

## **The Social Determinants of Mental Health, the Pandemic and Social Justice**

Rob Poole, Sadia Nafees

المحددات الاجتماعية للصحة العقلية والوباء والعدالة الاجتماعية

روب بُول، سعدية نَفِيس

### **Abstract**

The SARS-CoV-2 (COVID-19) pandemic has highlighted the central importance of social determinants of health to human welfare. This highly infectious disease has followed well-recognized patterns whereby people who have poor personal and financial resources are most at risk of contracting the disease, and of experiencing poor outcomes, including death, when they do. Unless action is taken across the world, the long-term socio-economic consequences of the pandemic are likely to lead to a wave of mental illness, as it is now well established that disorders such as psychosis are strongly associated with childhood exposure to disadvantage, and that the association is probably causal. There is good reason to believe that action to reduce inequality will mitigate this risk. Inequalities apply both within nations and between nations. Disadvantage aggregates in such a way that disasters such as the Beirut Harbor explosion of August 2020 particularly affect populations already struggling with multiple health challenges. Psychiatrists should take a role in promoting better public mental health by emphasizing the relationship between social injustice and poor mental health to employers, policy makers and the public.

**Keywords:** mental health, social determinants, social justice, pandemic, inequality

**Declaration of interest:** None

### **Introduction**

Over the last few decades, it has been convincingly demonstrated that inequality, social justice, and health (physical and mental) are intimately connected and cannot be separated.<sup>1,2</sup> It has been known for two hundred years that psychosis particularly affects people living in urban poverty. Throughout most of the twentieth century, psychiatry tended to see the relationship between mental illness, poverty and social inequality as an association that had to be controlled for in order to understand supposedly more fundamental causal factors, such as genetics. More recently, social conditions, particularly those experienced during childhood, have emerged as likely causal factors for mental disorders of all types.<sup>3</sup> In high income countries, it is well established that growing up in urban poverty or as part of an ethnic minority are major independent risk factors for developing psychosis in adulthood.<sup>4</sup> Although the evidence is not complete (as it never can be), we have known enough for some time to justify action to prevent psychosis through public health measures.<sup>5</sup> It is important to recognize that the greatest burden of mental health morbidity lies within Low- and Middle-Income Countries (LMIC), and that the public health imperative for greater equality transcends national boundaries.

Since the emergence of the COVID-19 pandemic, a massive global research effort has been mounted to

understand the virus and to develop technical means of preventing its spread. At the time of writing, it is a task that is by no means complete. Similarly, within mental health, it has been important to understand the immediate mental health consequences of the pandemic, such as the neuropsychiatric complications of COVID-19 infection and the psychological impact of lockdowns, bereavement and trauma (especially for health personnel and children). However, the longer-term risk of persistent and wide scale global public health problems related to increases in inequality between social groups and between nations/regions are equally as important.

The known effects of inequality mean that if we fail to act there are likely to be long-term increases in incidence and prevalence of major mental illness, particularly psychosis. In a worse-case scenario, this could mimic the early 19th century epidemic of mental illness that accompanied the industrial revolution and overwhelmed the European care facilities of the time. That epidemic led to the establishment of European mental hospitals and the birth of modern psychiatry. On this occasion, the population affected would likely be much larger, akin to a mental health pandemic. Set against this gloomy prospect is the fact that this is not inevitable. There are realistic measures that can mitigate such an outcome, but it will require a major international effort to avoid it. Psychiatrists across

the world can be effective agents to prevent it if they chose to be.

## **Social determinants of health**

Many commentators have expressed a hope that the convulsive effects of the COVID-19 pandemic will allow the world to reboot; to remake itself as a more just, equal and rational place. The World Health Organization (WHO) defines Social Determinants of Health (SDH) as “conditions in the places where people live, learn, work, and play that affect a wide range of health risks and

outcomes”.<sup>6,7</sup> SDH profoundly affect the health of individuals and societies. All major international and regional public health organizations recognize the importance of SDH in addressing the challenges posed by both chronic non-communicable diseases and communicable disease crises, including the evolving global 2020 pandemic.

