growth of practice-innovation and evidence-informed community mental health services for all, situated in the complexities and contexts of their own lives, and on their own turf and terms? The purpose of this article is to provide a framework and analysis of critical aspects relevant to design and monitoring of community psychiatry in the future, with focus on developments since the last review of this topic in this journal in 2006 [7].

In the first section, we revise the importance of complexity and the healthcare ecosystem approach to frame these relevant issues in community psychiatry, from the 'microsphere' of the interaction between services users and families with health professionals to individual services and programs, to the 'macrosphere' of local care and national mental health systems. Then we apply this approach to provide a better understanding of current questions in mental health planning such as the balance of care, the impact of human rights, challenging stigma and recovery, the role of digital mental health in the development of hybrid healthcare ecosystems; and then the implications of these approaches for mental health training. Finally, we discuss the policy implications and provide recommendations toward a road map and an action plan for improving community mental health globally.

COMPLEXITY AND HEALTHCARE ECOSYSTEM APPROACHES TO COMMUNITY MENTAL HEALTH

Healthcare systems and organizational interventions in mental health are complex. These complex systems are nonlinear and uncertain; they self-organize, and are context and time-dependent. Under these conditions, realistic priority-setting requires the incorporation of systems thinking, hybrid designs, new data analytics techniques, modeling tools, and decision-support systems that incorporate domain expertise [8]. This has led to restoring the valuing in contextualized science of both professional expertise and experiential knowledge of service users and families [9▪,10]. This approach should adhere to 'evidence-informed,' rather than 'evidence-based, health policy, and planning. Evidence-informed planning acknowledges that policy-making is an inherently political process in which research evidence is only one of the factors that influence decision-making [11].

One of us (L.S.C.) has developed a series of decision support tools for the assessment of community mental health using the complexity and the healthcare ecosystem approaches [12▪,13,14]. These decision support systems should be applicable to specific contexts and therefore they should consider aspects that are not routinely recorded in health service research. These factors include standard and comparable descriptions of the places and communities in which we live; the wider determinants of health (e.g., the social and demographic characteristics of the environment); the health behaviors and lifestyles of the local population; and an integrated description of the healthcare provision at the different levels of the ecosystem [15].

The mental health ecosystem is a subset of the general health system which focuses on the characteristics of the population at risk or living with mental illness (incidence, prevalence, and related administrative data); the workforce and organizations providing care and support to this target population; and their connections, for example, clinician–service-user contacts, the relationships between service-users and services, and among organizations [14]. Integrated healthcare provision can

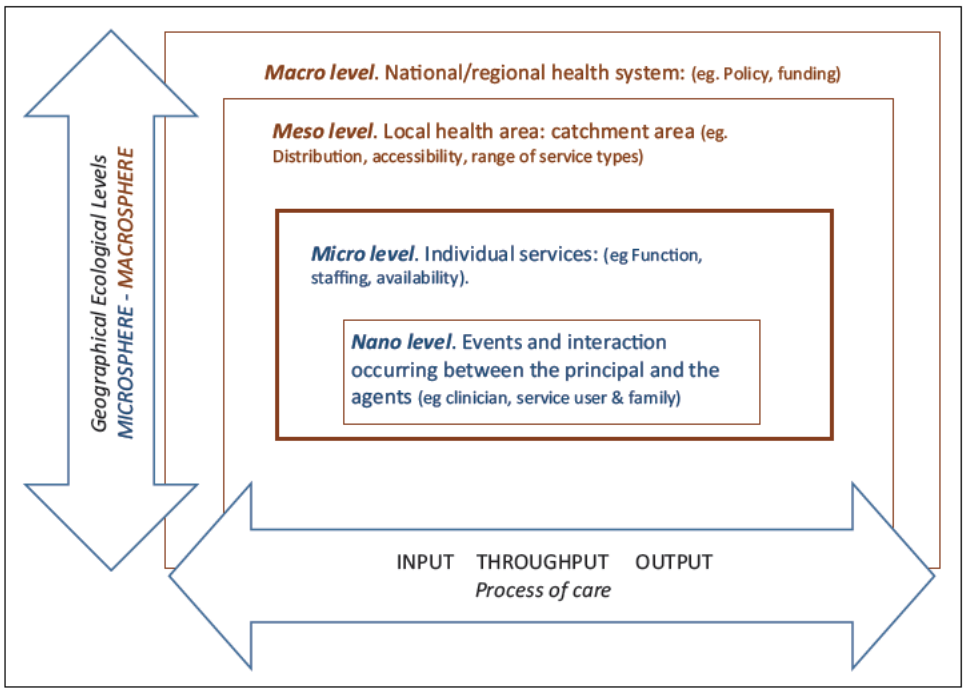

FIGURE 1. A healthcare ecosystem approach. Embedding of systems and their components, within larger systems in healthcare: geographical levels and processes of care.

be usefully differentiated at the different levels of the health ecosystem. A recent example is the analysis of mental healthcare in Belgium following an ecosystem perspective [16]. Any intervention or service-delivery system impacts at all levels of the system: from the 'nano' level (service user–family–professional), to the 'micro' level (immediate service unit or setting), 'meso' level (e.g., a local catchment area) and 'macro' (region/country). The incorporation of the 'microsphere' (nano and mesolevels), and the 'macrosphere' (meso and macrolevels) provides a conceptual connection between the healthcare ecosystem approach and the person-people-centered integrated model of care, which is critical in general community care beyond mental health [17] (Fig. 1).

Thornicroft and Tansella [18] established the foundations of the current approach to mental healthcare ecosystems by developing the Mental Healthcare Matrix model. This model found an elegant solution to a complex problem by combining the levels of the healthcare ecosystem with the three phases of the Donabedian's process of care. This combination provided a powerful tool to frame and operationalize systems' indicators, to better understand the role and complementarity of the instruments for service assessment, and for advancing and monitoring healthcare improvement and evidence-informed policy. Their initial model was refined and adapted for planning in Australia [18], New Zealand, and Canada among other countries [19] (Table 1).

Examples of this approach to guide policy have been developed for regional planning in Catalonia and the Basque Country in Spain, Finland, Chile, and Australia using international classifications and

Table 1. Adaptation of the matrix model to measure mental health performance in public mental health policy and planning [18,19]

	Type of information			
Level of the mental health system	**Input**	**Process[a]**	**Output[b]**	**Outcome**
Individual practitioner				
Team				
Program				
Organization				
Region/Area				
State				
National				

[a]'Process' has been renamed as 'throughput' in the adaptation of this model to mental health economics.
[b]The concept of outputs is often incorporated under 'Processes,' as per Donabedian's original model. However, there is heuristic value in distinguishing the two concepts for the purpose of developing a conceptual framework of mental health service performance.

Table 2. The 'quintuple whammy' model of complexity of severe and enduring mental illness [70]

Defined as simultaneous 'curses' (as in 'double whammies') or a 'full hand' of vulnerabilities and life obstacles experienced by individuals with severe and complex mental illnesses
Psychiatric condition severe, enduring (persistent and/or episodic)
Drug and/or alcohol dependency and other addictive behaviors
Physical disability: ongoing illness, physical neglect, reduced life expectancy
Being worn down by dire poverty and other social deprivations, for example, lack of stable and supported housing, social isolation (social determinants)
Disaffected, marginalized, alienated and/or traumatized existences: …including indigenous people, young people who cannot afford living costs, or who have dropped out of education and training, unemployed people, homeless or those in unstable housing, disability support pensioners, single parents, elderly on pensions, transcultural, immigrants, asylum seekers, former prisoners in transition to community living, or just being isolated from kin, etc.

questionnaires such as European Service Mapping Schedule and Description and Evaluation of Services and DirectoriEs - Long Term Care (DESDE-LTC) [20]. Integrated Atlases of Mental Healthcare using standardized tools such as DESDE-LTC for the classification of services, Geographical Information Systems, and other service assessment tools [21] have been produced in Europe [22] and in Australia and provided key context information for the spatial analysis of community services (e.g., in Western Sydney) [23] costs and financing, and to develop new smart decision support tools for care planning (e.g., Basque Country, Spain) [12▪,13].

