

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS



Issue date
July 2021

Key Findings:

Number of indirect health impacts projects:

1,135

Funding investments (known funding amounts):

\$203m

Top funder:

NIH

Indirect health impacts

To date, the COVID-19 pandemic has claimed over a million lives and devastated health systems across the globe (1) (2). However, the true scale of the impact of this pandemic remains underestimated as a result of limited evidence on the indirect health impacts secondary to the global pandemic response. Public health interventions (PHIs) instituted to control the spread of COVID-19 have led to disruptions in healthcare delivery, potentially worsening outcomes of other disease conditions, as witnessed in the 2014-2016 West Africa Ebola outbreaks (3). Indeed, there have similarly been projections of devastating consequences for reproductive, maternal and child health and non-communicable diseases (4)(5). Further, the wider negative socio-economic implications of lockdowns which exacerbate poverty, particularly in less-resourced countries, intersect with other social determinants of health to promote adverse disease outcomes. Here, we present the scope of funded research activity focussed on the indirect health impacts of COVID-19, drawing on evidence from the nine-month update of the Living Mapping Review (LMR) of COVID-19 funded research projects and the UKCDR/GLOPID-R [COVID-19 Research Project Tracker](#).

Methodology

Descriptive and thematic analysis were done as outlined in the LMR study protocol. Projects focusing on indirect health impacts of COVID-19 were identified. This includes projects assessing the disruptions of healthcare services, neonatal, maternal and child health impacts, non-communicable diseases, other chronic disease conditions and mental health. Key funders, funding amounts country distribution of projects specific research focus and study populations targeted were determined.

Findings

Locations, funders and funding amounts

The 1,135 projects focusing on indirect health impacts of COVID-19 were funded by 117 funders with an investment of at least \$203m. National Institutes of Health (NIH) funded the most projects followed by UK Research and Innovation (UKRI) and NSF (Figure 1). Research involved at least one of 65 countries including 12 Least Developed Countries and 11 Low-and middle-income countries. The majority of research projects were in High-income countries as shown in Figure 2.

Figure 1: Funders of projects focusing on indirect health impacts (top 10 funders shown)

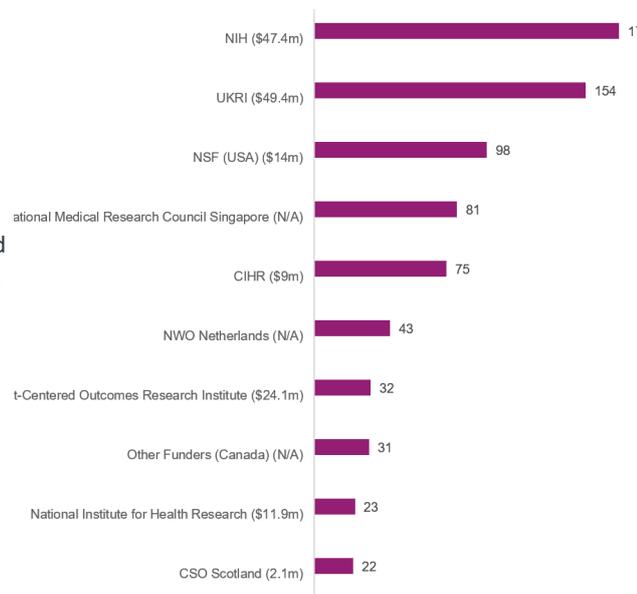
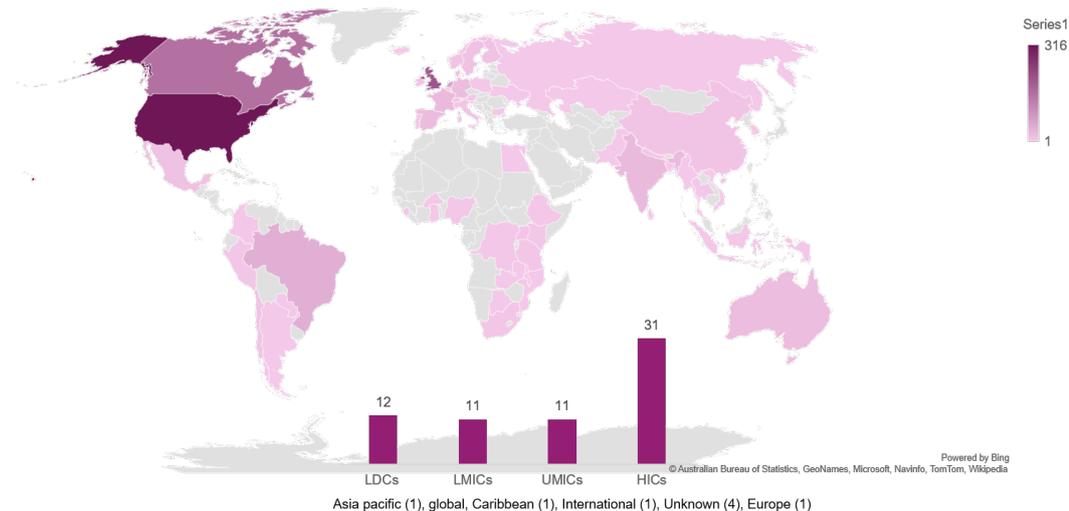


