

The environmental determinants of Mental Health

Headway - A new roadmap in Mental Health Forum - Brussels | 28Sep2022

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Outline

Let's get started

- Inter-connections of Mental health and SDGs
- Mental Health Burden
- Climate change and mental health
- Pathways of Environmental threats
- Policy and Research implications





The Inter-connection between social determinants of mental health, human security and SDGs



Social determinants of mental disorders and the Sustainable 🐧 📵 Development Goals: a systematic review of reviews



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Mental health has been included in the UN Sustainable Development Goals. However, uncertainty exists about the catent row which the major social determinants of mental disorders are addressed by these goals. The aim of this study \$237-59 was to develop a conceptual framework for the social determinants of mental disorders that is aligned with the Alan Product Control for P Sustainable Development Goals, to use this framework to systematically review evidence regarding these social Ment determinants, and to identify potential mechanisms and targets for interventions. We did a systematic review of reviews using a conceptual framework comprising demographic, economic, neighbourhood, environmental events, Geptown, tooth Africa and social and culture domains. We included 289 articles in the final Review, This study sheds new light on how the (Prof Clond PtG. Sustainable Development Goals are relevant for addressing the social determinants of mental disorders, and how these goals could be optimised to prevent mental disorders.

all United Nations member states in 2015, represent an of mental disorders. Although the SDGs set out to ambitious plan for sustainable human development by address several pressing global challenges—such as requirements the year 2030. In a departure from the Millennium violence, climate change, displacement, and income see Development Goals, mental health and wellbeing are inequality—little is known about the extent to which Gape Town, South Africa specifically addressed under SDG 3, which emphasises addressing these challenges might prevent or reduce the the inclusion of mental health care in universal health burden of specific mental disorders. coverage. The acknowledgment of mental health in the This study had two purposes: first, to develop a SDGs is important, since the global human suffering and preliminary conceptual framework for the social financial costs associated with mental disorders are determinants of mental disorders that is aligned with the productivity of affected individuals and families, as shown mental disorders, with a view to identifying potential in a recent return on investment analysis.4

determinants of mental disorders 1

unlikely to be relieved by improved access to mental development of mental disorders in populations. health treatments alone. 4 In the words of the final report of the WHO Commission on the social determinants of Conceptual framework

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countries, regarding the socioeconomic and violence. Psychology and Neuros The Sustainable Development Goals (SDGs), endorsed by related factors that should be targeted for the prevention

substantial and growing.23 Investments in mental health SDGs; and second, to use this framework to systematically Neuroscience, Sungatore, care have the potential to increase the capabilities and review evidence regarding the social determinants of testa great mechanisms and targets for interventions that address Busa However, there is growing global evidence that these determinants. This task requires the collection of Economica Nairota, Kenya mental disorders in populations are strongly socially available research literature on social determinants of (Hausholes; Orygen, determined. The social determinants of mental disorders mental illness across the life course from low-income, are the social and economic conditions that have a direct middle-income, and high-income countries. Such an influence on the prevalence and severity of mental approach has the potential to increase alignment between Meetaliisalin, The University disorders in men and women across the life course. For the SDGs and reductions in the burden of mental example, adverse social and economic circumstances, disorders, and suggest possibilities for action across a including poverty, income inequality, interpersonal and range of sectors. It might also reveal potential mechanisms collective violence, and forced migration, are key of interaction between socioeconomic factors and mental Amsterdam, Netherlands disorders. This, in turn, could provide an opportunity to Miontars): Department of Because mental disorders are so strongly socially shape the existing strategies for poverty alleviation and determined, the global burden of these disorders is violence reduction set out in the SDGs to prevent the gameted at Pote-Akee

health in 2008: "Why treat people only to send them back. We developed a novel conceptual framework that a course, send them back. to the conditions that made them sick in the first place?" summarised the major social determinants of mental Motte National Institute of In this context, the SDGs have the potential to reduce the health disorders and linked them with the SDGs. First, Tsychatry, Mosto, Most burden of mental disorders at the population level by we identified the key domains of the social determinants addressing their upstream social determinants. For this of mental disorders, on the basis of available on canada (EmorganMPM): reduction to occur, greater clarity is needed on which explorations of control transportations of the social determinants to target and how they are aligned neighbourhood, environmental events, and social and culture domains. The definitions of these domains are culture domains. The definitions of these domains are reduction to occur, greater clarity is needed on which epidemiological data, namely: demographic, economic, Centre for Chistand Adote To date, there is very little consolidated evidence, stated in the panel. These domains were based on madas Nigeria particularly from low-income and middle-income previous conceptual work that we had done on the social (Port Octoposan PMOP project



