

WHO R&D Blueprint COVID-19

WHO COVID-19 Social Science in Outbreak Response Achievements

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R&D Blueprint

Powering research
to prevent epidemics



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Abbreviations

ADHD	Attention Deficit and Hyperactivity Disorder
ALERRT	African Coalition for Epidemic Research, Response and Training
ARNTD	African Research Network for Neglected Tropical Diseases
CASS	Cellule d'Analyse de Sciences en Sociales
CCOUC	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response
CE	Community Engagement
COVID-19	Coronavirus Disease 2019
CRR	Community Readiness and Resilience
CRS	Community Readiness and Strengthening
CUHK	Chinese University of Hong Kong
DRC	Democratic Republic of Congo
EPI-WIN	WHO Information Network for Epidemics
GLoPID-R	Global Research Collaboration for Infectious Disease Preparedness
GOARN	Global Outbreak Alert and Response Network
GPMB	Global Preparedness and Monitoring Board
GPP	Good Participatory Practice
GPP-EP	Good Participatory Practice Guidelines for Emerging Pathogens
HCC	Health Care Coalitions
HCW	Health Care Workers
HHI	Harvard Humanitarian Initiative
HOME	Humanitarian Organization for Migrant Economics
IDS	Institute of Development Studies
IFRC	International Federation of Red Cross and Red Crescent Societies
IMS	Incident Management System
IPC	Infection Prevention and Control
IRSESSEF	Institut De Recherche En Santé De Surveillance Épidémiologique Et De Formation
KAP	Knowledge, Attitudes and Practices
KC3S	King County COVID-19 Community Study
KNUST	Kwame Nkrumah University of Science and Technology
LMIC	Low-to-middle Income Country
LSHTM	London School of Hygiene and Tropical Medicine
MERS-CoV	Middle East Respiratory Syndrome Coronavirus
MLW	Malawi Liverpool Wellcome Trust
MSF	Médecins Sans Frontières
NGO	Non-Governmental Organisation
NIMHANS	National Institute of Mental Health and Neuro Sciences
NPI	Non-pharmaceutical Interventions
PHSM	Public Health and Social Measures
PIU	Problematic Internet Use
PPE	Personal protective equipment



PRC	Publications Review Committee
RCCE	Risk Communication and Community Engagement
R&D	Research and Development
SARS	Severe Acute Respiratory Syndrome
SARS CoV-2	Severe Acute Respiratory Syndrome coronavirus 2
SDG	Sustainable Development Goals
SEBCOV	Social, ethical and behavioural aspects of COVID-19
SGBV	Sexual and Gender Based Violence
SoNAR	Global Social Sciences Network for Infectious Threats and Antimicrobial Resistance
SOP	Standard Operating Procedure
SSHAP	Social Science in Humanitarian Action Platform
SRH	Sexual and Reproductive Health
SWOT	Strengths, Weaknesses, Opportunities and Threats
TAG	Technical Advisory Group
UNICEF	United Nations Children's Fund
USP	University of São Paulo
WHO	World Health Organisation



Introduction

COVID-19 is equally a social and biological phenomenon: a robust and effective response to COVID-19 needs to be informed by credible, trustworthy data and evidence on the social, behavioural, political and economic aspects of COVID-19 as well as on biomedical ones. At the Global Research and Innovation meeting held in Geneva on 11-12 February 2020, over 400 scientists, Member State representatives, public health professionals, donors and private sector representatives came together to agree on priorities to accelerate research for the COVID-19 response. Social science in outbreak response was one of the nine thematic areas that featured on the meeting's agenda.

The social science in outbreak response thematic area brings technical expertise from social and behavioural sciences to integrate with biomedical understandings of the COVID-19 pandemic to strengthen the response at international, regional, national and local levels in order to stop the spread of COVID-19 and mitigate its social and economic impacts. The social science research agenda aligns what is known about the epidemiology, clinical features of COVID-19, and anticipated impacts of COVID-19 and the public health response and was conceived as a cross cutting agenda to impact and strengthen inclusive, person and community-centred approaches across all pillars of the operational response.

The social science research agenda aims to:

1. Generate high quality evidence to achieving the goals of the strategic public health response plan
 - a. Promote prioritisation of knowledge needs according to epidemic dynamics.
 - b. Promote the production of knowledge according to local, national and regional needs.
 - c. Promote that knowledge outputs and methodological limitations are easily understood by non-social scientists.
2. To develop and employ strong methodologies and theoretical frameworks to tackle current epidemic challenges.
 - a. Develop innovative and interdisciplinary science.
 - b. Develop guidelines and Standard Operating Procedures (SOPs) to operationalise epidemic mitigation mechanisms.
 - c. Develop and connect global research networks with response partners.
 - d. Engage with communities to bring their voices to decision-making processes.



3. To understand non-intended consequences of epidemic-control decisions
 - a. Understand contextual vulnerability
 - b. Understand how decisions in this field may inadvertently undermine response goals.
 - c. Understand how social and economic impacts need to be mitigated.

The inclusion of social sciences in outbreak response as one of nine thematic areas of the COVID-19 Research Roadmap has catalysed three important advances:

1. WHO increased its coordination capacity by setting a global research agenda that included attention to the social sciences;
2. Donors stepped in to make important investments in social science research in line with this agenda¹; and
3. The research community delivered and continues to deliver an ambitious research programme that has impacted the way COVID-19 is managed across the world.

Work from social science pillar has generated valuable evidence that is crucial for developing emergency response strategies that are robust and account for complex social, economic and political layers/landscapes. It has provided frameworks and methodologies for data collection, synthesis and analysis that is tailored to local realities to inform evidence-informed decision making at local, regional and global levels.

Research priorities and questions

To develop priority research areas in February 2020, researchers conducted a rapid review of published and pre-pre-published research relevant to social science considerations for COVID-19 and drew on published social science research from previous respiratory epidemics, particularly Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome Coronavirus (MERS-CoV). Important thematic areas relevant to COVID-19 were identified at a round table event of social science experts¹ (3 February 2020) and through discussions with operational partners and technical experts from the COVID-19 Incident Management System (IMS) to shape a

¹ See the UKCDR and GloPID-R COVID-19 Research tracker here: <https://www.ukcdr.org.uk/covid-circle/covid-19-research-project-tracker/>



working agenda framed around key areas of the response (6 February 2020). At the Global Research and Innovation forum (11 February 2020), discussions among invited social science academics led to further detailing of the agenda, and to identification and prioritisation of relevant research questions. The primary aim of these research priorities was to call attention to priority areas where evidence from the social and behavioural sciences could urgently inform the acute crisis of the emerging pandemic.

In July 2020, together with all thematic working groups within the COVID-19 Research Roadmap, the WHO COVID-19 Social Science Research Group reviewed the progress of the previously identified priorities and agreed on ongoing and newly identified research needs in the following areas.

1. Strengthen public health response (immediate)

Research to strengthen the public health response to COVID-19, including related uptake of public health and social measures, including vaccines, in the context of a protracted public health emergency.

2. Mitigate the uneven impact of COVID-19 on different social groups

Understanding the impacts of COVID-19 and attention to the uneven impacts of the pandemic and attendant public health interventions, with a focus on vulnerable groups, humanitarian and fragile settings

3. Methods, infrastructure and research capacity

Challenges and opportunities of researching in a pandemic, methodological innovations, understanding which groups are excluded, interdisciplinary approaches, synthesizing large bodies of knowledge to inform policy.

COVID-19 Social Science in outbreak response working group

The COVID-19 Research Roadmap social science working group is co-coordinated via WHO and the Global Outbreak Alert and Response Network (GOARN) research (social science). It is hosted by the Community Readiness and Resilience (CRR) Unit in the Country Readiness and Strengthening (CRS) Department of the World Health Emergencies Programme. The group works closely with other COVID-19 operational social science research initiatives and networks, including the [Risk Communication and](#)



[Community Engagement \(RCCE\) Collective Service](#)², which is a collaborative partnership, supported by WHO, IFRC, UNICEF and GOARN, that brings together a wide range of organisations engaged in policy, practice, and research for RCCE to ensure expert driven, collaborative, consistent and localised RCCE support reaches governments and partners involved in the national response to COVID-19 and beyond, and the GOARN Analytics for Operations working group. The social science in outbreak response group coordinates within WHO with colleagues working on different technical areas including EPI-WIN, the Behavioural Insights Unit, immunization, ethics, gender, maternal and child health, sexual and reproductive health. Joint initiatives have also been set up with other working groups of the COVID-19 Research Roadmap to advance the cross-cutting nature of the agenda put forward at the start of the COVID-19 pandemic. The group also works closely with the donor community via the GLoPID-R Social Science Working Group.