These and other studies have shown how the context of mental healthcare and care practice varies considerably not just across countries but even across regions and between neighboring health districts or different cultural communities, and this variation allows for a better understanding of sociodemographic determinants and clinical conditions. For example, the US life expectancy gap between the richest and poorest 1% of the population was estimated to exceed 14 years for men and 10 years for women with additional variations between geographical areas. A metaanalysis of 3.4 million individuals linked social isolation to a 29% increased odds of mortality with major variation across US counties. Midlife mortality and life expectancy declines (2014–2016) were worst in indigenous, black, and Hispanic populations, explained partially by poverty, income inequality, unstable employment, psychological distress (the 'death of despair' triad, including alcohol, substance abuse, and suicide), smoking, and divergent state policy choices, especially for vulnerable populations [24▪]. Regarding environmental determinants of health, a syndemic of climate change degradation, obesity, undernutrition, overpopulation, and recent pandemics has triggered sweeping health and economic global effects. The importance of considering complexities and context, which determine mental health problems and life-expectancy, is exemplified in Table 2.

Local context evidence may contribute to understanding why an intervention implemented successfully in one mental health system produces different outcomes in another. As has been shown by international studies of assertive community treatment [25], the effectiveness of an intervention depends on the characteristics of the local context.

HEALTHCARE ECOSYSTEMS AND BALANCED CARE: DETERMINING KEY DRIVERS OF COMMUNITY MENTAL HEALTHCARE

The balanced care model

The balanced care model was proposed as an approach to provide a whole-system perspective of the provision of mental healthcare mainly at the national level [26]. The whole idea was to optimize care provision by providing as much community care as possible and as little hospital care as possible but being aware that community care alone cannot work and that the changes should be gradual and incremental [26,27]; there will always be a need for a minimum number of beds in acute hospital care and a minimum number of beds for subacute and long-term care (wherever possible in the community as alternatives to hospital care). There has been a major effort worldwide in promoting a better balance in specialized mental healthcare, in understanding the service-provision at the national level using instruments such as the World Health Organization Assessment Instrument for Mental Health Systems (WHO-AIMS) and the WHO Atlases of mental healthcare, comparing national policies and human rights in mental health, providing information on the mental health gap and financing [28]. The WHO Comprehensive Mental Health Action Plan 2013–

2020, WHO places a major emphasis on the use of information for developing community care, and for strengthening mental health systems [29]. However, the analysis at the national level is hampered by the ecological effect in multilevel analysis (e.g., the evaluation at macrolevel overshadows key variations at mesolevel) and requires additional efforts to assess actual resource allocation at the regional and local levels to understand and monitor the balance of care.

There has been a decisive effort to consolidate community care in some South European Countries (e.g., Italy and Spain) and to improve community services in Latin American countries such as Chile (fully implemented) or Peru (early planning stages). However, psychiatry offers an unbalanced system in many countries, including advanced economies, with many perverse opportunities to fall through its gaps. Hospital-centric models are now predominant in many Anglo-speaking countries where community care is losing momentum at the same pace that a market-driven competitive system is favored by traditional public models (the United Kingdom) and private practice interests (e.g., USA, Australia). In 2015, the Australian Government rejected the recommendation made by the National Mental Health Commission to shift future growth funding priorities gradually from hospitals to community and primary mental health [30]. This governmental statement is unique in authorizing a hospital-based model as the main driver of a national system. The hospital-centric model is also predominant in France when compared with other Western European countries [31], Eastern Europe [31] and emerging economies such as India [32].

The balance of care framework could be expanded to nonhealth sectors involved in mental healthcare as suggested by the 'meta-community' model that considers a broader range of services such as social housing and homelessness services, prisons, asylums, schools, and refugee settings [33▪]. Following this holistic approach, the analysis of the 'balance' of care should not be restricted to hospital and community care, but it should also assess the balance between generic and specialized care and the balance between healthcare and other sectors. It is also important to note that from a health ecosystem perspective [14], the balance of care model is intrinsically a system-based approach. Therefore, it does not intend to reach a symmetry between hospital and community services or to compare evidence of one against the other. On the contrary, it aims at finding an optimal balance for improving efficiency that should be quantified both at micro and at macrospheres [12▪]. Figuratively speaking, we should move from a binary 'seesaw' representation of the balance of care to a multidimensional model like Alexander Calder's mobiles.

HUMAN RIGHTS, CHALLENGING STIGMA, AND RECOVERY-ORIENTATION

The new community mental healthcare should be guided by human rights, challenging stigma, and the recovery model. The United Nations Convention on the Rights of Persons with Disabilities adopts contemporary human rights framework by incorporating economic, social, and cultural rights (positive rights) as well as civil and political rights (negative rights) [34]. The positive rights can be promoted through macrolevel interventions by addressing the social determinants of health, for example, poverty, housing, education, employment, health promotion, and stigma-reduction at a community level. The negative rights can be protected through microlevel interventions of providing early access to healthcare and providing recovery-oriented least restrictive care. Thus, the macro and microlevels of community psychiatry are complementary to promoting human rights by addressing the social determinants of health; early access to social and health services; promoting recovery paradigm in mental health; respecting the inherent dignity, autonomy and freedom of every person and taking into account the choices, will and preference of the individual [35]. It is imperative that this contemporary human rights framework is adopted into the training, practice, and language of psychiatry [34].

Stigmatization of people with mental illness contributes to poor access to mental and physical healthcare; reduced life expectancy; exclusion from higher education and employment; increased risk of contact with the criminal justice system; victimization; poverty; and homelessness [36]. Together with a new categorization of stigma [37], the INDIGO Global Network has provided new research methods, a comprehensive toolkit for its assessment, and practical examples of its applicability in national and local contexts [38].

There is emerging evidence base that recovery orientation, aligned with human rights promotion and respect for human dignity and freedom of choice are therapeutic and healing. Different dimensions of recovery in mental health include 'personal recovery,' with central emphasis on identity, meaning and hope; 'functional recovery' – highlighting meaningful participation in society; and the traditional 'clinical recovery,' which is based on symptomatology, relapse prevention, and risk management [39,40▪▪]. Mental health services require emancipation from institutional thinking and practices [41▪▪]. Concern has also been

raised regarding transinstitutionalization of people with severe and persistent mental illness into prisons or forensic care facilities [4], which may be related to the underresourced community sector, lack of voluntary alternatives, and the risk-averse and punitive attitudes of the community.

Community psychiatry of the future needs to systematize voluntary alternatives, for example, peer-led community-based services, access to early intervention, joint/supported decision-making, collaborative recovery plans, advance directives, open dialogue, and open disclosure. Just having these systematized alternatives in the repertoire is not enough – they must be actually used consistently and evaluated [41▪▪]. Peer support workers must be an integral part of the mental health service planning and workforce. The future practice of psychiatry should align with a recovery model and use individualized choices and personalized narratives, particularly around service-user-led-desired outcomes. Psychiatry can then align with the recovery paradigm and human rights framework by adopting a biopsychosocial-existential model and person-centered approach. For mental health services to be truly recovery and human rights oriented, they would have to do more than paying lip-service to 'recovery' – it is important to systematize voluntary alternatives promoting higher order social and existential goals [2▪▪,41▪▪].

DIGITAL MENTAL HEALTH AND HYBRID SYSTEMS

Digital health facilitates cocreation, fosters agency in a people-centered healthcare system, and increases access to care. WHO [42] has made a call for healthcare providers to embrace eHealth, and computer tools have been widely implemented in community mental healthcare to improve care delivery and facilitate collaborative working. In 2020, the transition to digital mental health has experienced a rapid acceleration because of the Corona Virus Disease-19 (COVID-19) pandemic. This trend has followed different paths in different countries depending on the previous levels of implementation of apps, electronic records, and eHealth literacy [43].

