

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS



Issue date
December 2020

Key Findings:

Number of indirect health impacts projects:

421

Funding investments (known funding amounts):

\$61.4m

Top funder:

NSF

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 low-resource countries, intersect with other social determinants of health to promote adverse disease outcomes.

Here, we present the scope of funded research activity focused on the indirect health impacts of COVID-19, drawing on evidence from the first 3-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 addressing indirect health impacts were identified and key funders, funding amounts country distribution of projects, specific research focus and study populations targeted were determined.

Findings

Locations, funders and funding amounts

The 421 projects focusing on indirect health impacts of COVID-19 were funded by 38 funders with an investment of at least \$64.4m. NSF funded the most projects followed by UKRI and CIHR as shown in Figure 1. Research involved at least one of 36 countries, the majority of which are high-income countries. Only 2 Least Developed Countries (LDCs) and 5 low-and middle-income countries (LMICs) are involved in research as seen in Figure 2.

Figure 1: Funders of projects focusing on indirect health impacts (Funders of 10 or more projects shown)

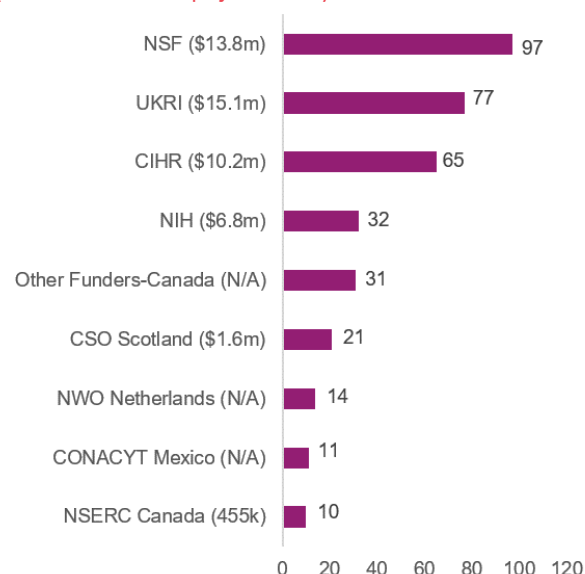
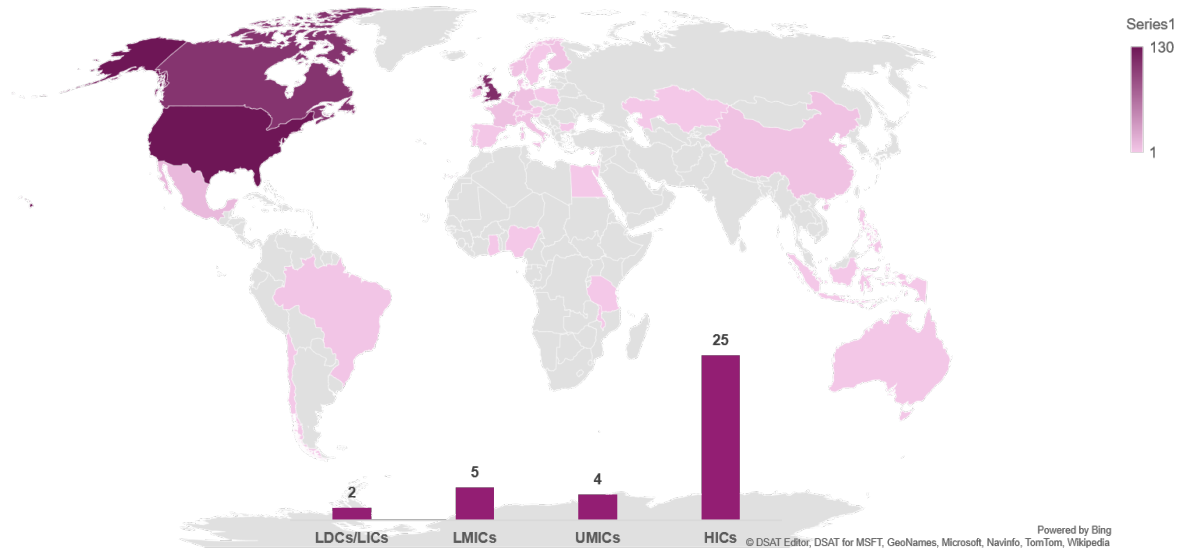


Figure 2: Locations of projects focusing on indirect health impacts of COVID-19



Research focus and WHO research priorities

Figure 3 shows most projects identified assess mental health impacts of COVID-19 and only a few researched impacts of COVID-19 on Reproductive Maternal Newborn and Child Health(RMNCH), Non-communicable diseases (NCDs) and infectious diseases. The projects classified as “others” included projects assessing COVID-19 and behavioural changes to diet and physical activity. 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 focussed on the impacts of public health interventions for COVID-19 prevention and control followed by projects exploring fears, anxieties and stigma associated with COVID-19.