## **The pandemic**

The current world crisis has illuminated the importance of SDH. Social inequality and injustice are not the sole cause, but they are the primary determinants of who is most likely to suffer and die from COVID-19-related illness. Low, middle- and high-income countries all confront the same reality, that the patterns of the burden of COVID-19 closely map social inequalities.<sup>8</sup>

In high income countries (HICs), where we have the best data, the poorest section of the urban population and people belonging to ethnic minorities face the highest risk of infection and, once infected, of death. Crowded living spaces, multigenerational living arrangements and poor working conditions contribute to further stress related to lockdowns and social distancing.<sup>9</sup> Obesity, diabetes and smoking-related diseases are COVID-19 mortality risk factors and are highly correlated with poverty in HICs.<sup>9-11</sup> Old age is the only major general population mortality risk factor that is not closely associated with low income.

Although data is not available from all parts of the world, it is almost certain that similar factors operate in Low- and Middle-Income Countries (LMICs), especially in those settings where structural health inequalities are exacerbated by armed conflict and socio-economic dislocation.

The suggestion that the pandemic is a great leveler has been discredited. As the situation has progressed, it has exposed fault lines in the fabric of societies across the world.<sup>12</sup> In the UK, a report by the Office for National Statistics (ONS) of COVID-19 mortality rates by area level of deprivation<sup>13</sup> shows a clear social gradient. Mortality is proportional to area deprivation. Similar trends can be seen in other countries.<sup>14</sup> Even Sweden, one of the most equal of HICs, conforms to the pattern. In Stockholm, the infection rate was found to be 3-4 times higher in socioeconomically disadvantaged areas compared to the regional average.<sup>9</sup>

## **Public Mental Health**

The UK’s 2020 Marmot review<sup>15</sup> concluded that political policies of austerity had very likely contributed to worsening health inequalities. Consequently, the UK faced the pandemic with already struggling health and social services. UK ONS analyses suggest that over half of cases in people of African, Pakistani and Bangladeshi background can be attributed to multiple deprivation,<sup>13</sup> rather than genetic or cultural factors. Similar issues affect other high-income countries. In the United States, black people form 13% of the population, but CDC reported that they make up 28% of COVID-19 cases and 33% of hospitalizations. Hispanic/Latino and other disadvantaged groups are similarly overrepresented.<sup>8,16-18</sup>

Societal responses, such as lockdown and work from home, amplify health and social inequalities, including job and food insecurity.<sup>19</sup> Whilst almost everyone welcomes the huge global effort to develop COVID-19 vaccines, these less well publicized SDHs create a public health imperative. We need to reduce inequalities and achieve greater health equity. This should have been recognized by governments long ago with regard to chronic diseases, including mental illness, in HICs and LMICs alike.<sup>1,2</sup>

Marmot describes a paradox whereby health ministers have responsibilities for health and health services but lack authority to address the key determinants of health. The WHO has a similar dilemma as it is governed by national ministers of health. Improvements in health

require universal health coverage and, critically, improvement in the conditions in which people are born, grow, live, work and age.<sup>20</sup> This applies everywhere.

## Prevention of mental disorders and of infection

In psychiatric practice, we focus on individual-level risk factors, biological and psychological. The same factors are seen to be relevant to doctors treating COVID-19 infection. In both cases, a neglect of SDHs limits the effectiveness of prevention and mitigation measures.<sup>21</sup> The living circumstances of marginalized groups increase disease burden in terms of risk of developing the disorder and of experiencing poor outcomes. Effective and equitable interventions can only be designed and implemented if their design takes the social origins of disease into account and prioritizes those populations most at risk.