'Mixed Reality' [44] or hybrid care [45] incorporates both real environments (in-person human interaction) with technologically facilitated human interaction (augmented reality in telemedicine), human-guided digital mental health and a brief liaison by digital services to prepare for in-person ones, whenever face-to-face care is needed. Mixed reality/hybrid care has been touted as a key advancement in healthcare, with applications in assessment, guidance and remote consultations with service-users [44], for example, developing a system of services via the internet to reach out to vulnerable and isolated people, to communicate, culturally and socially; and clinically connecting and interacting with them [2▪▪]. In spite of the growth of scientific literature on this field, there still is a dearth of literature on the long-term efficiency, impact and implications of implementing digital tools and platforms [46]; and research into how digital tools are being used is still underdeveloped [47]. There has been a call for international evaluation frameworks to standardize designs and methods and to facilitate comparative effectiveness in digital mental health [48].

The information on usability and effectiveness should be completed with information on the local and national eHealth ecosystem and the mapping of areas of needs to locate telemedicine services [49]; and to incorporate them into the existing community mental health services. This should take into account the local characteristics of the real world and the eHealth ecosystem of the consumer's local context (e.g., data on eHealth literacy, wifi access, cellular data limit, number of mobile phones, number of clinics with telemedicine systems, electronic medical records, open, and restricted health digital platforms). This type of information is particularly relevant in rural and remote mental health where digital mental health has been presented as an alternative to the lack of real on-site services. The Orange Declaration has stated the importance of digital health to extend service provision, as long as this is not a replacement for face-to-face help or specialist advice and care [50]. A mobile digital care pathway tool to provide recovery-focused care and facilitate coproduced care planning was recently piloted in the West of England although the evaluation was limited to its usability and practicality and it did not assess changes in the local provision or its comparative effectiveness [51].

There are also concerns on the quality and transparency of the information available to consumers. As stated in a recent Lancet editorial, 'without a clear framework to differentiate efficacious digital products from commercial opportunism, the companies, clinicians and policy-makers will struggle to provide the required level of evidence to realize the potential of digital medicine.' ([52], p 95). Unlike pharmaceutical research, there is little disclosure vigilance regarding financial ties and partnership bias in digital health research and it is still possible for researchers, clinicians, and health officers to be investors in the digital products that they are researching and promoting. An improvement of methods of analysis and conflict disclosure is even more pertinent in mental health, where it is

necessary to clearly define what kind of players and partners the new digital health companies will be for the mental health community, and how they will 'ensure that mental health data are secure and patient consent for their use and reuse is transparent' especially for service users who are plagued by stigma ([53], p 273).

IMPLICATIONS FOR TRAINING IN COMMUNITY PSYCHIATRY

Future community psychiatrists must have training, not only in integrated mental and physical health medicine, but also in clinical leadership and governance; community engagement; and public health and policy. In a previous article, our lead author highlighted the need for future community psychiatrists to seek specific leadership training to be an effective member of the clinical leadership group of mental health service [7]. It is unnecessary for community psychiatrists to aspire to be the sole leader of interdisciplinary service, as a small leadership group allows for strategic planning codesign, shared responsibility, and collegial support. Moreover, a significant treatment gap for mental disorders persists in many public mental health services, and especially in low and middle-income countries (LMIC), with a great scarcity of psychiatrists [54,55]. In that context, community psychiatrists may not be available to be the sole clinical leader of team or service and may need to employ 'task-shifting,' whereby psychiatrists have predominant public health roles as educators and mentors of primary healthcare workers. The latter would then assess mental disorders and deliver basic treatments and refer patients to the psychiatrist, if needed [55]. Communication technology may be used in combination with intermittent in-person input for such education, mentorship and as required, for digital and in-person health assessments [45].

The training of medical students and psychiatry trainees needs to adapt to all those challenges through greater emphasis and exposure to community mental health teams; clinical governance/leadership skills; public health policy and law; and community engagement. For community psychiatrists to meet both their micro and macrolevel commitments, they must be trained in line with the Canadian Medical Education Directions for Specialists (CanMEDS) domains as public health experts/scholars/research translators, mental health advocates, collaborative leaders, competent managers and effective communicators, in addition to being medical experts/clinicians/supervisors [56].

Community psychiatrists should be trained to look both inward and outward. They have responsibilities for caring for the mental health and embodiment of stressors internally within both presenting individuals and issues generating psychosocial difficulties between individuals (e.g., family members), and they should also be trained and resourced to care for the mental health needs of their local catchment and communities. Therefore, the psychiatrists of the future need to familiarize themselves with the service ecosystem approach described above. Community Psychiatry training should encompass the development of proficiency, competence, and confidence by community mental health clinicians at the different levels of the ecosystem. Some tasks and skills are common to all levels such as facilitating human rights, tackling stigma and discrimination, collaborative leadership, mental health managements advocating for improvement in public health and social determinants, and social movements for promoting a recovery approach and for improving both physical and mental health. However other tasks and skills are related to the micro or to the macrosphere. Generally, only the nano to microskillset is taught and examined in depth in formal training. Little active training or supervision in the macroskills is done in most national training programs, despite lip-service or only partial applications, if at all, given to this much wider agenda of training in some leadership courses. Psychiatric training needs to expand to develop practitioner skills, confidence, and competence, working with both nano–micro and meso–macroskills. Examples of these service developments are in Table 3.

Nano to microlevel tasks and skills

These should include refinement of access, engagement, and mental health services required by individual service users and families, evidence-based technical interventions and service-delivery systems, humane relationships, and purposes fostering healing and recovery.

Community psychiatrist training in nano–microlevel skills provides sound specialized and integrated community and hospital-based mental health clinical care for individuals, families, and groups living with psychiatric disorders. Some critical requirements by mental health economists [57] for effectiveness of community mental health services at the nano–microlevels include working in teams, group supervision and supervising of supervisors ('supervison pyramids') [58], and training and supervising to international evidence-based fidelity criteria of interventions and service-delivery systems. We should 'go wider' in assessment and review, involving home-visiting

Table 3. Micro and macrospheres of community mental health: principles, models, and examples

Part 1: microsphere		
Guiding principles, models, and future directions	**Components**	**Description/examples of growing points and innovations**
Protecting and promoting human rights	Application of the UN CRPD [71] and WHO Quality Rights Modules [72]	Encouraging self agency/autonomy, peer support and advocacy networks Systematizing and resourcing evidence informed voluntary alternatives to involuntary/coercive mechanisms [41▪▪]
	Social inclusion and freedom from stigma and discrimination	Moderated social contact between individuals with lived experience and local community To promote early access to social support and clinical interventions. Challenging self stigma & personal instances of negative discrimination
Lifespan/whole systems approach to early intervention, recovery, and rehabilitation	Developmental perspective: for example, early intervention in psychosis programs and other models specific to lifespan	Diagnostic, organizational, delivery and training models; operational configurations, including type of training, staff, interventions, and delivery systems Early Psychosis Guidelines and services could be adapted to accommodate the most severe forms of high prevalence disorders and wider age groups
	Younger onset invites earlier intervention, rather than late intervention and 'maintenance stream' shelving	Most mental disorders, notably excepting dementias, have their onset in adolescence or young adulthood [73]. This shift has significant implications for theoretical diagnostic, organizational, delivery, and training models; operational configurations, including type of training, staff, interventions, and delivery systems. Most mental health services worldwide deal with people over the age of forty, which is long after the onset of the majority of disorders by that time it is more difficult to make a major improvement in their course, so individuals tend to get shelved in the low expectation 'maintenance stream' [73]. Early intervention in these disorders is much more effective in markedly improving their prospects, including symptoms, function, quality of life and recovery trajectory
	Early intervention in a spectrum of severe disorders	Encourage further development of promising to evidence informed prevention and early intervention approaches for most psychiatric disorders across lifespan, from perinatal to old age [74,75]. Although, at present, our priority must be the most highly evidence based systems for early intervention of psychosis in younger age groups, the protocols and services could be adapted in the future to accommodate most severe forms of higher prevalence disorders and wider age groups, as long as they do not dilute or denature the service framework for psychosis, subject to further research [73]
	Recovery and Rehabilitation as a whole systems approach	Recovery is the process led and controlled by the service users, in their own timeframe, as a journey of hope and growth throughout life, with the encouragement of people who can convey that they really believe in them Rehabilitation is the complementary component led by the professional and peer providers They maximize an individual's quality of life and social inclusion by encouraging their skill development and promoting autonomy, and leading to successful community living through appropriate support
Positive perspectives in mental health system	Therapeutic optimism	Therapeutic optimism invokes a constructive mindset, integral to early intervention strategies in the critical period of the first five years of psychosis which can improve outcomes through systematic family, cognitive, vocational interventions; and optimizing individual, family and communal inclusion, and cultural factors associated with better prognosis while reducing stigma. It has an established evidence base, and relevant skills are readily manualized, taught, and operationalized [27]
	Positive psychiatry and psychology	Positive psychiatry and psychology are the psychiatric and psychological practices and science of promoting positive psychosocial factors to improve wellbeing and outcomes in mental and physical illnesses. It draws on research on cognitive reframing (e.g., CBT and narrative therapy), optimism, resilience, purpose and social engagement to improve emotional and social functioning [76]