The social science working group has contributed to the global public health response through coordinated action and partnership with multiple stakeholders and partner agencies. Key achievements include:

- Convened a **global consultation on evidence gaps and research priorities** to advance community centred approaches to health emergencies, adopting a longer-term view of what is needed to invest in community systems and structures, build trust and social cohesion.
- Contributed to **technical and guidance documents** as well as risk communication and community engagement (RCCE) response strategy including on care of people with COVID-19 living at home^{3,4}, use of masks⁵, personal and family risk management and prevention of health worker infection.

² Collective Service - <https://www.rcce-collective.net/>

³ Chan EYY, Gobat N, Hung H et al. [A review on implications of home care in a biological hazard: The case of SARS-CoV-2/COVID-19](#). Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response CCOUC 2020 (Health-Emergency and Disaster Risk Management Technical Brief Series #202001)

⁴ Chan EYY, Gobat N, Kim JH, Newnham E, Huang Z, Hung H, Dubois C, Hung KKC, Wong ELY, Wang SYS (2020). Informal home care providers: the forgotten health care workers during the COVID-19 pandemic. *Lancet*, 395(10242):1957–1959. 2020.06.

⁵ Public use of masks during the COVID-19 pandemic: key considerations for implementation v2.6 October 2020. Geneva: World Health Organisation; 2020



- Strengthened **Good Participatory Practice** and engagement through tailored and bespoke training and guidance for clinical trials⁶⁷, including the Global Solidarity Trial of COVID-19. Materials include a practical, user-friendly handbook and content for online learning for Good Participatory Practices and on Crisis Communications, standardised communications tools (leaflets, FAQs etc), an animated explainer of the trial; a FlipBook for trial recruitment; a clinical trials explainer; engagement planning and budget templates; tools for tracking anxieties and rumours; and an evaluation framework for engagement with COVID-19 clinical trials.
- Provided technical guidance for research related to perceptions of risk, trust and drivers that influence **uptake of public health and social measures**, that included 2 million people across 67 countries⁸.
- Advanced **research among health workers** to inform optimal infection control practices across 51 countries in 5 global regions and including 10 000+ health workers. The following tools have been developed: a research protocol guidance document and data collection tool⁹, grounded in behavioural theory, that includes a standardised measure of health worker wellbeing, and a companion document based on implementation science to identify evidence-based strategies that translate outcomes of the study to action¹⁰. Additional question sets have been developed and added to a digitalised question bank for rapid research relative to new SARS-CoV-2 variants and to health worker views of vaccination. To assist field-based practitioners working in humanitarian settings in low- and middle-income countries, a short guide on how to develop and implement health worker surveys was also developed¹¹.
- As a joint initiative with the ethics working group, advanced understanding of challenges related to uptake of **evidence to inform policy** during the COVID-19 pandemic. Semi-structured interviews with 25 scientific advisers from 11 WHO member states highlighted: 1) pressures with making decisions during times of intense

⁶ [Good Participatory Practice for COVID-19 Clinical Trials: a toolbox](#)

⁷ [Working with Community Advisory Boards for COVID-19 related clinical studies](#)

⁸ Babalola, S., Krenn, S., Rimal, R., Serlemitos, E., Shaivitz, M., Shattuck, D., Storey, D. KAP COVID Dashboard. Johns Hopkins Center for Communication Programs, Massachusetts Institute of Technology, Global Outbreak Alert and Response Network, Facebook Data for Good. Published September 2020.. <https://ccp.jhu.edu/kap-covid/>

⁹ [Perceptions of Healthcare Workers regarding local infection prevention and control procedures for COVID-19: Research protocol](#)

¹⁰ [Taking action on COVID-19: A toolkit for selecting and enacting change strategies that improve health worker adherence to infection prevention and control measures for COVID-19 in your health facility](#)

¹¹ [Guidance for Health Care Worker \(HCW\) Surveys in humanitarian contexts in LMICs](#)



uncertainty with incomplete or unavailable evidence, or evidence of variable quality and scientific rigor; 2) pressure with informing decisions when large amounts of new evidence was emerging very quickly; and 3) challenges with bringing together and weighing up different perspectives and different kinds of scientific evidence to inform decision-making.

- Facilitated rapid research to articulate ethical and context-specific considerations for practitioners needing to make decisions about **triage of critically ill patients** in high, middle, and low-income settings¹². Key findings based on 52 semi-structured interviews and 15 written responses collected from across all six WHO regions highlighted: (1) in high-income settings, the value of a pragmatic approach guided by assessments of who is most likely to benefit from available resources (utilitarian approach), with the caveat that these decisions are highly complex and that health workers also need autonomy to make bedside in-person patient assessments based on evolving pandemic conditions (2) anxiety, stress and resistance across all regions about fixed resource allocation decisions, particularly in the face of limited clarity on how and who was involved in developing best practices for resource allocation in their settings; (3) in low income countries, emphasis on pre-existing inequalities (rather than resource allocation guidance) as key drivers for who gets access to or prioritized for care.
- Highlighted key **policy lessons** from areas of the Western Pacific Region first affected by the COVID-19 pandemic related to government containment, control and mitigation policies¹³. These include the value of early interventions of border control, case identification, isolation and management, and contact tracing and quarantine that were effective in averting the need for widespread community quarantine or lockdown when COVID-19 became dispersed in the community. There is also a need for a more precise risk assessment methodology that captures social costs which is calibrated with the effectiveness of interventions and the criticality of community and business engagement.
- Based on an example of best practice, supported retrospective development of an **intervention package for Risk Communication and Community Engagement**

¹² Nouvet, E., Strachan, P. et al. (2020). Triaging critical care during Covid-19: Global preparedness, socio-cultural considerations, and communication. Hamilton, Canada: Humanitarian Health Ethics Research Group. ISBN: 978-0-9938354-5-2.

¹³ Yeoh EK, Kwon S, Ng C-W, Rampal S, Lee V, Chiew CJ, Wang W, Hashimoto H (2021) Government Response Measures to COVID-19 Key Policy Lessons from Experiences of Six Middle/ High Income Jurisdictions in the Western Pacific Region (June –November 2020)



among migrant workers in Singapore for wider scale up and spread¹⁴. The project viewed RCCE as a system level intervention for migrant worker populations living in closed settings, providing a grounded illustration of participatory practice and engagement as a core part of outbreak response.

¹⁴ Tam WJ, Gobat N, Hemavathi D, Fisher, D. Risk communication and community engagement (RCCE) during the migrant worker COVID-19 outbreak in Singapore: <https://www.rcce-collective.net/case-study/a-national-risk-communication-and-community-engagement-campaign-for-large-closed-communities-in-singapore/>



Social Science Outbreak in Response projects according to the R&D Blueprint roadmap objectives

Studies have been initiated and research tools developed by WHO and partners including the RCCE Collective Service, GOARN-Research and operational research units such as the Cellule d'Analyse de Sciences en Sociales (CASS). Additional studies were conducted independently by members of the WHO COVID-19 Social Science R&D Working Group, in line with the objectives for Social Science research identified in the R&D Blueprint [global research roadmap](#) and downstream research priorities areas and questions. The tables below present summaries of these projects, with summaries of the type of study, objectives, leading institution and related publications thus far. It is by no means a comprehensive list of all the studies the members of the group have contributed to it until May 2021.