Awareness of regional, cultural, linguistic and ethnic diversity are relevant when planning effective responses to COVID-19 and its likely mental health sequelae. We

know that addressing the SDH can help avert the societal costs in LMICs and mitigate infrastructural insufficiencies in health systems.<sup>22,23</sup> The Ebola crisis in Africa highlighted this, whereby a sudden rise in cases can cripple a fragile health system.<sup>24-26</sup> The effectiveness of an early response in mitigating the current pandemic amongst the lower socioeconomic groups was evident in a study reported from China.<sup>27</sup> The National Healthcare Security Administration and Ministry of Finance levied all out-of-pocket medical expenses for patients confirmed to have COVID-19 (later applied to all suspected cases). The removal of a perverse financial barrier to medical treatment also prevented the amplifying consequences of impoverishment. There are lessons concerning the similar barriers to mental health care, which can have long-term health consequences for the individual and for those close to them, particularly their children.

## What should psychiatrists do?

We cannot expect a massive transnational change in public and policy thinking about health unless we, the health professions, are effective in promoting an approach that emphasizes social justice, cooperation between social and health sectors, and the applicability of the public health lessons of the pandemic to all areas of human health, including mental health.<sup>23,28</sup>

The penalty of failure will be harsh. Unless coordinated responses can be organized by international bodies, the world is unlikely to escape disasters such as major famines in the short- to medium-term. In the longer-term, a sharp increase in destitution appears likely for a significant proportion of people in HICs and, to a greater extent, in LMICs. Timely action to address social determinants and improved accessibility of basic health care are critical. Inaction now will have long-term consequences.<sup>27</sup> These changes are not utopian dreams. Spending on biomedical health interventions is considerably less effective in improving health than measures that address SDH. The United States illustrates this. The USA has some of the worst overall population health indices amongst HICs despite very high spending on health care (17.7% of GDP in 2018 versus OECD average 8.8%).<sup>29,3</sup>

It seems clear that change will not happen spontaneously. So far, the evidence about 2020 suggests that deep seated inequalities have been amplified. In some parts of the Arab world, such as Syria and Yemen, the pandemic has

been worsened by conflict and displacement. The huge explosion in Beirut in August 2020 illustrated how misfortune aggregates. A country with a strong case to be considered one of the birthplaces of civilization has suffered from the effects of regional conflict, and economic and political crises. These problems have made responses to the pandemic more difficult to organize. The explosion did not occur when and where it did by chance. It was a consequence of a series of prior misfortunes.<sup>31</sup> The tendency for disadvantage to aggregate affects countries and individuals alike. Those parts of the world most likely to see a sharp increase in mental illness due to the pandemic in years to come are those areas where mental health care has long been scarce.

If we are going to mitigate the risk of a global mental illness crisis, hoping for the best is not enough. Psychiatrists must take the lead in pressing for action in the interests of public mental health. Inequality and social justice must be understood as public health priorities as well as political issues. Political and economic tolerance of increases in poverty (as has been seen in the UK since 2010) are false economies.<sup>12</sup>

'Health Equity in England: The Marmot Review 10 Years On'<sup>15</sup> painted an alarming picture in the run-up to the pandemic. Over 10 years there had been a slowdown in the increase in life expectancy; worsening inequalities in life expectancy between more and less deprived areas; and

a decline in life expectancy in women in the most deprived areas.<sup>15</sup> By way of comparison, much of London was bombed during World War II and those who survived were traumatized. The war was followed by a period of economic austerity. Nonetheless, that UK generation was

healthier than their predecessors, because the effect of their traumatic experiences was outweighed by an increase in social equality and welfare provision. It is shameful that UK health gains made in the 1940s are threatened in 2021.