Table 3 (*Continued*)

Part 1: microsphere		
Guiding principles, models, and future directions	**Components**	**Description/examples of growing points and innovations**
	Woodshedding	Woodshedding is a phase in the slow recovery of psychosis, in which there are long periods of no apparent improvement, whereby the individual is subtly and incrementally gaining self esteem, competence, stamina, and social skills. After an acute episode, the individual may improve initially but then seems to stop getting better for a long period, often resulting in 'maintenance stream' placement. Given a therapeutic environment of patient and constant encouragement, this may be followed by a discontinuous leap into a higher level of function [27]
Facilitating evidence informed intervention and service delivery systems	Further Development of Evidence Based Components and Fidelity Criteria, on evidence based interventions and service delivery systems	Active response, mobile home visiting community mental health Crisis Teams and Assertive community treatment teams [25,77] Community residential respite facilities [78] Early intervention in psychosis teams Assess and monitor fidelity of the interventions [77] Housing initiatives [79] Employment programs, individual placement and support [80] Cultural adaptation of interventions
	Active response, mobile, home visiting community mental health teams	Implement active response, mobile, home visiting community mental health teams, supervising to the evidence based fidelity criteria for home visiting in operational manuals for mental health crisis teams, early intervention in psychosis teams & assertive community treatment and support teams [25,81]
	Multiple family groups	Facilitated series of meetings with median to large groups comprising several individuals living with severe and enduring mental illness (and more recently first episode psychosis and prodromal states) with their families, to work together on education about managing life with these disorders, more effective low key communication styles, and brainstorming/problem solving techniques. Derived from studies by Ian Falloon and Grainne Fadden, it has high level RCT outcome evidence and has been adapted to mood and eating disorders [82]
	Significant interventions without adequate evidence Possible growing points	Supervision and Pastoral mentorship for all mental health providers Individual and/or group in house line supervision or regular external consultation for all mental health professional and support providers, including peers Individual mentorship of all mental health providers at every level in the service, for example, to deal with work/home life balance, vicarious trauma, organizational pressures, and career progression
		Open Dialogue in Acute Psychosis episode, combining crisis intervention at home, family intervention, extending the local support system, working dialogically, honoring polyphony of different voices and viewpoints [83]. The evidence base for this is deficient despite many years of development and continuing studies.
	Primary healthcare integrating with community mental health services	Youth Enhanced Support Service (YESS) Teams and adult mobile equivalents for the 'missing middle' (often unserved) clientele, working directly in liaison with Primary Healthcare (GP) practices and Primary Health Networks (Northern and Western Sydney) IAPT: in primary healthcare: systematized evidence based psychological therapies augmenting general practices with co located teams of graduate psychologists supervised strictly to fidelity criteria (United Kingdom), though its reach to most needy populations is limited. However, the uptake penetration with most vulnerable and needy individuals of IAPT is still too limited An alternative to IAPT has been developed in New Zealand in conjunction with Primary Health Organizations and GP practices, providing a broader menu and choice of therapeutic roles: a counselor/behavioral health consultant, a peer/cultural Health Coach, NGO provided peer and community support

Part 2: macrosphere		
Guiding principles, models, and future directions	**Components**	**Description/examples of growing points and innovations**
Workforce and training for mental health services and related professions	Continual learning organization	Ensuring that mental health service is a continual learning organization, including how to build and sustain an interdisciplinary team, and how to widen the core of common ground and common practices that we should share as teams [84]
	Communities of Practice	Regular opportunities to network with similar teams on a regional, cross national, and international basis to swap notes regarding interpretation of guidelines, applying best practices and solutions [85]
Social and environmental challenges	Mental health service response to manmade and natural disasters/hazards	For example, COVID 19 pandemic; 2019 extreme wildfires Restriction of the means of harm for suicide and homicide A balance needs to be achieved between office based telehealth and in person mobile home visiting services by familiar clinical and support providers. Otherwise, hospital emergency and inpatient facilities will be overwhelmed when delayed surges of acute episodes occur
Protecting and promoting human rights	Application of the UN CRPD and WHO Quality Rights Modules	Provide guidance using comparisons across regions and countries Legislative amendments to minimize coercive practices and systemic discrimination
	Social inclusion and freedom from stigma and discrimination	Social movement approach to dispel stigma and eliminate discrimination Public advocacy to challenge widespread stigma and negative structural discrimination Public awareness media campaigns should be preceded by grassroots network meetings between local communities, services users and their families Social enterprises and intersectoral collaborations to ensure participation of people with lived experience in the workforce
	Rights to Address equity and the social determinants of health	Advocating for public policy and whole of government approach to reduce poverty, provide housing, employment, education, social inclusion and access to healthcare
	Eliminating poverty, as a precursor to mental illness	Technical agricultural innovations with local manufacture and employment for pastoral applications on the basis of microloans to promote relief from poverty and positive rights to prevent and ameliorate mental illnesses (Paul Polak, International Development Entrerprises)
Lifespan/whole systems approach to recovery and rehabilitation	Recovery and rehabilitation systems	Rehabilitation driven by recovery entails the various components of the mental health system working collaboratively to support recovery. This 'whole system' includes inpatient and community based components provided by statutory health and social care services, nongovernmental organizations and independent providers of health, housing, welfare benefits, education, and employment services
Facilitating evidence informed early intervention and service delivery systems	Population based adaptations	Specific culturally appropriate adaptations and proxies for all these levels of service for rural remote, indigenous, transcultural, refugee/asylum seeker, LGBTI, forensic and cooccurring mental health, and substance using populations and communities
	Primary healthcare integrating with community mental health services	Specific access to psychotherapy programs such as IAPT are being nationally implemented in several countries around the world, e.g., United Kingdom, New Zealand, Canada, France, and Chile [57].
Workforce and training for mental health services and related professions	Applying nationally consistent training, supervision, and qualifications Recovery colleges	National institutes for mental health service workforce training, supervision, and mentorship for interdisciplinary teams including peer workers Recovery colleges offer a comprehensive range of courses based on the wishes and needs of people with living experience of mental illness and of clinical services. They embody a shift from a focus on therapy to education and from a clinical illness to a wellbeing approach. Some of them are registered training providers, training peer facilitators for the mental health workforce [86]

Table 3 (*Continued*)