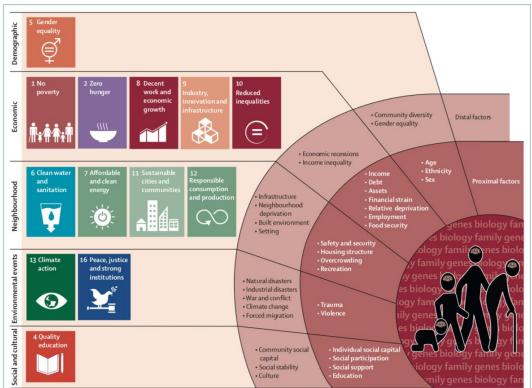


Figure 6: Social determinants of global mental health and the Sustainable Development Goals?

The burden of mental disorders

An invisible burden

- Mental, neurological and substance abuse disorders burden continues to grow, impacting health and major social, human rights and economic consequences, globally (WHO, 2021)
- They significantly **contribute** more **to disability rates** than any physical health condition globally (Whiteford et al., 2015) and can be **extremely costly** to the individual, their households, their communities and health care systems (Insel, 2008).
- They often have a **chronic-recurrent course** despite treatment (Leon et al., 2005) and rank among the most substantial **causes of death** worldwide (Walker et al., 2015).
- The treatment gap for these disorders is **huge** (MhGAP)

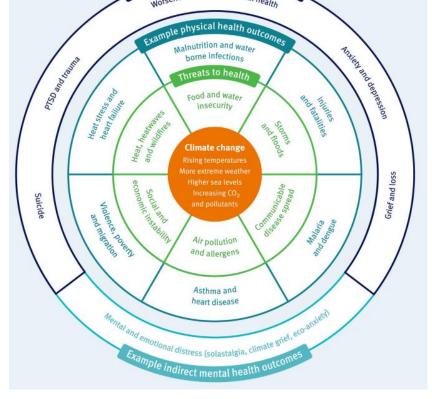




Climate change and Mental health

What we already know

- Globally, climate change is negatively affecting mental health and psychosocial wellbeing across population groups, with different impacts.
- Clear evidence between effects of climate change (e.g. extreme weather events, increased heat, forced displacement) and the development or worsening of mental disorders. Also, can disrupt the provision of care.
- Vulnerability factors will exacerbate these impacts (e.g. physical and mental co-morbidity, disability, gender and age groups, social determinants)



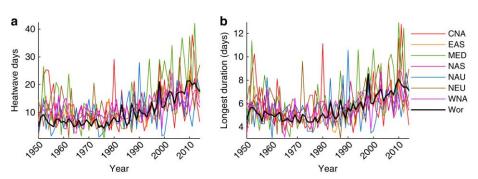
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Grantham Briefing paper No 36 May 2021 Image adapted by World Innovation Summit for Health report: "Health In The Climate Crisis: A Guide For Health Leaders" (2020) and the Centers for Disease Control and Prevention (CDC) "Climate effects on health" (2020).



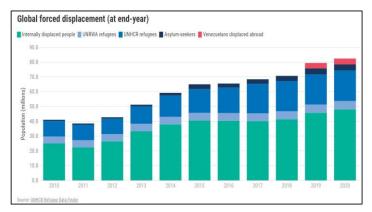
Environmental threats and Mental health impacts

Who are at risk?