A live, comprehensive database of research, including social science research, categorised by the priorities set out under the COVID-19 Research Roadmap can be found here: <https://www.ukcdr.org.uk/covid-circle/covid-19-research-project-tracker/>

Objective 1 – Generate high-quality social science evidence for achieving the goals of national strategic public health response plans

Project	Institution	Objectives	Link to publication
Evidence generation led by WHO and partners			
Health workers: Infection prevention and control: health worker perception survey (WHO protocol) – Studies listed below	Coordination: WHO	These studies aimed (1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	https://www.who.int/publications/m/item/perceptions-of-healthcare-workers-regarding-local-infection-prevention-and-control-procedures-for-covid-19-research-protocol



Project	Institution	Objectives	Link to publication
Study 1: The experience of European hospital-based health workers on following Infection, Prevention and Control (IPC) procedures for COVID-19	RECOVER research consortium; Julius Center for Health Sciences and Primary Care, University Medical Center Utrecht, Utrecht University	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	https://doi.org/10.1101/2020.12.23.20248793
Study 2: Perceptions of health workers on IPC for COVID-19 in Canada	Study 2: Institute of Health Policy, Management, and Evaluation, University of Toronto; Department of Medicine, University of Toronto; St Michael's Hospital	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	In press https://www.medrxiv.org/content/10.1101/2020.12.23.20248793v1
Study 3: Perceptions of pharmacists on IPC for COVID-19 in Canada	Pharmacy Department, Surrey Memorial Hospital, Surrey, BC, Canada; Faculty of Pharmaceutical Sciences, University of British Columbia, Vancouver, Canada	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 4: Perception of health workers of IPC procedures for COVID-19: State of São Paulo, Brazil	University of São Paulo (USP)	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Report



Project	Institution	Objectives	Link to publication
Study 5: Cellule d'Analyses de Science en Sociales (CASS) and guidance for health care worker surveys in humanitarian contexts in low- and middle-income countries	Cellule d'Analyses de Sciences en Sociales (CASS)	To assess perceptions of health workers of healthcare services impacts from COVID-19 and perceived capacity to stop transmission	https://drive.google.com/drive/u/2/folders/1iOk1ens9od18k7A_xnNf6L8YRJTH-htDz
Study 6: Perceptions of health workers regarding local IPC procedures for COVID-19 in Palestine	Al-Quds University Jerusalem/Gaza/West Bank	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Report
Study 7: Perception of doctors and nurses regarding local infection prevention for COVID-19 at Kathmandu Medical College Teaching Hospital – Nepal	Kathmandu Medical College Teaching Hospital, Nepal	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	https://jpahs.edu.np/index.php/jpahs/article/view/427
Study 8: Perceptions of health workers regarding local IPC procedures for COVID-19 in Nigeria	University of Port Harcourt Teaching Hospital, Nigeria (ALERRT)	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 9: Perceptions of health workers regarding local IPC procedures for COVID-19 in Ghana	Kumasi Center for Collaborative Research in Tropical Medicine, African Research Network for Neglected Tropical	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress



Project	Institution	Objectives	Link to publication
	Diseases (ARNTD) (ALERTT)		
Study 10: Perceptions of health workers regarding local IPC procedures for COVID-19 in Cameroon	University of Yaoundé (ALERTT)	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 11: Perceptions of health workers regarding local IPC procedures for COVID-19 in Senegal	Institut De Recherche En Santé De Surveillance Épidémiologique Et De Formation (IRESSEF) (ALERTT)	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 12: Perceptions of health workers regarding local IPC procedures for COVID-19 in Uganda	Uganda Virus Research Institute (ALERTT)	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 13: Perceptions of health workers regarding local IPC procedures for COVID-19 in Malawi	Malawi Liverpool Wellcome Trust (MLW) - Clinical Research Program	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 14: Perceptions of health workers regarding local IPC procedures for COVID-19 in India	Christian Medical College, Vellore National Institute of Mental Health and Neuro Sciences (NIMHANS),	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection	Manuscript development in progress



Project	Institution	Objectives	Link to publication
	Bangalore, ESIC Medical College, Bangalore, India	control procedures; and (2) to assess health worker well-being	
Study 15: Perceptions of health workers regarding local IPC procedures for COVID-19 in United States (Correctional Settings)	Tulane University	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Study 16: : Perceptions of health workers regarding local IPC procedures for COVID-19 in Finland	The Finnish Institute for Health and Welfare, Helsinki, Finland	(1) to assess perceptions of health workers of local IPC procedures during the COVID-19 pandemic with a view to optimising infection control procedures; and (2) to assess health worker well-being	Manuscript development in progress
Health workers: Infection prevention and control: health worker perception survey (WHO protocol) process evaluation	GOARN-Research	A process evaluation was used to assess how the protocol was developed, utilized, and modified across over a dozen study sites to meet the dynamic needs of the COVID-19 pandemic	Manuscript development in progress
Health systems: Managing limited health resources: Triage of critically ill patients with COVID-19	Western University of Ontario for WHO	Clarifying context-specific considerations for the realistic management of scenarios where the needs of critically ill COVID-19 patients outweighs resources available	https://humethnet.files.wordpress.com/2020/04/triaging-critical-care-during-covid-19-global-preparedness-socio-cultural-considerations-and-communication.pdf
Homecare: Review of implications of homecare in a biological hazard	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response	Review existing guidelines, research evidence and published practices related to home care, covering care delivered by formal and informal care providers with the care recipients maintained at their own home	Link: http://www.ccouc.ox.ac.uk/_asset/file/a-review-on-implications-of-home-care-in-a-biological-hazard.pdf



Project	Institution	Objectives	Link to publication
Knowledges, Attitudes and Practices (KAP) COVID: Exploring, Knowledge, Attitudes and Practices for COVID-19 Prevention	Johns Hopkins Center for Communication Programs, Massachusetts Institute of Technology, GOARN-Research, Facebook Data for Good, WHO EPI-WIN (WHO Information Network for Epidemics)	<p>Longitudinal, cross-sectional global survey promoted on Face book. Thus far, the study has been conducted in 67 countries with more than 1.7 million participants.</p> <p>KAP COVID dashboards present data from a global survey of knowledge, attitudes and practices around COVID-19.</p> <p><u>Dashboards:</u></p> <ol style="list-style-type: none"> 1. Trend Analysis 23 Countries: https://ccp.jhu.edu/kap-covid/kap-covid-trend-analysis-for-23-countries/ 2. Global-View of KAP COVID (67 Countries): https://ccp.jhu.edu/kap-covid/kap-covid-global-view-2/ 3. KAP COVID Country Profiles (67 Countries): https://ccp.jhu.edu/kap-covid/kap-covid-country-profiles-with-demographic-disaggregation/ 4. KAP COVID – India & US Sub-National View: https://ccp.jhu.edu/kap-covid/kap-covid-us-and-india-subnational-data/ 5. Global Vaccine Acceptance: https://ccp.jhu.edu/kap-covid/vaccine-acceptance/ 	<p>Blog Posts:</p> <ol style="list-style-type: none"> 1. https://ccp.jhu.edu/2020/11/09/kap-covid-prevention-longitudinal/ 2. https://ccp.jhu.edu/2020/10/14/covid19-prevention-behaviors-united-states-india-dashboard/ 3. https://ccp.jhu.edu/2020/10/05/women-those-over-30-more-likely-to-practice-covid-dashboard/ 4. https://ccp.jhu.edu/2020/09/17/dashboard-covid19-prevention-facebook/ 5. https://ccp.jhu.edu/2021/02/22/covid-19-vaccine-acceptance-falling-globally-in-u-s/ 6. https://ccp.jhu.edu/2021/01/21/covid-19-vaccine-hesitant/ 7. https://ccp.jhu.edu/wp-content/uploads/Vaccine-acceptance-and-education-level.pdf <p>Webinars:</p> <ol style="list-style-type: none"> 1. Utilizing Data from the KAP COVID Survey to



Project	Institution	Objectives	Link to publication
			<p>Manage the COVID-19 Infodemic</p> <ol style="list-style-type: none"> Global Knowledge Attitudes and Practices around COVID-19, A Close Up Look at the Data A socio-ecological perspective on COVID-19 research: A sampling of our local, national, and global work. Utilizing data from the KAP COVID survey to increase vaccine confidence and reinforce prevention behaviors <p>Manuscripts (pre-print) Global survey on COVID-19 beliefs, behaviors, and norms: https://covidsurvey.mit.edu/covid_survey_files/COVID_BBN_survey_report.pdf</p> <p>Role of information technology in COVID19 vaccination drive: an analysis of the COVID-19 Global Beliefs, Behaviors, and Norms Survey:</p>