Part 2: macrosphere		
Guiding principles, models, and future directions	**Components**	**Description/examples of growing points and innovations**
Intentional communities	Multiple family groups	Families involved often form ongoing intentional communities for continuing these methods, reciprocal support and friendship when professionally facilitated sessions end
	Social enterprises or social cooperatives	To develop work opportunities and businesses with a triple bottom line, of providing real jobs for real pay for people living with disabilities, profitability to support workforce and a social or ecological purpose. Prominent in Europe where these businesses get a substantial tax break if more than 30% of workers have a disability
	Urban renewal	Microareas as intentional communities: community building of social inclusive networks, common spaces and activities (Trieste, Italy)
	Living skills centers	For example, men's sheds, female craft collectives and service user drop in centers as 'communities of identity'
	A social movement approach	To promote early access to evidence informed interventions, for example, social movements of GPs, families, and mental health professionals for early intervention and physical healthcare [59,87] and employment in first episodes in psychosis
Social and environmental challenges	Climate change and disaster response psychiatry	Taking responsibility to deal with psychosocial impacts of droughts, extreme bushfires, floods and possibly pandemics as harbingers of climate change, via emergence of climate change psychiatry, dealing with anticipatory and actual grief and trauma, and advocating for marginalized communities which are the most vulnerable (e.g., indigenous, the poor, the homeless, physically and developmentally disabled, forensic, drug and alcohol affected and severely mentally ill populations)
	Advocacy, for example, gun control	Issues which impinge on the lives of people living with mental illnesses, e.g., gun control to deter mass shootings (service users are much more likely to be victims than perpetrators) and challenging structural discrimination against mentally ill service users by government agencies
	Urban renewal and design	Codesign of Urban Renewal of Tenement Precincts in Decay according to Basaglian community mental health principles in Trieste, Italy, e.g., social inclusivity, generational reciprocity (e.g., young assisting elderly), involving architecture faculties consult ng precinct community to redesign their urban housing precincts, and partnerships with local social and health services to meet unique mix of needs

CBT, Cognitive behaviour therapy; CRPD, Convention on the Rights of Persons with Disabilities; GPs, General practitioners; IAPT, Improving Access to Psychological Therapies; LGBTI, Lesbian gay bisexual transgender and intersex. Adapted from Refs. [35,81].

and family involvement wherever possible, to include all contextual concerns from a holistic perspective that encompasses all aspects: biopsychosocial, cultural, spiritual and ecological, and also widening the interdisciplinary team to include more health disciplines. These are now contributing to better health outcomes for people living with mental illnesses and improving their life expectancies (e.g., dieticians, exercise physiologists, drug and alcohol workers, community pharmacists, vocational specialists, peer workers, and general practitioners) [59].

Meso to macrolevel tasks and skills

These tasks should include culturally universal collective tasks of buffering communal and climatic hurts and trauma, drawing on the person's extended kinship system, relational communities, social movements, and enabling people to complete their rites of passage to grow and develop purposeful lives within their communities.

The key skills in training programs should teach and provide supervised experience in acquiring and consolidating macroskills of public advocacy, extended kinship systems and multiple family groups, service user and family groups, social movements and the media, facilitating human rights or challenging stigma and discrimination, to improve the mental health and wellbeing of their local or regional catchment communities. These competencies enable practitioners to develop buoyancy and sense of competence and confidence, in community meetings, stakeholder groups, and social movements, dealing with communal stressors, traumas, stigma and discrimination, human rights issues,

access and service equity and parity for your whole local catchment, state, or national population.

A ROADMAP TO COMMUNITY MENTAL HEALTHCARE OF THE FUTURE

The 2017 report of the Lancet Psychiatry Commission on the Future of Psychiatry has contributed significantly to prioritize key aspects of mental healthcare design for the future [60▪]. It underscores key areas for health improvement, such as a focus on healthcare systems, human rights and regulations, digital mental health, and the training of psychiatrists. However, to transfer priorities into actionable local implementation, the Lancet report should be followed by a series of practical steps. First, a terminological consensus and a formal integrated taxonomy of the models and components of community care is needed, just as a common taxonomy of mental disorders was needed in the 1970s. This would minimize the ambiguity and vagueness [61] that may lead to confusion and misinterpretation, which in turn, could lead to national and local initiatives detrimental for the future of community psychiatry. For example, the statement made by the Lancet Commission about the balance of care model could be interpreted as the existence of separate models of hospital and community care. Community mental health models have integrated hospital and community services since their inception. Without an accompanying formal definition and taxonomy, the Lancet Commission statement on 'balance of care' can be misinterpreted, as if hospital and community care were two opposing movements, which is not the intention of the balanced care model. The statement could also be misinterpreted as implying a symmetry or equivalence of evidence between hospital and community components of the system. Although we will continue to need the inpatient component for a significant minority, there is no rigorous evidence that supports a hospital care model versus community-based alternatives [63]. The Lancet report also supports the stepped care model without defining it. This vagueness may lead to different interpretations and ultimately accentuate the fragmentation and discontinuity of care when stepped care is adopted as a driver for systems' planning. As an example, although stepped care was used in Europe to design interventions within existing services (e.g., primary care psychotherapy) [2▪▪], its adoption as the guiding principle of the mental health system in Australia implies the development of separate services for every stage of severity [62].

The Lancet Commission's report could be usefully complemented by considering the evidence-based interventions informing delivery systems for complex and severe mental illness such as Assertive Community Treatment, Mental Health Crisis Intervention, and supported accommodation and respite care [63]. The pivotal role of community psychiatry for both training and consistent service delivery in both micro and macrospheres of community psychiatry should go beyond the recommendations of the Lancet report. Recently, van Os *et al.* [2▪▪] questioned the validity of a diagnosis-based symptom reduction approach, one of the core elements for mental healthcare design and planning, and proposed a patient-centered, transsyndromal framework. Concurring with the evidence-informed approach [64], van Os states that the so-called evidence-based practice' does not take into account the service-level contextual factors and patient-clinician level relational factors. Therefore, van Os proposes a reorganization of psychiatry training and service-delivery to promote therapeutic relationship building skills and a patient-centered approach based on values of existential recovery, for example, connectedness, empowerment, identity, meaning, and hope. He also emphasized the community psychiatry services need to be based in an enhanced primary care model, with integrated specialist psychiatric, drug and alcohol, and social sector input. This must be complemented by an expanded public mental health system including e-communities providing information, self-help, and peer support [2▪▪].

The European Community Mental Health Service Provider (EUCOMS) Network [40▪▪], bases its approach to a holistic model of community-based mental healthcare on the practical experiences of service provision in Europe and consensus across provider and peer organizations. According to their model, high-quality services should encompass: the protection of human rights, a public health approach, the promotion of the recovery journey of service users, the evaluation of effectiveness (i.e., use of effective interventions based on service user goals as well as evidence) the development of a wide network of community support and services, and the incorporation of service user/peer expertise in service planning and delivery [40▪▪]. EUCOMS recognizes the difficulty of balancing the principles of recovery and effectiveness but acknowledges that both should be considered to achieve a person-centered approach that takes into account the different levels of care: self-help, resource group, the generic community services, and the community mental health.

The principles and priorities for future mental healthcare laid out by these and other recent approaches should be followed by a roadmap and

action plan to get us there. Although this discussion article has focused on the generic aspects of the adult community mental healthcare, an action plan should necessarily include a whole span of services that we have not reviewed in detail such as promotion services, care for child services, transition to adulthood, psychogeriatrics, comorbid physical illness, neurodevelopmental disorders or drug, and alcohol problems. These areas also need to be managed providing integrated care rather than silo'ed treatment. Similarly, a special consideration should be made to design, planning and monitoring of community mental health services in low and middle-income countries that incorporate an operationalization of the basic services types for LMIC listed in the original balance of care model [26] in the context of the global development goals [65].