## Conclusions

Like all medicine, psychiatry should be about relieving human suffering. Providing effective care for people with mental illness is an important and legitimate part of what we do. For most branches of medicine, from gerontology to pediatrics, prevention is understood to be a priority of equal importance. For a variety of reasons, psychiatry has been persistently negative about the prevention of mental illness. Even where the desirability of achieving it is acknowledged, it is often dismissed as idealistic and unattainable. All prior assumptions have been stood on their head during 2020, and there is a new global emphasis on using public health measures to save lives and to keep

nations functioning. Psychiatrists must take their place in the effort to prevent mass mental health casualties due to the socio-economic aftermath. We must articulate the case for treatment and for social justice as the two irreducible components of a mental health strategy. We must argue this case to our employers, within our professional organizations and to policy makers. We have no vaccines, but neither did John Snow when he ended a 19<sup>th</sup> Century cholera epidemic in Soho, London by removing the handle from the Broad Street pump.<sup>32</sup> Like him, we should argue that social conditions can and should be changed to protect and improve health, including mental health.

## References

1. Wilkinson RG, Pickett K. *The Spirit Level: Why More Equal Societies Almost Always Do Better*: Allen Lane; 2009.
2. Marmot M. *The Health Gap: The Challenges of an Unequal World*. 1st ed. London: Bloomsbury Publishing; 2015 10-09-2015. 400 p.
3. Murray RM. Mistakes I Have Made in My Research Career. *Schizophren Bull*. 2016;43(2):253-6.
4. Pearce J, Rafiq S, Simpson J, Varese F. Perceived discrimination and psychosis: a systematic review of the literature. *Soc Psychiatry Psychiatr Epidemiol*. 2019;54(9):1023-44.
5. Poole R, Higgs R, Robinson CA. *Mental Health and Poverty*: Cambridge University Press; 2013.
6. World Health Organization. *About Social Determinants of Health*. 2020.
7. Bukhman G, Mocumbi AO, Atun R, Becker AE, Bhutta Z, Binagwaho A, et al. The Lancet NCDI Poverty Commission: bridging a gap in universal health coverage for the poorest billion. *The Lancet*. 2020;396(10256):991-1044.
8. Macharia PM, Joseph NK, Okiro EA. A vulnerability index for COVID-19: spatial analysis at the subnational level in Kenya. *BMJ Glob Health*. 2020;5(8):e003014.
9. Burström B, Tao W. Social determinants of health and inequalities in COVID-19. *Eur J Public Health*. 2020;30(4):617-8.
10. Jordan RE, Adab P, Cheng KK. COVID-19: risk factors for severe disease and death. *BMJ*. 2020;368:m1198.
11. Sommer I, Griebler U, Mahlknecht P, Thaler K, Bouskill K, Gartlehner G, et al. Socioeconomic inequalities in non-communicable diseases and their risk factors: an overview of systematic reviews. *BMC Public Health*. 2015;15(1):914.
12. Marmot M, Allen J. COVID-19: exposing and amplifying inequalities. *J Epidemiol Community Health*. 2020;74:681-2.
13. Office for National Statistics. *Deaths involving COVID-19 by local area and deprivation*. London 2020.
14. Cox C. *Older Adults and Covid 19: Social Justice, Disparities, and Social Work Practice*. *J Gerontol Soc Work*. 2020:1-14.
15. Marmot M. Health equity in England: the Marmot review 10 years on. *BMJ*. 2020;368:m693.
16. Dorn Av, Cooney RE, Sabin ML. COVID-19 exacerbating inequalities in the US. *The Lancet*. 2020;395(10232):1243-4.
17. Centres for Disease Control and Prevention. *Demographic Trends of COVID-19 cases and deaths in the US reported to CDC*. US Government 2020.
18. Whitehead M, Barr B, Taylor-Robinson D. COVID-19: we are not “all in it together”—less privileged in society are suffering the brunt of the damage. *BMJ Opin*. 2020.
19. Connors C, Malan L, Canavan S, Sissoko F, Carmo M, Sheppard C, et al. *The lived experience of food insecurity under COVID-19: A Bright Harbour Collective Report for the Food Standards Agency*. In: Agency FS, editor. 2020.