Project	Institution	Objectives	Link to publication
			https://doi.org/10.20944/preprints202104.0552.v1
Public health and social measures (PHSM): Evidence synthesis of social and behavioural evidence considerations for face coverings	WHO	Review to inform guidance on community use of masks as source control for SARS-CoV-2	Internal briefing document
Policy review: Government Response Measures to COVID-19. Key Policy Lessons from Experiences of Six Middle/High-Income Jurisdictions in the Western Pacific Region in the Stage of New Normalcy	Chinese University of Hong Kong for WHO	The study examines key government containment, control and mitigation policies and measures in six middle/high-income jurisdictions in the Western Pacific Region (WPR) in the pandemic. It aims to generate empirical findings for policy learning and provide insights on contextual issues to inform other jurisdictions.	Final report submitted for WHO internal review
Policy: Understanding update of Evidence to inform Policy and Practice	University of Washington, University of Liverpool, London School of Hygiene and Tropical Medicine, University of Oxford, Roskilde University, University of Toronto, and Chinese University of Hong Kong for WHO	Through the perspective of local experts and science advisers, this study investigates the types of evidence used in COVID-19 response and recovery decision-making processes, how decision-makers reason with evidence that is evolving, fast-paced, and conflicting, how different types of evidence are weighed in decision-making, and how evidence from other contexts are adapted or applied for COVID-19 decision-making in the decision-makers' locally relevant context.	In progress
Policy brief: Young people and COVID-19: behavioural considerations for promoting safe behaviours	WHO Behavioural Insights TAG	Rapid review of evidence on young people risk taking behaviours and policy options for programs targeting young people	Manuscript waiting for PRC approval



Project	Institution	Objectives	Link to publication
Additional studies from group members			
Evidence synthesis, briefs, and reviews			
Homecare, RCCE, PHSM: Briefing syntheses of social, political and contextual factors	Social Science in Humanitarian Action Platform (SSHAP): a collaboration of the Institute of Development Studies (IDS), Anthrologica and London School of Hygiene and Tropical Medicine (LSHTM)	Desk-based reviews of social, political and contextual factors that are influencing, and need to be considered, in aspects of the COVID-19 response in different settings https://www.socialscienceinaction.org/emergency/covid-19-pandemic/ . Briefs on social media, burials, shielding, physical distancing, informal settlements, review of home care, infodemics and online media.	https://www.socialscienceinaction.org/search/?post_types=resources&sft_emergency=covid-19
Homecare: Key considerations: COVID-19 in informal urban settlements	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC)	Chinese translation of brief from SSHAP	https://www.socialscienceinaction.org/resources/key-considerations-covid-19-informal-urban-settlements-march-2020/
PHSM: Key considerations: quarantine in the context of COVID-19 (Social Science in Humanitarian Action Platform)	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC)	Chinese translation of brief from SSHAP	https://www.socialscienceinaction.org/resources/february-2020-social-science-humanitarian-action-platform/
RCCE: Key considerations: online information, mis- and disinformation in the context of COVID-19	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC)	Chinese translation of brief from SSHAP	https://www.socialscienceinaction.org/resources/key-considerations-online-information-mis-disinformation-context-covid-19/
RCCE: Perceptions and concerns related to preparedness and	Anthrologica	Understand perceptions and concerns related to preparedness and response efforts for	In progress



Project	Institution	Objectives	Link to publication
response efforts for Ebola and COVID-19 in DRC and South Sudan		Ebola and COVID-19 in DRC and South Sudan	
RCCE: Community: Beyond command and control: A rapid review of meaningful community-engaged responses to COVID-19	Equinet	Rapid review of case studies of community engaged responses to COVID-19	https://www.tandfonline.com/doi/abs/10.1080/17441692.2021.1900316?journalCode=rgph20
Primary studies			
Gender: Research agenda setting process for Gender and COVID-19	Gender and Health Hub at the United Nations University-Institute of Global Health with the School of Public Health, University of the Western Cape	Set research agenda priorities across 5 thematic areas in an open and participatory manner: 1. Health behaviour and status of those directly and indirectly affected by COVID-19 2. COVID-19 diagnostic and therapeutic interventions R&D 3. Health service delivery implications and impacts of COVID-19 4. Social determinants of gender dynamics affecting or impacted by COVID-19 5. Gender and governance of COVID-19 health systems,	In progress to date over 400 individuals largely from Low to Middle Income Country (LMIC) have contributed https://www.ghhbuzzboard.org/
Health systems: Experience of health providers and patients providing and receiving primary care in Europe during the COVID-19 pandemic	RECOVER research consortium	To understand views of primary care health providers and patients in Europe with a view to optimising care provision	Manuscript 1 in press Manuscript 2 under review
Homecare: Experiences and needs of persons living with a	RECOVER research consortium	To 1) investigate the impact of living with a person infected with SARS-CoV-2; 2)	https://doi.org/10.1371/journal.pone.0249391



Project	Institution	Objectives	Link to publication
household member infected with SARS-CoV-2: A mixed method study		understand how household members implemented infection control recommendations in their home; and 3) identify the information and support needs of household members.	
PHSM: Follow-up survey for the knowledge, attitude and practice about COVID-19 and home quarantine in Hong Kong	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC)	Understand knowledge, attitudes and practices about COVID-19 and home quarantine amongst people in Hong Kong	In progress
PHSM - Vaccines: Social Science Response to Epidemics in East Africa	London School of Hygiene & Tropical Medicine	Understanding public sentiment and factors of prevention and vaccination behaviors in Chinese children and adults	DOI: 10.2196/26372 DOI: 10.3390/vaccines9040342
PHSM and mental health: Social, ethical and behavioural aspects of COVID-19 (SEBCOV)	Mahidol Oxford Tropical Medicine Research Unit, University of Oxford	We launched a survey and qualitative study in UK, Italy, Slovenia, Malaysia and Thailand to explore 4 themes - (1) Quarantine and self-isolation; (2) Social distancing and travel restrictions; (3) Wellbeing and mental health (4) Information, misinformation and rumours	doi.org/10.12688/wellcomeopenres.15813.2 doi.org/10.12688/wellcomeopenres.16293.1 https://doi.org/10.1101/2020.10.26.20209361
PHSM: Perception towards coronavirus disease (COVID-19) and home quarantine: A cross-sectional survey in Hong Kong	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC)	Understand public perception towards coronavirus disease (COVID-19) and home quarantine	http://ccouc.org/perception-towards-coronavirus-disease-covid-19-and-home-quarantine-a-cross-sectional-survey-in
PHSM: Social Science Response to Epidemics in East Africa	London School of Hygiene & Tropical Medicine	Public health measures and social consequences of COVID	Pre print



Project	Institution	Objectives	Link to publication
Policy: Evidence-based decision making in the initial response to COVID-19	Rockilde University	Highlight lessons learned about the challenges faced by evidenced-based decision making during major health emergencies using Scandinavian countries' experiences.	https://journals.sagepub.com/doi/10.1177/1403494821997227
Policy: Experience of scientists working in the public eye during COVID-19	RECOVER research consortium	To understand and document the views and experiences of scientists working in the public eye on COVID-19 research	In progress
Policy: How can Environmental Health Practitioners contribute to ensure population safety and health during the COVID-19 pandemic?	School of Health of the Polytechnic Institute of Porto	To discuss current environmental health practices and challenges across different countries during the pandemic	DOI: https://doi.org/10.1016/j.ssci.2020.105136
PHSM: Enhancing uptake of COVID-19 prevention and mitigation measures through community engagement approach in Kampala City	Makerere University	Community randomized controlled trial to enhancing uptake of COVID-19 prevention and mitigation measures through community engagement approach in Kampala City	In progress
RCCE: Building Trust and Community Ownership of Ebola Awareness and Community Engagement in the DRC & Uganda	London School of Hygiene & Tropical Medicine / SoNAR-Global	Build trust and community ownership of Ebola Awareness in the DRC & Uganda	In progress
RCCE: Infodemiology - Social Science Response to Epidemics in East Africa	London School of Hygiene & Tropical Medicine	Comparison of public response to containment measures during the initial outbreak and resurgence of COVID-19 epidemic in China: an infodemiology study	DOI: 10.2196/26518
RCCE: Infodemiology - Social Science Response to Epidemics in East Africa	London School of Hygiene & Tropical Medicine	Cross-Country Comparison of Public Awareness, Rumors, and Behavioral Responses to the COVID-19 Epidemic: Infodemiology Study	DOI: 10.2196/21143