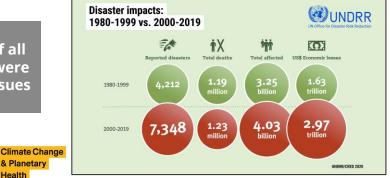
Trends in heatwave frequency, duration and cumulative heat have accelerated since the 1950s Perkins-Kirkpatrick, Nature comm, 2021

& Planetary



An important consequence of disasters: forced displacement (FD). Global rates have increased rapidly UNHCR, 2021

2008 - 2017 (84%) of all recorded disasters were related to climate issues







Between 1980 and 2017, disasters cost the EU more than 90,000 lives and over €500 billion of economic losses European Civil Protection and Humanitarian Aid Operations, 2018

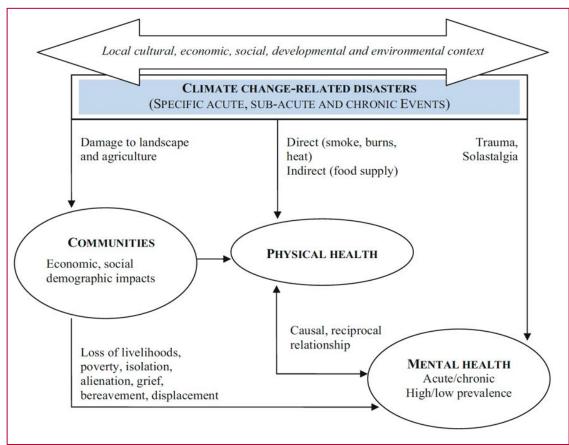
Climate change events and Mental health - Pathways

Berry et al (2010) categorise climate change related hazards into:

• **Acute**: floods, hurricanes, etc

• **Sub-acute**: pervasive droughts

Chronic: rising sea-levels, increasing temperatures

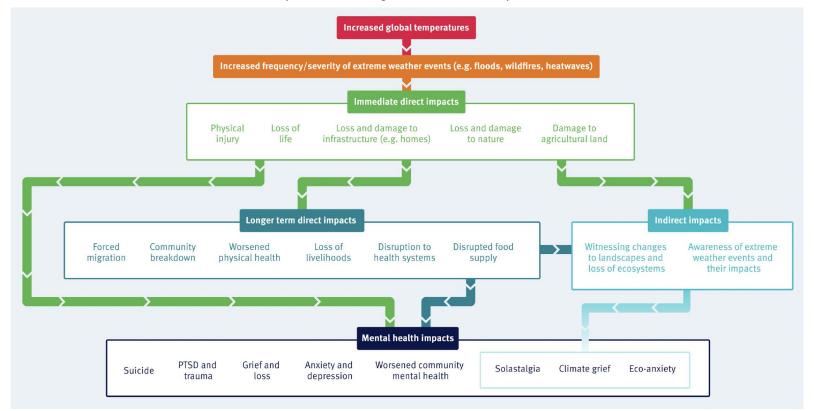








Extreme weather events pathways and impacts on MH







Other relevant exposures and mental disorders

Some examples

Pesticides

Organophosphate pesticide exposure with **anxiety** and **depression** (Harrison et al., 2016)

Air Pollution

Schizophrenia / Psychosis with air suspended particle concentrations (Yackerson et al., 2014)

• Endocrine Disruptors

Prenatal BPA exposure with higher **anxiety, hyperactivity and depression** scores (Evans et al., 2014, Perera et al., 2016)

Metals

Pb exposure and increased odds of major depression/panic disorder (Bouchar et al., 2009)









What can be done?

Implications for policy and research

Decision making process must include the cost of **mental health burden**

Strengthen existing **research networks** - key stakeholders' **collaborations**

Prioritise successful adaptation and mitigation strategies: co-benefits

Targeted research – Identifying and scaling-up successful interventions

Implement evidence-based strategies

Vulnerable groups → Address structural inequities, social determinants and tailor interventions to their needs

Increase awareness and preparedness at public level.

Individual efforts / self-care is not enough: Promote and engage collective action







"Climate change is like no other environmental problem that humanity has ever faced...requires such a strong interdisciplinary knowledge base to tackle; research to support effective policymaking and other actions must cut across the full range of natural sciences, social sciences, and humanities..."

The Oxford handbook of Climate Change and Society, 2011



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