CONCLUSION AND RECOMMENDATIONS

All public mental health services should be rebuilt as community-centric mental health services, integrating all regional or local community-based and hospital (including inpatient) components, and led from community sites. This can be achieved through contextually and complexity-informed community-based care for individuals, with their

Table 4. Recommendations for the future of community psychiatry and community mental health services

Every regional mental health authority should consult widely with all sectors, public, private, and NGO to codesign and work together to a single/unitary mental health plan
It should have the authority to commission evidence informed services at arm's length on the basis of being enabled to pool funds from different sources and have statutory mechanisms to ensure that ostensibly dedicated mental health resources will not be sidetracked for other nonmental health purposes
Correspondingly, all mental health professionals should be well trained in all aspects of nano to macro mental health knowledge and practical skills, as the core or stem disciplines, from which they may then branch out to subspecialties as required, while retaining a critical mass of community based psychiatrists and mental health professionals who in reach to hospitals as necessary
Internationally and nationally consistent standardization should be established regarding workforce training, and line supervision to evidence based criteria, pastoral mentorship, and widely recognized qualifications
National Mental Health Service standards and indicators should be reconstructed as policy drivers, for service providers to align with policy implementation guides and evidence based fidelity criteria, and to provide a common language guide for service users, their families and the public, as to what they should be able to expect from standardized regional services. For example, Australia's National Standards for Mental Health Services [88]; The European Observatory on Health Systems and Policies, an intergovernmental partnership, hosted by the WHO which specializes in the development of such health systems within Europe
To engage adolescents and young adults early in the course of life disrupting disorders, mental health services must become much more accessible, youth friendly, and focused on age appropriate psychosocial issues and developmental priorities [73]. To achieve this, there should be specific training for psychiatrists, other mental health professionals and peer support workers
We should build on the existing, substantial, and still developing, evidence base for community mental health services components, to complement the Lancet Commission report on the future of psychiatry [60▪], e.g., assertive community teams, mental health crisis commun ty respite facilities and early intervention in psychosis teams. Moreover, we need to develop promising growing points in services: e.g., human rights facilitation, recovery approach, and challenging stigma and discrimination; adding peer workers and on line interventions as integral to interdisciplinary teamwork, not as replacements for in person mental health professional roles and interventions. We need all of them working together
Formal, rigorous training and supervision in the meso to macroskills, complementing current training in nano to microskills, should be implemented widely in all national training programs for all psychiatry trainees. Such training should be active, experiential and academic, including skills to enable mental health professionals to be cooperative team players in interdisciplinary leadership groups
Mental healthcare ecosystems analysis requires advanced quantitative techniques for estimating the local quanta of services, facilities, and professionals across hospital and community care; identifying benchmarking, allocative and comparative efficiency of different services in different catchment areas; and the evolution of community care in local and regional areas over time [64,89]. We need consensus guidelines that could inform the quality of research in this area and facilitate grading of evidence and standardized recommendations
We should adopt a health ecosystems approach to mental healthcare and training, encompassing nano to macrolevels of service in every region. All catchment mental health services should be rebuilt as community centric mental health services, integrating all community and inpatient components, but led and integrated from community sites
We need consistent policy and a legislative framework for the future development and stability and protection of resourcing for community psychiatry and community mental health with a roadmap and an action plan to get us there
Community services should be digitally augmented but retaining and developing further the capacity for in person engagement and intensive home visiting when required. If transient residential placement is needed, we should be able to provide an unlocked voluntary home like respite facility.
Established and emerging evidence suggests that psychiatry of the future should entail shifting the centre of gravity of services from hospital centric services with occasional outreach, to community centered services and facilities, with in reach to hospital when needed, on a safety or urgent organic assessment baied.

families and caregivers, wherever possible 'on their own turf and terms'. However, to move from principles and priorities to action planning, we should adopt an ecosystems approach encompassing the nano, micro, meso, and macrolevels of mental healthcare following a holistic (bio-psycho-social, cultural, ecological, person-centered, and integrated) model [66,67]. At a nano (individual and family) and micro (mental health service) level, evidence-based interventions and service-delivery methods need to be applied and systematized (e.g., assertive community treatment; early intervention in psychosis and other disorders; psychiatric crisis management; and residential respite care) [25]. Consensus guidelines could inform the quality of research in this area and facilitate grading of evidence and standard recommendations (Table 4).

During the last few years, major progress has been made in the development of technical supports and instruments to improve community mental health. However, we still lack a comprehensive approach to the analysis of the interaction between humans and technology. The new path to hybrid service delivery should not be limited to eHealth, as it should include active-response home-visiting services; more equitable access to clinicians and peer support workers; augmenting in-person services with digitally mediated individual and group contact; employment, social housing, upholding social inclusion and human rights, and challenging stigma and discrimination.

Psychiatry is a discipline which has contributed the multifaceted biopsychosocial and cultural-ecological outlook to the other disciplines of medicine [66]. Eisenberg [68] went one step further and claimed psychiatry to be a paradigm for the rest of the medical practice of the future. He argued that in doing so, psychiatry should undertake organizational and political tasks to ally itself with other professions to promote the health of the public [68]. We go back to Eisenberg's restated core role of psychiatry in the redesign of the healthcare system, to integrate both clinical and psychosociocultural concerns [68]. In this respect, the current crisis of psychiatry resonates in the crisis of the healthcare system as a whole [69] and the solutions that we could elucidate will have an impact on the overall health system as well.

Acknowledgements

Our thinking on these issues has been greatly influenced by Professors Leon Eisenberg, Len Stein, Michele Tansella, Paula Goering, Doctors Richard Warner, Paul Polak and Denis Scott and Ms Anne Deveson (all deceased), Professors Helen Killaspy, Helen Herrman, Pat Dudgeon, and Doctors Roberto Mezzina, Ken Thompson, Michelle Funk, Pat Bracken, and Rafael Bengoa. We also acknowledge Ms. Vivienne Miller and Mr Zacha Rosen for their support with editing the article.

Financial support and sponsorship

None.

Conflicts of interest

There are no conflicts of interest.

REFERENCES AND RECOMMENDED READING

Papers of particular interest, published within the annual period of review, have been highlighted as:
- ■ of special interest
- ■■ of outstanding interest

1. Malhi GS. The truth, the whole truth and nothing but the truth. Austr N Zeal J Psychiatry 2019; 53:6 7.
2. ■■ van Os J, Guloksuz S, Vijn TW, *et al.* The evidence based group level symptom reduction model as the organizing principle for mental healthcare: time for change? World Psychiatry 2019; 18:88 96.

This article suggests a reconceptualization and redesign of mental healthcare based on community peer support complemented by regional facilities. Its em phasis is on transsyndromal symptom reduction, aimed at learning to live with mental vulnerability, existential recovery, and social participation. The comparative effectiveness of this model versus other clinically oriented approaches will deserve special attention in the future.

3. Sakaluk JK, Williams AJ, Kilshaw RE, Rhyner KT. Evaluating the evidential value of empirically supported psychological treatments (ESTs): a meta scientific review. J Abnorm Psychol 2019; 128:500.
4. Marquant T, Torres Gonzalez F. Deinstitutionalization versus transinstitutionalization. In: Goethals K, editor. Forensic psychiatry and psychology in Europe. Cham: Springer; 2018. pp. 293 304.
5. Beaulieu ND, Dafny LS, Landon BE, *et al.* Changes in quality of care after hospital mergers and acquisitions. N Engl J Med 2020; 382:51 59.
6. Bobevski I, Rosen A, Meadows G. Mental health service use and need for care of Australians without diagnoses of mental disorders: findings from a large epidemiological survey. Epidemiol Psychiatr Sci 2017; 26:596 606.
7. Rosen A. The community psychiatrist of the future. Curr Opin Psychiatry 2006; 19:380 388.
8. Gibert K, Garcia Alonso C, Salvador Carulla L. Integrating clinicians, knowl edge and data: expert based cooperative analysis in healthcare decision support. Health Res Policy Syst 2010; 8:28.
9. ■ Salvador Carulla L, Lukersmith S, Sullivan W. From the EBM pyramid to the Greek temple: a new conceptual approach to guidelines as implementation tools in mental health. Epidemiol Psychiatr Sci 2017; 26:105 114.

This paper provides a conceptual review of the scientific knowledge required to approach community mental health questions from a complexity and systems thinking approach. It advocates to replace the unidimensional EBM Cochrane pyramid of evidence by a ''Greek Temple'' made by five columns or domains of scientific knowledge required for complexity analysis: experimental, observational, contextual, expert and experiential. It also provides a practical example of its application to the development of clinical practice guidelines in mental health care.

10. Rosen A. What does co design, co production & co delivery mean to me?In: Co design: shared perspectives in authentic co design: the co design in itiative. Melbourne: Civil Society; 2016.
11. World Health Organization. European health report 2018: more than numbers evidence for all. WHO Regional Office for Europe; 2018.
12. ■ Garcia Alonso CR, Almeda N, Salinas Pérez JA, *et al.* A decision support system for assessing management interventions in a mental health ecosys tem: the case of Bizkaia (Basque Country, Spain). PLoS One 2019; 14:e0212179.