Project	Institution	Objectives	Link to publication
RCCE: Population survey on public response and risk communication during COVID-19 epidemic.	London School of Hygiene & Tropical Medicine	Social media surveillance to assess public awareness, sentiment, stigma and discrimination, emotion and behavioural responses about COVID-19 epidemic and containment measures;	In progress
RCCE: Real time community feedback mechanism to track rumours and information needs	Makerere University	Establishing a near-real time community feedback mechanism utilizing social mobilizers to elicit and respond to rumors, beliefs and information needs about COVID-19 in South Sudan	In progress
RCCE: Social Science Response to Epidemics in East Africa	London School of Hygiene & Tropical Medicine	Risk communication on behavioral responses during COVID-19 among general population in China: a rapid national study.	DOI: 10.1016/j.jinf.2020.10.031
RCCE: The role of communication strategies and media discourse in shaping psychological and behavioral response to the COVID-19 outbreak: a comparative analysis between Canada and two Asian countries/regions	Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response (CCOUC)	Gain a better understanding of how the health information related to the COVID-19 outbreak is delivered by authorities and media, and how it is received, understood and used by the public.	https://www.sonar-global.eu/covid-19-projects/the-role-of-communication-strategies-and-media-discourse-in-shaping-psychological-and-behavioral-response-to-the-covid-19-outbreak-a-comparative-analysis-between-canada-and-two-asian-countries-region/
RCCE Community: What Is COVID-19 Teaching Us About Community Health Systems? A Reflection From a Rapid Community-Led Mutual Aid Response in Cape Town, South Africa	Cape Town Together, University of the Western Cape, University of Cape Town	Lessons from urban informal community organizing in response to COVID-19 on the nature of informality, trust and evidence required	https://www.ijhpm.com/article_3904.html



Objective 2 – Develop and employ strong methodologies, standardised tools and theoretical frameworks to tackle current epidemic challenges

Project	Institution	Objectives	Link to publication
Evidence led by WHO and partners			
Systematic reviews			
Rapid evidence review for best practice guidance and training: evaluation of rapid qualitative research tools in urgent epidemic settings, including the COVID-19 pandemic	SoNAR-Global; Institut Pasteur, Chinese University of Hong Kong, Fiocruz, CRCF (Senegal), LSHTM, Western University, Oxford University, Temple University, UCL	To rapidly review published and grey literature relevant to rapid qualitative methods for public health emergencies.	Protocol : https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=223283 https://www.researchregistry.com/browse-the-registry#registryofsystematicreviewsmeta-analyses/ .
Meta synthesis for operational guidance: Lessons Learned from Ebola for COVID-19	Cellule d'Analyses de Science en Sociaux: UNICEF, WHO, IFRC, MSF-Epicentre, LSHTM, HHI, GOARN, Anthrologica, Oxford University, ITM, TWB	Meta-synthesis of the 55 studies conducted by the CASS during the 2018-20 DRC Ebola outbreak to develop 4 priority guidance briefs for improved COVID-19 response in humanitarian settings	https://www.socialscienceinaction.org/blogs-and-news/social-science-support-covid-19-briefings-cellule-danalyse-en-sciences-sociales/
Evidence synthesis: Using Health Promotion Strategies in Emergency Management - Critical Success Factors for Community Engagement	WHO, Department of Health and Community Studies Western Washington University USA, School of Global Public Health, New York University USA, Paris School of International	This study summarizes the evidence guiding current community engagement methods and strategies, share a selection of positive case examples, consider these strategies in relation to health equity, and raise questions on emerging and contentious issues for the field.	Manuscript development in progress



Project	Institution	Objectives	Link to publication
	<p>Affairs, Sciences Po, France. Department of Public Health, University of Limpopo, South Africa, African Institute for Health & Development, Nairobi, Kenya.</p> <p>Global Health Literacy Academy, Risskov, Denmark.</p> <p>Department of Health Promotion and Education, School of Public Health, University of Zambia, Lusaka, Zambia, WHO Collaborating Center for Health Promotion Research, National University of Ireland Galway, Ireland, Faculty of Psychology & Educational Sciences Research, Université Catholique de Louvain</p> <p>Department of Community Medicine, Faculty of Medicine, Midlands State University, Gweru, Zimbabwe.</p>		
Tools and protocols			



Project	Institution	Objectives	Link to publication
Resource collection: R&D Good Participatory Practice (GPP) for COVID-19 clinical trials – a toolbox	WHO GPP task force	Practical toolbox to operationalise WHO Good Participatory Practice Guidelines for Emerging Pathogens (GPP-EP) guidelines (2016) to help ensure respectful community engagement and strengthen trust through collaborative partnerships.	https://www.who.int/publications/m/item/r-d-good-participatory-practice-for-covid-19-clinical-trials-a-toolbox Webinars: Cheah PK, Davies A, Marshall J, Schwartz L (2020) Beyond ‘good enough’: How to engage communities with COVID19 research quickly & effectively. Global Health Network Epidemic Ethics Webinar https://epidemicethics.tghn.org Schwartz L (July 17, 2020) Good Participatory Practices in Emerging Pathogen Research. GLOPID-R COVID-19 Research Synergies Meetings https://www.glopid-r.org/covid-19-research-synergies-meetings/
Resource collection: R&D GPP: Working with Community Advisory Boards for COVID-19 related clinical studies	WHO task force	Practical resource on setting up and working with Community Advisory Boards for clinical trials.	https://www.who.int/publications/m/item/working-with-community-advisory-boards-for-covid-19-related-clinical-studies
Standardised operational guidance: GPP for the Global Solidarity Trial of COVID-19 Vaccines	WHO technical advisory group to the Global Solidarity Trial of COVID-19 Vaccines	Provide standardised tools and guidance to operationalise GPP for the Global Solidarity Trial of COVID-19 Vaccines	Available to trial implementing teams
Standardised operational guidance: Crisis	WHO EPI-WIN team; WHO technical advisory group to	Provide standardised tools and guidance to operationalise crisis communications	Available to trial implementing teams



Project	Institution	Objectives	Link to publication
communication for the Global Solidarity Trial of COVID-19 Vaccines	the Global Solidarity Trial of COVID-19 Vaccines	planning and implementation for national teams implementing the Global Solidarity Trial of COVID-19 Vaccines.	
Strategy: RCCE Global Strategy (December 2020 – May 2021)	The Collective Service (Partnership between the International Federation of Red Cross and Red Crescent Societies (IFRC), United Nations Children's Fund (UNICEF), and the World Health Organization (WHO) and the Global Outbreak Alert and Response Network (GOARN))	The updated strategy is underpinned by a socio-behavioural trends analysis and builds on the learnings from the response to-date. The shift presented in the document is towards the community engagement and participatory approaches that have been proven to help control and eliminate outbreaks in the past.	https://www.who.int/publications/i/item/covid-19-global-risk-communication-and-community-engagement-strategy
Standardised data collection: RCCE indicators COVID-19 Behaviour Change Framework	RCCE Collective Service	Present key indicators for RCCE to measure socio-behavioural changes at the population level. This will enable consistent and comparable socio-behavioural data sets, enabling more effective measurement of social and behavioural drivers now and in the future and streamline data collection.	https://drive.google.com/drive/u/0/folders/15T5LMq7wakL4TXfXtYQ4UsZpH5vJN7vG
Standardised data collection: COVID-19 RCCE Behavioural indicators (country level)	RCCE Collective Service	Present socio-behavioural data by country and region across COVID-19 behavioural change framework	https://www.rcce-collective.net/data/behavioural-indicators/
Standardised data collection: RCCE Online Question Bank	RCCE Collective Service	Facilitate the collection of quality data, drawing on existing methods and tools. This	https://docs.google.com/spreadsheets/d/1S8rlzukZYzn7uVgWdXhOUzcXR-