Figure 2: Locations of projects focusing on indirect health impacts of COVID-19



Research focus and WHO research priorities

Most projects identified assess the mental health impacts of COVID-19 with fewer projects involving Reproductive Maternal Newborn and Child Health (RMNCH), Non-communicable diseases (NCDs) and infectious diseases as seen in Figure 3. Some projects assessed the general impact of the pandemic on healthcare quality, utilization and access whereas those classified as “other” included projects exploring health behaviour change such as changes to diet and physical activity. The impact of COVID-19 on HIV care was the most common focus under infectious diseases and over 65% of projects focusing on non-communicable diseases assessed the impact of the pandemic on cancer care.

Mental health projects were analysed in greater detail by categorising against the WHO priorities. Most of the projects fell within “social sciences in the outbreak response” as shown in figure 4. When further categorised against the sub-priorities in this priority area (shortened forms used in figure 5), most projects fell outside the WHO sub-priorities under the broad social sciences priority area (categorised as ‘N/A’). Of the other projects the majority of fell under secondary impacts of public health interventions for COVID-19 prevention and control.

Figure 3: Spectrum of projects focusing on indirect health impacts of COVID-19

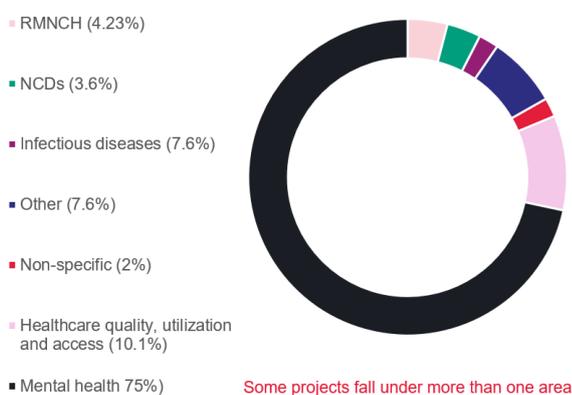


Figure 4: Mental health projects categorised by WHO research priority areas

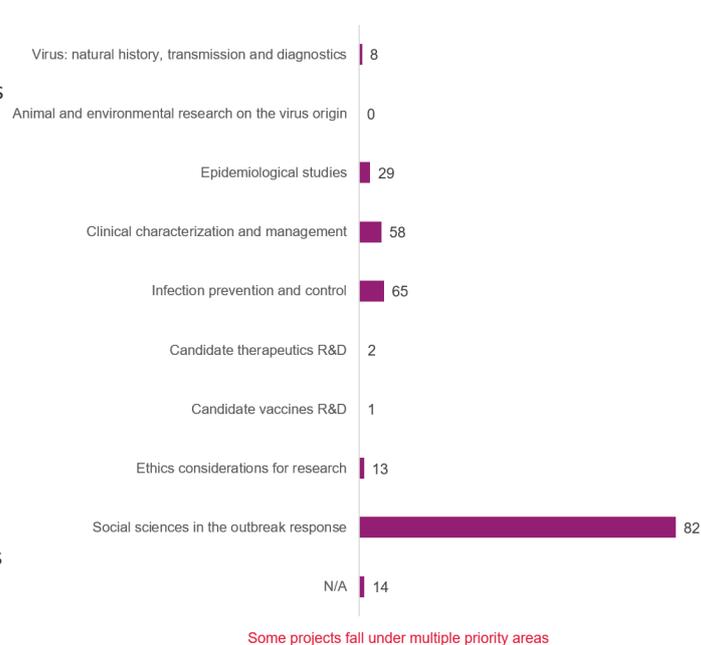


Figure 5: Mental health projects falling under “social sciences in the outbreak response”

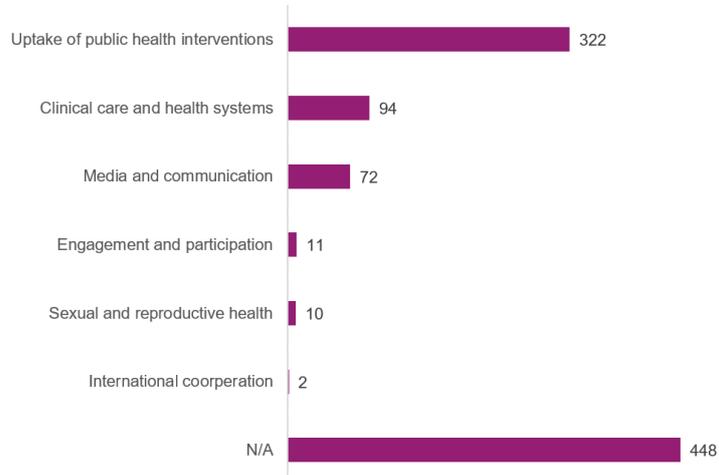
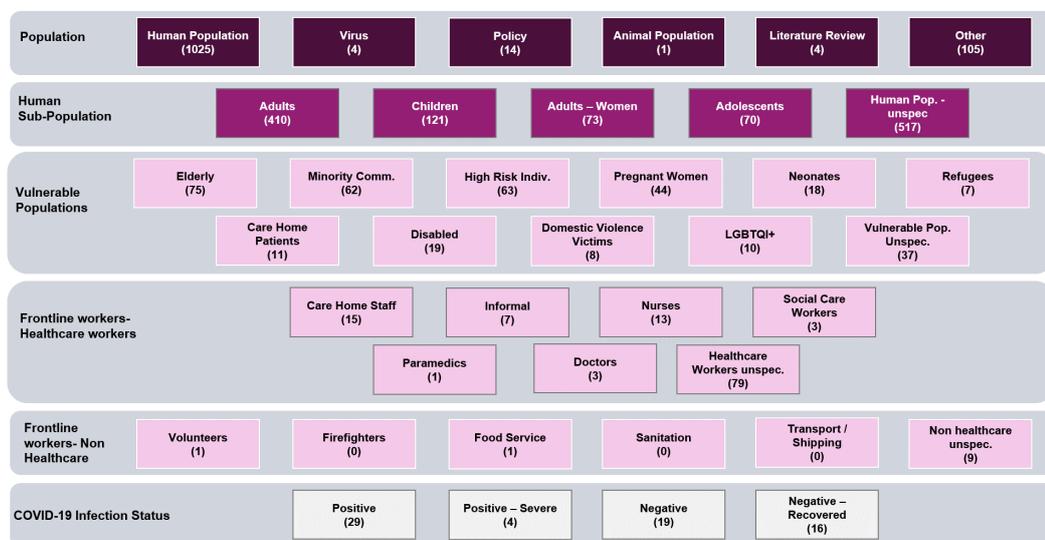


Figure 6: COVID-19 research projects classified using study population categorisation system (number of projects indicated in brackets)



Individual research projects may be classified against multiple categories/sub-categories

Study Populations

Over 90% of projects studied indirect impacts of COVID-19 in human populations with most of the studies involving adults (Figure 6). Few projects involved children and other vulnerable populations including pregnant women, the disabled and the elderly. Similarly, only a few of projects involved frontline workers, COVID positive patients and recovered patients.