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

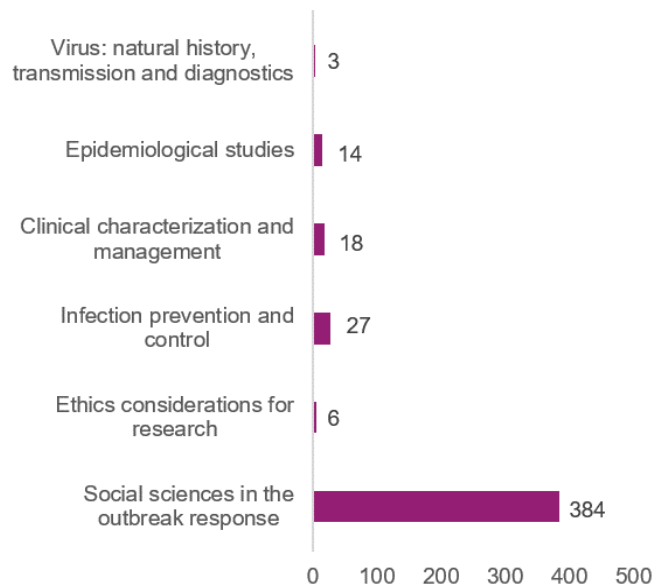


Figure 3: Spectrum of projects focusing on indirect health impacts of COVID-19

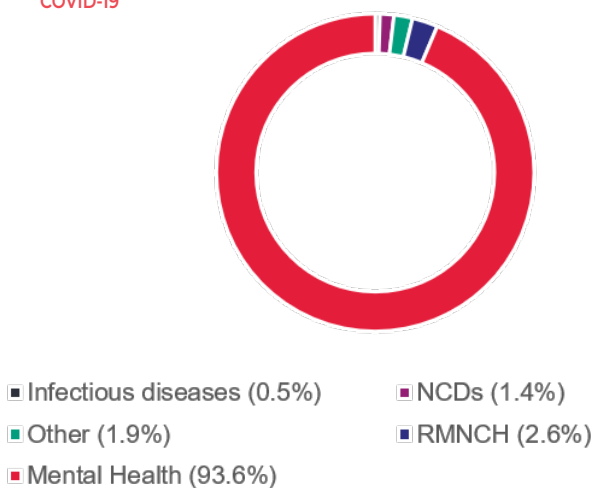


Figure 5: Mental health projects falling under “social sciences in the outbreak response”

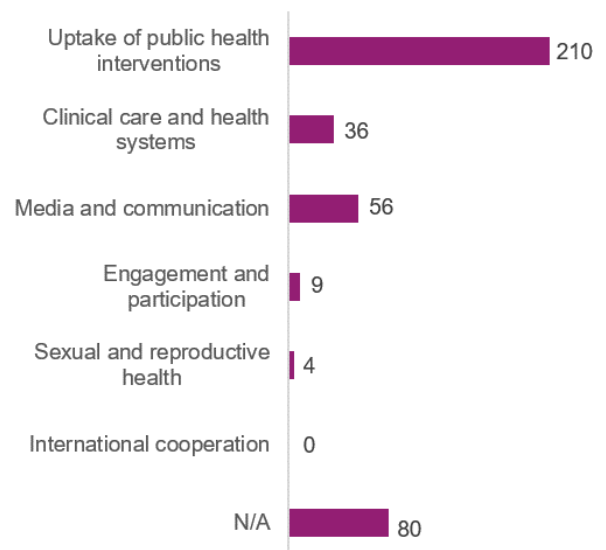
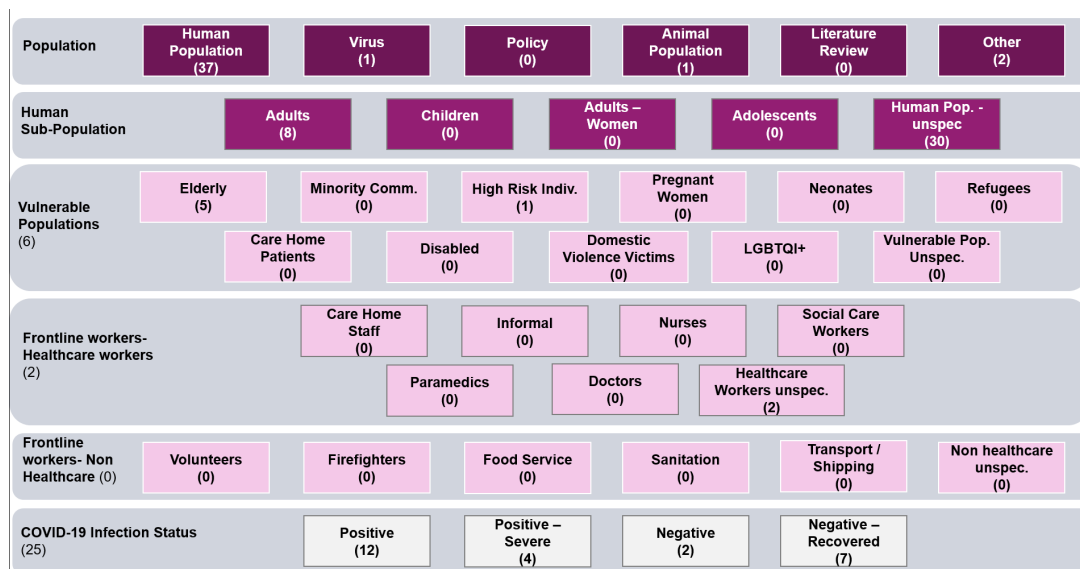


Figure 6: COVID-19 research projects classified using study population categorisation system (number of projects indicated in brackets)



Study Populations

Over 95% of projects studied indirect impacts of COVID-19 in human populations with most of the studies involving adults as seen in Figure 6. Few projects focused on children and frontline workers. There are also few projects involving infected and recovered individuals, as well as vulnerable groups.

Discussion and conclusion

This analysis found a limited representation of LMICs in research projects investigating the indirect health impacts of COVID-19. Given the projected devastating implications of COVID-19 in low-resource countries, this area may be a potential gap in funded projects which requires prioritisation for research investment. Research of indirect health impacts of COVID-19 in underrepresented populations should also be prioritised.

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.

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 & Alice Norton (and the Tracker team).

Get in touch covid19@ukcdr.org.uk

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=EAIaIQobChMj5nyh6HB7QIV6-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://bmcmedicine.biomedcentral.com/articles/10.1186/s12916-020-01723-6>