Project	Institution	Objectives	Link to publication
		tool is informing data collection processes of regional and global partners	WmyS0BYpAk5DhSQ0/edit#gid=1017951406
Social and Behavioural Insights COVID-19 Data Collection Tool for Africa	WHO AFRO and WHO Behavioural Insights	To develop a standardized Covid19 social and behavioural data collection tool that facilitates data collection in African countries and comparison across countries	In progress (publication due on May 17, 2021)
Case studies: Piloting of the Social and Behavioural Insights COVID-19 Data Collection Tool	WHO AFRO, WHO Behavioural Insights, WHO Zambia, WHO Nigeria	To pilot the tool in two countries	In progress (publication due on May 17, 2021)
Resource collection: COVID-19 West and Central Africa resource library	RCCE Collective Service	A dedicated regional library with a collection of resources, guidance, case studies and data related to COVID-19.	https://coronawestafrica.info/
Research protocol: Perceptions of Healthcare Workers regarding local infection prevention and control procedures for COVID-19	WHO Joint initiative Social Science in Outbreak Response and IPC working groups	Evaluate health worker perceptions of their preparedness to ensure effective infection prevention and control of Covid-19 in healthcare settings, trust in their healthcare organization and health worker wellbeing.	DOI: https://doi.org/10.1101/2020.12.23.20248793
Online tools: rapid evidence generation related to health workers	Harvard Humanitarian Initiative (HHI); CASS; WHO Joint initiative Social Science in Outbreak Response and IPC working groups	To provide user-friendly, operational tools and infrastructure for high quality, rapid, timely and accessible generation of socio-behavioural data on healthcare workers to inform local and national level policy and actions, as well as for international public health and scientific communities.	https://hhi.harvard.edu/kobotoolbox
Implementation Strategies and guidance: to address barriers and facilitators related to IPC adherence for COVID-19	Center for Implementation Science; WHO Joint initiative Social Science in Outbreak Response and IPC working groups	1) Further develop the current WHO protocol related to health worker perceptions of infection prevention and control (IPC); 2) categorize survey items to theory/frameworks, and; 3) determine	Under review



Project	Institution	Objectives	Link to publication
		change strategies and develop recommendations for implementation	
Guidance for conducting health worker surveys in humanitarian contexts in Lower and Middle Income Countries	GOARN Analytics for Operations working group; WHO Social Science in Outbreak Response working group	Practical guidance for response actors working in humanitarian contexts who seek rapid approaches to gathering evidence about the experience of healthcare workers, and the communities of which they are a part, in order to inform and guide humanitarian programming and effective strategies to promote IPC, identify psychosocial support needs. This evidence also informs humanitarian programming that interacts with HCWs and facilities such as nutrition, health reinforcement, communication, SGBV and gender.	https://reliefweb.int/sites/reliefweb.int/files/resources/2020-07%20Social%20Sciences%20Research%20Guidance%20HCW%20surveys%20in%20humanitarian%20contexts-%20final%20draft.pdf
Guidance: 10 Steps to Community Readiness	RCCE Collective Service	Highlights 10 well established Risk Communication and Community Engagement (RCCE) principles that have proven their power. Together they put communities at the heart of the roll out of new vaccines, treatments and tests and promote trust, the critical ingredient for all community action.	https://www.who.int/publications/i/item/who-2019-nCoV-Community_Readiness-2021.1
Research protocol: Health system analysis of the barriers to availability, utilization and readiness of sexual and reproductive health services in COVID-19 affected areas	WHO Sexual and Reproductive Health team	Use mixed methodology to assess the impacts of COVID-19 on the health system's readiness and capacity of providing sexual and reproductive health services. Generic protocol has been adapted in 9 countries	Available on request (publication in progress)



Project	Institution	Objectives	Link to publication
		(Brazil,Burkina Faso, China, Ghana, Italy, Kenya, Pakistan, Thailand, UK)	
Research protocol: Qualitative Research on Women's Sexual and Reproductive Health related to Pregnancy, Pregnancy Prevention and Induced Abortion in the Context of COVID-19"	WHO SRH team	Explore the effects of the COVID-19 pandemic on women's and their partner's attitudes, needs and practices related to sexual and reproductive health. Generic protocol has been adapted in 7 countries (Brazil,Burkina Faso, China, Ghana, Kenya, Pakistan, Thailand)	Available on request (publication in progress)
Resource collection: Country readiness and delivery of COVID-19 vaccines	ACT-Accelerator country readiness and delivery workstream	A full package of guidance from the ACT-Accelerator country readiness and delivery workstream on acceptance and demand, covering overall planning and implementation, gathering and use of behavioural and social data, community engagement, and misinformation management.	https://www.who.int/initiatives/act-accelerator/covax/covid-19-vaccine-country-readiness-and-delivery/acceptance-and-demand
Resource collection: Assessing and addressing behavioural and social drivers of vaccine uptake	ACT-Accelerator country readiness and delivery workstream	The evidence-based tools and guidance specifically on assessing and addressing behavioural and social drivers of uptake, an essential first step to generating the insights needed to inform the design and evaluation of targeted interventions	https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccination-demand-planning-2021.1



Project	Institution	Objectives	Link to publication
Community Engagement (CE) Package: A database of Community Engagement experiences in different settings	WHO	A robust repository with a set-criteria for a systematic collection and inclusion of various best practices for community engagement, including for public health emergencies, that have been employed in different settings and contexts in countries across the six regional offices of WHO	Temporary location Deliverable 1- Database - Google Drive
Community Engagement Package: Learning Package	WHO	A training package based on the Database of Community Engagement experiences in various settings for pre- and in-service CE training	Training design and draft contents available here Deliverable 2 - Learning Package - Google Drive
Community Engagement Package: Workshop Package capturing CE experiences	WHO	A workshop package designed to capture CE experiences in different settings for inclusion in the database to ensure the database remains current and updated.	In progress
Process evaluation: Innovative methods in the development of the WHO Community Engagement Package	WHO, Social Innovations in Health Initiatives	Documentation of innovative approaches adopted in developing the different components of the Community Engagement Package	Manuscript development in progress



Project	Institution	Objectives	Link to publication
RCCE implementation package: A guide to effective RCCE engagement in large closed communities	National University of Singapore for WHO	Practical implementation package for delivering RCCE among migrant worker communities based on an innovative intervention delivered in Singapore during COVID-19 through multi-sectoral partnerships.	Implementation package available on request. Manuscript in preparation. Webinar WHO EPI-WIN Webinar: Setting your Kitesong free: a creative approach to RCCE in an outbreak (13.10.2020)
Additional studies from group members			
Research Protocol: After Action Review on evidence-based decision making for selected COVID-19 response measures	Roskilde University	Develop an accessible tool for rapid assessment of response actions using a framework of evidence based decision making	In progress
Research protocol: King County COVID-19 Community Study Protocol	University of Washington	The King County COVID-19 Community Study (KC3S) aimed to characterize, in real time, how Non-pharmaceutical Interventions (NPIs) impacted the lives and wellbeing of individuals, families, and communities, as well as the ways in which individuals, families, and communities adapted and coped	https://doi.org/10.17603/ds2-atw6-7z47
Methodological Innovation: Vulnerability Assessment and Community Engagement in 5 European countries (France, Germany, Italy, Slovenia, Malta), Uganda, Bangladesh	SoNAR-Global	Characterize complex factors shaping marginalization and identify locally-meaningful categories of vulnerability as a consequence of COVID-19 and its control measures; engage stakeholders (elected officials, public services, association, NGOs)	https://www.sonar-global.eu/vulnerability-assessment/the-rapid-assessment-of-vulnerable-populations/



Project	Institution	Objectives	Link to publication
		to identify and implement concrete measures to promote resilience	https://www.sonar-global.eu/advisory-and-action-committee-for-the-vulnerability-assessment-and-community-engagement-approach/ DOI: 10.7189/jogh.11.03003 doi.org/10.1136/bmjopen-2019-031944
Methodological innovation: Meanings and practices of Pandemic Preparedness at different global, regional and national levels, and in two villages in Uganda and Sierra Leone	Institute of Development Studies	Better understand meanings and practices of pandemic preparedness at global, regional and national levels	In progress
Methodological innovation: training health workers to track rumours and misinformation	London School of Tropical Medicine	Training Community Health Workers in Tanzania to conduct ethnography in Dar es Salaam to collect rumours, concerns and misinformation about COVID-19	DOI: 10.1093/inthealth/ihaa071
Methodological innovation: Diverging sensemaking frames during the initial phases of the COVID-19 outbreak in Denmark	Roskilde University	Use of the Cynefin framework to illuminate how distinct sensemaking boundaries appeared to co-exist among the two main group of actors, health experts and political leaders, during the crucial early response phase of the COVID-19 outbreak in Denmark	https://www.tandfonline.com/doi/full/10.1080/25741292.2020.1809809



Objective 3 – Understand (non-intended) consequences of epidemic-control decisions¹⁵