This article coauthored by a multidisciplinary team of health systems engineers, health geographers, health planners, and health service researchers illustrates the use of the healthcare ecosystem approach to implement decision support tools for regional planning. It analyzes the relative technical efficiency of the whole care provision for mental health in the catchment areas of the community mental health centers of Bizkaia, Basque Country, Spain.

13. Chung Y, Salvador Carulla L, Salinas Pérez JA, *et al.* Use of the self organis ing map network (SOMNet) as a decision support system for regional mental health planning. Health Res Policy Syst 2018; 16:35.
14. Furst MA, Bagheri N, Salvador Carulla L. An ecosystems approach to mental health services research. BJPsych Int 2020. ((in press) Accepted March 27, 2020). DOI:10.1192/bji.2020.24.

15. The King's Fund. A vision for population health: towards a healthier future; 2018. Available from: https://www.kingsfund.org.uk/publications/vision population health.

16. Sels C, Van Hootegem G. Designing networks for integrated care within the Belgian mental healthcare ecosystem. In: Mohr B, Dessers E, editors. Designing integrated care ecosystems. Cham: Springer; 2019. pp. 173 187.

17. Charles A, Ham C, Baird B, *et al.* Reimagining community services: making the most of our assets. King's Fund: London; 2018.

18. Thornicroft G, Tansella M. The mental health matrix: a manual to improve services. Cambridge: Cambridge University Press; 2006.

19. McEwan KL, Goldner EM. Accountability and performance indicators for mental health services and supports: a resource kit. Ottawa: Health Canada; 2001.

20. Romero López Alberca C, Gutiérrez Colosía MR, Salinas Pérez JA, *et al.* Standardised description of health and social care: a systematic review of use of the ESMS/DESDE (European Service Mapping Schedule/Description and Evaluation of Services and DirectoriEs). Eur Psychiatry 2019; 61:97 110.

21. Salvador Carulla L, Amaddeo F, Gutiérrez Colosía MR, *et al.* Developing a tool for mapping adult mental healthcare provision in Europe: the REMAST research protocol and its contribution to better integrated care. Int J Integr Care 2015; 15:e042eCollection, PubMed PMID: 27118959; PubMed Central PMCID: PMC4843179.

22. Alonso Trujillo F, Salinas Pérez J, Gutiérrez Colosía M, *et al.* Impact assessment of a multisectoral plan for the promotion of health and social wellbeing in Andalusia. Spain: Gaceta sanitaria; 2019.

23. Maas C, Salinas Perez JA, Bagheri N, *et al.* A spatial analysis of referrals to a primary mental health programme in Western Sydney from 2012 to 2015. Geospat Health 2019; 14:. doi: 10.4081/gh.2019.773.

24. ■ Koh HK, Parekh AK, Park JJ. Confronting the rise and fall of US life expectancy. JAMA 2019; 322:1963 1965.

This article provides a good example of the combined use of geographical information system and the analysis of determinants of health and administrative data to identify a novel construct in mental health ('deaths of despair') which is highly relevant for policy and planning at the different levels of the mental health ecosystem, from the nano to the macrolevels.

25. Rosen A, Killaspy H, Harvey C. Specialisation and marginalisation: how the assertive community treatment debate affects individuals with complex mental health needs. Psychiatrist 2013; 37:345 348.

26. Thornicroft G, Tansella M. The balanced care model: the case for both hospital and community based mental healthcare. Br J Psychiatry 2013; 202:246 248.

27. Shiers D, Rosen A, Shiers A. Beyond early intervention: can we adopt alternative narratives like 'Woodshedding' as pathways to recovery in schizophrenia? Early Interv Psychiatry 2009; 3:163 171.

28. Maulik P, Daniels A, McBain R, Morris J. Global mental health resources. In: Patel V, Minas H, Cohen A, Prince MJ, editors. Global mental health: principles and practice. New York: Oxford University Press; 2013 . pp. 167 192.

29. Lora A, Hanna F, Chisholm D. Mental health service availability and delivery at the global level: an analysis by countries' income level from WHO's Mental Health Atlas 2014. Epidemiol Psychiatr Sci 2017; 1 12; doi: 10.1017/S2045796017000075. [Epub ahead of print]

30. Australian Government. Australian Government response to contributing lives, thriving communities review of mental health programmes and services. Canberra: Department of Health; 2015; 8.

31. Gutiérrez Colosía MR, Salvador Carulla L, Salinas Pérez J, *et al.* Standard comparison of local mental healthcare systems in eight European countries. Epidemiol Psychiatr Sci 2019; 28:210 223.

32. Murthy P, Isaac M. Five year plans and once in a decade interventions: need to move from filling gaps to bridging chasms in mental healthcare in India. Indian J Psychiatry 2016; 58:253 258.

33. ■ Bouras N, Ikkos G, Craig T. From community to meta community mental healthcare. Int J Environ Res Public Health 2018; 15:806.

This paper suggests an extension of the community care model. A pluralistic and multisectorial approach is suggested based on the following main aims: role of primary care, user participation and efforts to reduce stigma, physical aspects of mental illness, patient centred approach, care delivery in a broad span of settings including schools, workplace, prisons and asylums, and adopting the principles of sustainability, flexibility and innovation

34. Gill NS. Human rights framework: an ethical imperative for psychiatry. Austr N Zeal J Psychiatry 2019; 53:8 10.

35. Gill NS. Human rights of people with mental disabilities: a thesis in fulfilment of the requirements for the degree of Doctor of Public Health. Sydney: University of New South Wales; 2020.

36. Thornicroft G, Bakolis I, Evans Lacko S, *et al.* Key lessons learned from the indigo global network on mental health related stigma and discrimination. World Psychiatry 2019; 18:229 230.

37. Tomar N, Thornicroft G. Principle of gradient rationality: revisiting stigma and conceptualizing its guiding mechanism. Soc Sci Med 2020; 245:112716.

38. Maulik PK, Devarapalli S, Kallakuri S, *et al.* Longitudinal assessment of an antistigma campaign related to common mental disorders in rural India. Br J Psychiatry 2019; 214:90 95.

39. Slade M. Mental illness and wellbeing: the central importance of positive psychology and recovery approaches. BMC Health Serv Res 2010; 10:26https://doi.org/10.1186/1472 6963 10 26.

40. ■■ Keet R, de Vetten Mc Mahon M, Shields Zeeman L, *et al.* Recovery for all in the community: position paper on principles and key elements of community based mental healthcare. BMC Psychiatry 2019; 19:174.

This position article provides a holistic model of community mental healthcare based on an international bottom up and experience base consensus. It is based on six main components including peer support and recovery combined with evidence based approaches.

41. ■■ Mezzina R, Rosen A, Amering M, Javed A. The practice of freedom: human rights and the global mental health agenda. In: Advances in Psychiatry. Hiedelberg New York: Springer; 2019:; 483 515.

This book chapter highlights that freedom and human rights are inherently therapeutic and emphasizes that the need to systematize and resource voluntary alternatives to involuntary treatment practices.

42. World Health Organisation. Draft global strategy on digital health 2020 2024. Draft March 2020. Geneva: World Health Organisation. Available from: https://www.who.int/docs/default source/documents/gs4dhdaa2a9f352b0445bafbc79ca799dce4d.pdf?sfvrsn=f112ede5 38 [Accessed 06 May 2020]

43. Alvarez Galvez J, Salinas Perez JA, Montagni I, Salvador Carulla L. The persistence of digital divides in the use of health information: a comparative study in 28 European countries. Int J Public Health 2020; 65:325 333.

44. Hu HZ, Feng XB, Shao ZW, *et al.* Application and prospect of mixed reality technology in medical field. Curr Med Sci 2019; 39:1 6.

45. Yellowlees P, Shafqat S, Myers K. Indirect consultation and hybrid care. In: Yellowlees P, Shore JH, editors. Telepsychiatry and health technologies: a guide for mental health professionals. Arlington, VA: American Psychiatric Publication; 2018. pp. 251 288.

46. Gardner J, Cribb A. The dispositions of things: the nonhuman dimension of power and ethics in patient centred medicine. Sociol Health Illness 2016; 38:1043 1057.

47. Trnka SH. Digital care: agency and temporality in young people's use of health apps. Engag Sci, Technol, Soc 2016; 2:248 265.