Discussion and conclusion

This analysis found a limited representation of less-resourced countries in research projects investigating the indirect health impacts of COVID-19. Given the projected devastating implications of COVID-19 in these countries, this area may be a potential gap in funded projects which requires prioritisation for research investment.

A significant number of mental health projects fell outside the sub-priority areas under “social sciences in the outbreak response”. Having been developed very early in the pandemic, the WHO Research Roadmap underemphasised the indirect health impacts of the pandemic.

Notes

Limitations of data and findings: Study protocol is outlined in [Living Mapping Review of COVID-19 funded research projects](#). Analysis was limited by:

- o A lack of completeness of funding and/or qualitative data for some projects.
- o Tracker data is more likely to be derived from UKCDR and/or GloPID-R funders.
- o The absence of commercial research.

References

1. World Health Organization (WHO). WHO Coronavirus Disease (COVID-19) Dashboard | WHO Coronavirus Disease (COVID-19) Dashboard [Internet]. 2020 [cited 2020 Dec 9]. Available from: https://covid19.who.int/?gclid=EAlaQobChMj5nyh6HB7QIV6-jtCh2I3grBEAAYASAAEgIL8_D_BwE
2. Gretchen B, Shubham S, Meredith L, John S. Challenges emerge for the US healthcare system as COVID-19 cases rise | McKinsey [Internet]. 2020 [cited 2020 Dec 9]. Available from: <https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/challenges-emerge-for-the-us-healthcare-system-as-covid-19-cases-rise#>
3. Ribacke KJB, Saulnier DD, Eriksson A, Schreeb J von. Effects of the West Africa Ebola virus disease on health-care utilization - A systematic review. *Front Public Heal* [Internet]. 2016 Oct 10 [cited 2020 Dec 9];4(OCT):222. Available from: www.frontiersin.org
4. Robertson T, Carter ED, Chou VB, Stegmuller AR, Jackson BD, Tam Y, et al. Early estimates of the indirect effects of the COVID-19 pandemic on maternal and child mortality in low-income and middle-income countries: a modelling study. *Lancet Glob Heal* [Internet]. 2020 Jul 1 [cited 2020 Dec 9];8(7):e901-8. Available from: www.thelancet.com/lancetgh
5. Modesti PA, Wang J, Damasceno A, Agyemang C, Van Bortel L, Persu A, et al. Indirect implications of COVID-19 prevention strategies on non-communicable diseases. *BMC Med* [Internet]. 2020 Aug 14 [cited 2020 Dec 9];18(1):256. Available from: <https://bmcmecine.biomedcentral.com/articles/10.1186/s12916-020-01723-6>

About the UKCDR/ GloPID-R Tracker

The UKCDR/GLOPID-R [COVID-19](#)

[Research Project Tracker](#) (the

Tracker) is a live open access

database which categorises

COVID-19 research activity funded

around the world against the

[WHO research priorities](#) outlined

in the WHO Coordinated Research

Roadmap. [COVID CIRCLE](#) has

initiated a Living Mapping Review

of these projects, published in

Wellcome Open Research, to

support funders and researchers

in the achievement of a coherent

response to this pandemic. The

version of the tracker for the nine-

month update (15th April, 2021)

included 10,608 projects involving

142 countries with at least \$4.7

billion invested by 201 funders.

For more on the Tracker and

our work on COVID-19, visit:

ukcdr.org.uk/covid-circle

This piece was developed by Emilia

Antonio, Adrian Bucher, Marguerite

Gollish & Alice Norton (and the

Tracker team).

Get in touch

covid19@ukcdr.org.uk