Project	Institution	Objectives	Link to publication
Evidence led by WHO and partners			
PHSM impacts: Impact of COVID-19 on women and girls in the DRC	CASS	Using CASS and other data source, conduct a regular meta-syntheses to understand and map the impacts of COVID-19 on women and girls (health, protection, education, socio-economic circumstances) in the DRC.	https://www.unicef.org/drcongo/cellule-analyse-sciences-sociales https://www.socialscienceinaction.org/resources/the-impacts-of-the-covid-19-outbreak-response-on-women-and-girls-in-the-democratic-republic-of-the-congo/
PHSM impacts: Impact of school closures due to COVID-19 in the DRC	CASS	Using CASS and other data source, conduct a meta-synthesis to understand and map the long-term impacts of school closures (reopened since February 2021) on children across the DRC	https://reliefweb.int/report/democratic-republic-congo/covid-19-school-closures-drc-impact-health-protection-and-education
Additional studies from group members			

¹⁵ The most recent Living Mapping Review of COVID-19 funded research projects (16 April 2021) includes a deep dive analysis of the indirect health impacts of COVID-19 and can be accessed here: <https://www.ukcdr.org.uk/wp-content/uploads/2020/12/UKCDR-1230-Tracker-Highlights-In-direct.pdf>



Project	Institution	Objectives	Link to publication
Health impacts: Broader health impacts of vertical responses to COVID-19 in low- and middle-income countries	IDS/ SSHAP	Highlight the drivers and evidence of these impacts, emphasises the additional vulnerabilities experienced by marginalised social groups, and provides insight for governments, agencies, organisations and communities to implement more proportionate, appropriate, comprehensive and socially just responses that address COVID-19 in the context of and alongside other disease burdens.	https://gh.bmj.com/content/6/4/e004110.citation-tools https://reliefweb.int/report/world/review-broader-health-impacts-vertical-responses-covid-19-low-and-middle-income
Health impacts: Impacts faced by people in informal settlements	Liverpool School of Tropical Medicine	Documentation of challenges from COVID-19 faced by people in informal settlements related to health and accountability for services; re-orientation of existing community-based participatory research to focus on COVID-19 case studies in informal settlements in India, Bangladesh, Sierra Leone and Kenya.	In progress
Health impacts: Re-examining healthcare coalitions in light of COVID-19	John Hopkins Bloomberg School of Public Health	A SWOT (strengths, weaknesses, opportunities, and threats) analysis to summarize the strengths, weaknesses, opportunities, and threats related to the current Health Care Coalitions (HCC) model against the backdrop of COVID-19	https://doi.org/10.1017/dmp.2020.431
Health Worker impacts: Mental Health and Social Stigma among Health Care workers (HCW)	Tuberculosis Research Institute	Understanding experiences of social stigma and assessing mental health among Health care workers	In progress
Health worker impacts: Social science response to Epidemics in East Asia		Defamation against healthcare providers in Japan during COVID-19 pandemic. International Journal of Health Policy and Management	DOI: 10.34172/IJHPM.2020.184



Project	Institution	Objectives	Link to publication
Mental Health: Factors associated with COVID 19 stigma	Tuberculosis Research Institute	Identifying factors associated with stigma related to COVID-19	In progress
PHSM and Drug Use: Challenges to Opioid Use Disorders During COVID-19	Peking University	COVID-19 brings an opportunity to learn as well as a responsibility to prevent and treat. As clinical scientists, we must learn from early experience and communicate to the global community as well as adapt local healthcare to emergencies such as the COVID-19 pandemic. This adaptation to COVID-19 must include paying attention to pre-existing medical and mental disorders and understanding the interrelationship of these comorbid disorders in drug-dependent populations.	DOI: 10.1111/ajad.13031
PHSM and Mental Health : The impact of quarantine on mental health status among general population in China during the COVID-19 pandemic	Peking University	Quarantine and isolation measures urgently adopted to control the COVID-19 pandemic might potentially have negative psychological and social effects. We conducted this cross-sectional, nationwide study to ascertain the psychological effect of quarantine and identify factors associated with mental health outcomes among population quarantined to further inform interventions of mitigating mental health risk especially for vulnerable groups under pandemic conditions.	DOI: 10.1038/s41380-021-01019-y
PHSM and Mental Health: 2019-nCoV epidemic: address mental health care to empower society	Peking University	At the beginning of the COVID-19 pandemic, we conducted correspondence to emphasize the importance of mental health during coping with pandemic and propose possible solutions for the world.	DOI: 10.1016/S0140-6736(20)30309-3



Project	Institution	Objectives	Link to publication
PHSM and Mental Health: Mental Health Symptoms During COVID-19 Outbreak in China	Peking University	To investigate the prevalence of and risk factors associated with mental health symptoms in the general population in China during the COVID-19 pandemic	DOI:10.1001/jamanetworkopen.2020.14053
PHSM and Mental Health: Prevalence and correlates of suicidal ideation among the general population in China during the COVID-19 pandemic	Peking University	The coronavirus disease 2019 (COVID-19) pandemic is a major threat to the public. However, the comprehensive profile of suicidal ideation among the general population has not been systematically investigated in a large sample in the age of COVID-19. This study is to evaluate the prevalence of suicidal ideation and its risk factors.	DOI: 10.1192/j.eurpsy.2021.5
PHSM and Mental Health: Prevalence of post-traumatic stress disorder after infectious disease pandemics	Peking University	The present systematic review sought to provide a reliable estimate of the worldwide prevalence of infectious disease pandemic related PTSD and investigate the effects of demographic characteristics, clinical stage, and other factors on such prevalence.	DOI: 10.1038/s41380-021-01036-x
PHSM and Mental Health: Psychological Impact of COVID-19 Pandemic on Healthcare Workers	Peking University	To investigate the prevalence of psychological problems in different healthcare workers during the COVID-19 pandemic in China and explore factors that are associated with the psychological problems	DOI: 10.1136/gpsych-2020-100259
PHSM and Mental Health: services for infectious disease outbreaks including COVID-19	Peking University	To synthesize the data on worldwide mental health services and interventions for the infectious disease epidemics, and enhance knowledge and improve the quality and effectiveness of the mental health response to COVID-19 and future infectious disease epidemics.	DOI: 10.1017/S0033291720003888



Project	Institution	Objectives	Link to publication
PHSM and Mental Health: The impact of COVID-19 on loneliness, mental health, and health service utilization	Chinese University of Hong Kong	Investigated changes in loneliness, mental health problems and primary care attendance among older adults with multi-morbidity in a prospective primary care cohort before and after COVID-19 in Hong Kong	DOI: 10.3399/bjgp20X713021
PHSM and Vaccine Hesitancy: Social science response to Epidemics in East Asia	London School of Hygiene & Tropical Medicine	Assessing COVID-19 vaccine hesitancy, confidence and public engagement: a global social listening study	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3775544
PHSM impacts: Effects of COVID-19 on career and specialty choices among Chinese medical students	Peking University	Coronavirus disease 2019 (COVID-19) pandemic has brought unprecedented challenges to medical education systems and medical students. The aim of this study was to investigate the effects of COVID-19 pandemic on medical career and specialty choices among medical students.	DOI: 10.1080/10872981.2021.1913785
PHSM impacts: Guidelines for prevention and treatment of internet addiction in adolescents during home quarantine for the COVID-19 pandemic	Peking University	We have gathered leading experts in China and developed this guideline to provide references and suggestions to prevent and treat Internet addiction in adolescents during home quarantine and help them get through the pandemic.	DOI:10.4103/hm.hm_36_20
PHSM impacts: How did outdoor biking and walking change during COVID-19?: A case study of three U.S. cities	University of Washington	Examine how Stay Home orders in Houston, New York City, and Seattle impacted outdoor physical activity patterns, measured by daily bicycle and pedestrian count data	DOI: 10.1371/journal.pone.0245514
PHSM impacts: indigenous populations	Friocruz	1- The impact of Covid-19 on indigenous people related to health surveillance, social protection and prevention. 2- Social and ethical issues on Covid-19 related to people living in Favelas in Brazil	In progress