48. Torous J, Andersson G, Bertagnoli A, *et al.* Towards a consensus around standards for smartphone apps and digital mental health. World Psychiatry 2019; 18:97.

49. Soares N, Dewalle J, Marsh B. Utilizing patient geographic information system data to plan telemedicine service locations. J Am Med Inform Assoc 2017; 24:891 896.

50. Perkins D, Farmer J, Salvador Carulla L, *et al.* The Orange Declaration on rural and remote mental health. Austr J Rural Health 2019; 27:374 379.

51. Pithara C, Farr M, Sullivan SA, *et al.* Implementing a digital tool to support shared care planning in community based mental health services: qualitative evaluation. J Med Internet Res 2020; 22 e14868.

52. The Lancet. Is digital medicine different? Lancet (London, England) 2018; 392:95.

53. Lancet Psychiatry. Digital health: the good, the bad, and the abandoned. Lancet Psychiatry 2019; 6:273.

54. World Health Organization. (2008) mhGAP: Mental Health Gap Action Programme: scaling up care for mental, neurological and substance use disorders. Geneva: World Health Organization. https://apps.who.int/iris/handle/10665/43809

55. Patel V. The future of psychiatry in low and middle income countries. Psychol Med 2009; 39:1759 1762.

56. Frank JR, Danoff D. The CanMEDS initiative: implementing an outcomes based framework of physician competencies. Med Teach 2007; 29:642 647.

57. Layard R, Clark DM. Thrive: the power of evidence based psychological therapies. UK: Penguin; 2014.

58. Atif N, Nisar A, Bibi A, *et al.* Scaling up psychological interventions in resource poor settings: training and supervising peer volunteers to deliver the 'Thinking Healthy Programme' for perinatal depression in rural Pakistan. Global Mental Health 2019; 6 e4, 1 10.

59. Curtis J, Newall HD, Samaras K. The heart of the matter: cardiometabolic care in youth with psychosis. Early Interv Psychiatry 2012; 6:347 353.

60. ■ Bhugra D, Tasman A, Pathare S, *et al.* The WPA Lancet psychiatry commission on the future of psychiatry. Lancet Psychiatry 2017; 4:775 818.

This article has contributed significantly to prioritise key aspects of mental health care design for the future. However, to transfer priorities into actionable local implementation, the Lancet report should be followed by a series of practical steps.

61. Montagni I, Salvador Carulla L, Mcdaid D, *et al.* The REFINEMENT glossary of terms: an international terminology for mental health systems assessment. Admin Policy Mental Health Mental Health Serv Res 2018; 45:342 351.

62. Rosenberg S, Salvador Carulla L, Hickie I, Mendoza J. Stepped mental healthcare model leading Australia astray. Australas Psychiatry 2020; Accepted for publication on 18 April 2020.

63. Rosen A, Mezzina R, Shiers D. Correspondence: the future of psychiatry commission. Lancet Psychiatry 2018; 5:16 17.

64. Furst MA, Gandré C, López Alberca CR, Salvador Carulla L. Healthcare ecosystems research in mental health: a scoping review of methods to describe the context of local care delivery. BMC Health Serv Res 2019; 19:173.

65. Chandra PS, Chand P. Towards a new era for mental health. Lancet 2018; 392:1495 1497.
66. Rosen A, Rosen T, McGorry P. The human rights of people with severe and persistent mental illness: can conflicts between dominant and nondominant paradigms be reconciled? In: Dudley M, Silove D, Gale F, editors. Mental health and human rights: vision, praxis, and courage, 1st ed. Oxford: Oxford University Press; 2012. pp. 297 320.
67. Mezzich JE, Salloum IM, Cloninger CR, *et al.* Person centred integrative diagnosis: conceptual bases and structural model. Can J Psychiatry 2010; 55:701 708.
68. Eisenberg L, Guttmacher LB. Were we all asleep at the switch? A personal reminiscence of psychiatry from 1940 to 2010. Acta Psychiatr Scand 2010; 122:89 102.
69. Djulbegovic B, Elqayam S, Dale W. Rational decision making in medicine: implications for overuse and underuse. J Eval Clin Pract 2018; 24:655 665.
70. Rosen A. The 'Quintuple Whammy' model of complexity of severe & enduring mental illness. Sydney, Australia: New South Wales State Parliamentary Forum, Catholic Social Services; 2014.
71. United Nations. Convention on the rights of persons with disabilities, adopted on 13 December 2006, GA Res 61/106, UN Doc A/Res/61/106 (entered into force 3 May 2008). New York; 2006. Available from: https //www.un.org/development/desa/disabilities/convention on the rights of persons with disabilities.html. Accessed 06 May 2020.
72. World Health Organization. WHO quality rights initiative improving quality, promoting human rights. Geneva: World Health Organization; 2019. Available from: https //www.who.int/mental health/policy/quality rights/en/. Accessed 06 May 2020.
73. De Girolamo G, McGorry PD, Sartorius N. Age of onset of mental disorders: etiopathogenetic and treatment implications. Cham: Springer; 2018.
74. Byrne P, Rosen A. Early intervention in psychiatry: EI of nearly everything for better mental health. Oxford: John Wiley and Sons; 2014.
75. Rosen A, Byrne P, Goldstone S, McGorry P. Early intervention for better mental health services. In: Tasman A, Kay J, Lieberman J, *et al.,* editors. Psychiatry. New York: John Wiley and Sons; 2014. pp. 1 20.
76. Jeste DV, Palmer BW. Positive psychiatry: a clinical handbook. Arlington, VA: American Psychiatric Publication; 2015.
77. Rosen A. Mental health services: evidence based components in the continuum of care. In: Mendoza J, Elson A, Gilbert Y, *et al.,* editors. Obsessive hope disorder: reflections on 30 years of mental health reform in Australia and visions for the future. Caloundra: BJN Graphic Design; 2013. pp. 239 251.
78. Johnson S, Lloyd Evans B, Howard L, *et al.* Where next with residential alternatives to admission? Br J Psychiatry 2010; 197(S53):s52 s54.
79. Chung TE, Gozdzik A, Palma Lazgare LI, *et al.* Housing first for older homeless adults with mental illness: a subgroup analysis of the at home/Chez Soi randomized controlled trial. Int J Geriatr Psychiatry 2018; 33:85 95.
80. Bond GR, Drake RE, Becker DR. An update on randomized controlled trials of evidence based supported employment. Psychiatr Rehab J 2008; 31:280.
81. Rosen A. Presidential invited lecture. American Psychiatric Association, Annual Meeting; San Francisco, CA; 2019.
82. McFarlane WR. Family interventions for schizophrenia and the psychoses: a review. Fam Process 2016; 55:460 482.
83. Bergstrom T, Seikkula J, Alakare B, *et al.* The family oriented open dialogue approach in the treatment of first episode psychosis: nineteen year outcomes. Psychiatry Res 2018; 270:168 175.
84. Senge PM. The fifth discipline fieldbook: strategies and tools for building a learning organization. Crown Bus 2014.
85. Ranmuthugala G, Plumb JJ, Cunningham FC, *et al.* How and why are communities of practice established in the healthcare sector? A systematic review of the literature. BMC Health Serv Res 2011; 11:273.
86. Perkins R, Meddings S, Williams S, Repper J. Recovery colleges 10 years on. Nottingham: ImROC; 2018.
87. Shiers D, Smith J. Early intervention and the power of social movements: UK development of early intervention in psychosis as a social movement and its implications for leadership. In: Rosen A, Byrne P, editors. Early intervention in psychiatry: EI of nearly everything for better mental health. Oxford: John Wiley and Sons; 2014.
88. Miller V, Rosen A, Gianfrancesco P, Hanlon P. Australian national standards for mental health services: a blueprint for improvement. Int J Leadersh Publ Serv 2009; 5:25 42.
89. Garcia Alonso CR, Almeda N, Salinas Pérez JA, *et al.* Relative technical efficiency assessment of mental health services: a systematic review. Adm Policy Mental Health Mental Health Serv Res 2019; 46:429 444.