20. Marmot M, Allen J. Health priorities and the social determinants of health. *EMHJ-East Mediterr Health J.* 2015;21(9):671-2.
21. Afifi RA, Novak N, Gilbert PA, Pauly B, Abdulrahim S, Rashid SF, et al. 'Most at risk' for COVID19? The imperative to expand the definition from biological to social factors for equity. *Prev Med.* 2020;139:106229.
22. Ataguba JE. COVID-19 Pandemic, a War to be Won: Understanding its Economic Implications for Africa. *Appl Health Econ Health Policy.* 2020;18(3):325-8.
23. Ataguba OA, Ataguba JE. Social determinants of health: the role of effective communication in the COVID-19 pandemic in developing countries. *Global Health Action.* 2020;13(1):1788263.
24. Kruk ME, Myers M, Varpilah ST, Dahn BT. What is a resilient health system? Lessons from Ebola. *The Lancet.* 2015;385(9980):1910-2.
25. Kieny M-P, Evans DB, Schmets G, Kadandale S. Health-system resilience: reflections on the Ebola crisis in western Africa 2014; 92(850).
26. O'Hare B. Weak health systems and Ebola. *The Lancet Global Health.* 2015;3(2): e71-e2.
27. Wang Z, Tang K. Combating COVID-19: health equity matters. *Nature Medicine.* 2020;26(4):458-.
28. Smith JA, Judd J. COVID-19: Vulnerability and the power of privilege in a pandemic: Australian Health Promotion Association; 2020.
29. Centers for Medicare and Medicaid Services. National Health Expenditure Data. USA: US Gov; 2019.
30. Tikkanen R, Abrams, MK. US health care from a global perspective: higher spending, worse outcomes? USA: The Commonwealth Fund; 2020.
31. Abouzeid M, Habib RR, Jabbour S, Mokdad AH, Nuwayhid I. Lebanon's humanitarian crisis escalates after the Beirut blast. *The Lancet.* 2020.
32. British Society for Immunology. John Snow's pump (1854). 2020 [cited 2020 23 Oct.]; Available from: <https://www.immunology.org/john-snows-pump-1854>

## المخلص

ان جائحة كورونا المتحورة لعام 2019 قد كشفت عن الأهمية المركزية للمحددات الاجتماعية للصحة ورفاهية الناس. هذا المرض شديد العدوى قد اتبع نمط مميز بشكل خاص حيث ان الاناس ذوي المصادر الشخصية المالية الصغيرة كانوا هم الأكثر عرضه للإصابة بالمرض وتكون خبراتهم بالمخرجات ضعيفة، ويشمل الوفاة. مالم يتم اتخاذ عمل عبر العالم فان العواقب الاجتماعية الاقتصادية طويلة الأمد للجائحة على الاغلب ستؤدي الى موجة من المرض النفسي، وقد أصبح من الثابت الان ان الاضطرابات كالذهان ترتبط بقوة مع التعرض لمحن الطفولة، وأن هذه العواقب ربما تكون سببيه. هناك سبب جيد للاعتقاد ان العمل لتخفيف عدم العدالة سوف يخفف من هذه الخطورة. عدم العدالة تكون في الدولة الواحدة وبين الدول، المساوي سوف تتفاقم بطريقة ان الكوارث مثل تفجير مرفأ بيروت في آب/أغسطس 2020 قد أثر بشكل خاص على السكان الذين يصاروا العديد من التحديات الصحية النفسية. الأطباء النفسيين يجب ان يأخذوا دوراً في الترويج للصحة النفسية العامة ومن الأفضل التركيز على العلاقة بين عدم العدالة الاجتماعية وضعف الصحة النفسية، وذلك لأصحاب العمل وصانعي السياسات والقرارات والجمهور.

## Corresponding author

**Professor Rob Poole**, Professor of Psychiatry, Centre for Mental Health and Society, Bangor University - UK

Email: [r.poole@bangor.ac.uk](mailto:r.poole@bangor.ac.uk)

## Authors

**Dr Sadia Nafees**, Research Officer, Centre for Mental Health and Society, Bangor University - UK

**Professor Rob Poole**, Professor of Psychiatry, Centre for Mental Health and Society, Bangor University - UK