Project	Institution	Objectives	Link to publication
PHSM impacts: Poor urban settlements	Makerere University	Assessing socioeconomic impact of COVID-19 prevention and mitigation measures in poor urban settlements of Kampala City	In progress
PHSM impacts: Seattle Street View Campaign	University of Washington	Conducting longitudinal street view to track impacts of NPIs and COVID-19 recovery on community infrastructure in Seattle, WA, USA	https://www.nsf.gov/awardsearch/showAward?AWD_ID=2031119&HistoricalAwards=false
PHSM: Association of Symptoms of Attention Deficit and Hyperactivity with Problematic Internet Use among University Students in Wuhan, China During the COVID-19 Pandemic	Peking University (Prof. Lin Lu)	COVID-19 is still spreading worldwide and posing a threat to individuals' physical and mental health including problematic internet use (PIU). A potentially high-risk group for PIU are those with symptoms of attention deficit and hyperactivity (ADHD symptoms), because of restrictions in their physical activity levels and engagement in computer diversions requiring only short attention spans. The objective of this study is to identify the association of ADHD and PIU among university students.	DOI :10.1016/j.jad.2021.02.078
PHSM: Internet Addiction Increases in the General Population During COVID-19	Peking University (Prof. Lin Lu)	COVID-19-related quarantine and stress have likely escalated the crisis of Internet addiction. This study aimed to determine the impact of the COVID-19 pandemic on Internet use and related risk factors among the general public in China.	DOI: 10.1111/ajad.13156
PHSM: Social science response to Epidemics in East Asia	London School of Hygiene & Tropical Medicine	Social consequences of mass quarantine: a systematic literature review of global evidence	DOI: 10.1093/jtm/taaa192
PHSM: Social science response to Epidemics in East Asia	London School of Hygiene & Tropical Medicine	Comparison of public response to containment measures during the initial outbreak and resurgence	DOI: 10.2196/26518



Project	Institution	Objectives	Link to publication
		of COVID-19 epidemic in China: an infodemiology study	
PHSM: Social science response to Epidemics in East Asia	London School of Hygiene & Tropical Medicine	Cross-Country Comparison of Public Awareness, Rumors, and Behavioral Responses to the COVID-19 Epidemic: Infodemiology Study	DOI: 10.2196/21143
PHSM: Study on the social impact of physical distance on vulnerable populations in the Netherlands	SoNAR-Global	Understand the social impact of physical distance specific populations: older people, people with psychiatric problems, people with learning disabilities, homeless people, care workers, young families and people experiencing domestic violence.	https://doi.org/10.1093/geronb/gbaa111 DOI: https://doi.org/10.1016/j.jamda.2020.09.007



Global consultation: Community-centred responses to health emergencies: progress, gaps and research priorities

COVID-19 has reached deep into the lives of people and societies across the world. The health, economic, political and societal consequences of the pandemic are felt by all, but disproportionately impact those who are most vulnerable, including women, children, older people, people with disabilities, migrants, refugees and those living in fragile and conflict settings. These impacts will be felt for years to come. And they were not unanticipated: in September 2019, the inaugural report of the Global Preparedness and Monitoring Board (GPMB) called for urgent action to prepare a whole of society approach that can anticipate, detect, respond effectively to and recover from a respiratory pathogen pandemic. Despite forewarning, the world was unprepared to respond.

The most recent report from the GPMB calls for engaged citizenship as one of as one of five urgent actions to both strengthen the response to COVID-19 and prepare the world for future events of this kind. Ensuring that communities are at the centre of disease prevention, detection, response and recovery initiatives is a core goal of multiple high-level policies and frameworks, including the Sustainable Development Goals (SDGs), the Sendai Framework for Disaster Risk Reduction 2015-2030, and the Health Emergency and Disaster Risk Management Framework. For COVID-19, Strategic Preparedness and Response Plans repeatedly stress the need for inclusive, people and community-centred approaches to preparedness and response and the vital role that can be played by local actors, including civil society organizations. Citizen engagement has the power to mobilize communities and strengthen social cohesion in ways that top-down approaches are unable to achieve.

Despite progress in advancing this critical agenda, COVID-19 has revealed inconsistencies and weakness in mechanisms and approaches for actively involving and engaging citizens in prevention and response activities. All too often communities are seen as target groups or beneficiaries of prevention and response activities that are provided. Engagement requires appropriate mechanisms for governance and decision-making, government accountability, power sharing, and recognition of the legitimacy of local and traditional knowledge, competencies, systems and practices. Key lessons can be drawn from disaster management and humanitarian practice, as well as from innovative bottom-up approaches that have emerged in response to disease outbreaks and the COVID-19 pandemic in many parts of the world.



On Wednesday, 31 March 2021 WHO hosted a global consultation on Community-centred responses to health emergencies: progress, gaps and research priorities.

This event aimed to promote a rethink of the role of communities in prevention, detection, response and recovery interventions during outbreaks of new and re-emerging infectious diseases. Drawing on experiences of COVID-19 and other disease control efforts, the event signposted the vital role of trust, agency, social cohesion, plural forms of knowledge and resilience for inclusive, people and community centred approaches to preparedness and response. Topics covered included best practice for preparedness, community-based disease surveillance, transmission prevention, including contact tracing and quarantine, infection control and prevention, and care provision in community settings. A key outcome will be to specify the evidence needs and research agenda to drive and better support community-led initiatives, programmes and responses.

Objectives for the meeting were to:

- Identify knowledge gaps and evidence needs that can be addressed through interdisciplinary or social science research
- Understand the experience gained through local, regional, and national approaches, strategies and initiatives for inclusive, people and community-centred responses to the COVID-19 pandemic and other infectious disease outbreaks.
- Inspire new perspectives to tackling pandemic challenges through citizen engagement and participation.

Key findings are presented in a report of the meeting and videos of the event are publicly available on the WHO website.



Annex 1. Members of the WHO COVID-19 Social Science R&D Expert Group and subgroups

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Emily YY Chan (Chair)	Chinese University of Hong Kong
Lin Lu	Peking University
Lisa Schwartz	MacMaster University
Phaik Yeong Cheah	MORU Tropical Health Network; University of Oxford
Alice Desclaux	SoNAR-Global, CRCF
Beena Thomas	Tuberculosis Research Institute
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David Kaawa-Mafigiri	SoNAR-Global, Makerere University
David Napier	SoNAR-Global, University College London
Gustavo C Matta	Fiocruz
LY Wong	Chinese University of Hong Kong
Melissa Leach	Institute of Development Studies
Olivia Tulloch	Anthrologica
Tamara Giles-Vernick	SoNAR-Global, Institut Pasteur
Tang Kun	Tsinghua University
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Leesa Lin	London School of Hygiene and Tropical Medicine
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Kenneth Camargo	Rio de Janeiro State University
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Elise Novvete	Western University of Ontario



WHO and partners	Affiliation
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Dayo Spencer-Walters	WHO
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Vicky Houssiere	WHO EPI-WIN
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Eva Neiderberger	RCCE Collective Service/ Anthrologica
Moazzam Ali	WHO
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Lina Moses	GOARN-Research Lead, Tulane University
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Simone Carter	UNICEF Public Health Emergencies, CASS, Analytics for Operations

Health worker subgroup

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Good Participatory Practice Task Force and Technical Advisory Group

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Dr. Phaik Yeong Cheah	MORU Tropical Health Network; University of Oxford
Joanna Howard	Institute of Development Studies
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Evidence into Practice working group

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Olivier Rubin	Roskilde University
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Key lessons: government responses to COVID-19 subgroup

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Calvin Chiew	Singapore National Centre for Infectious Diseases
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Rapid qualitative methods subgroup

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Jeni Stolorow	GOARN-Research, Temple University
Beena Thomas	National Institute for Research in Tuberculosis



Annex 2. Publication List

WHO COVID-19 Research Roadmap social science working group: update on outputs and publications aligned with priority areas for research.

Uptake of public health and social measures, including vaccines

Behavioural considerations for acceptance and uptake of COVID-19 vaccines: WHO technical advisory group on behavioural insights and sciences for health, meeting report, 15 October 2020

Public use of masks as source control during the COVID-19 pandemic: key considerations from social science. Geneva: World Health Organization; 2020.

Public use of masks during the COVID-19 pandemic: key considerations for implementation v2.6 October 2020. Geneva: World Health Organisation; 2020

Analytics for Operations and Research Roadmap Working Groups: Guidance for Health Care Worker (HCW) Surveys in humanitarian contexts in LMICs

Analytics for Operations working group: How to maximise the use of social sciences evidence for public health emergencies in humanitarian settings

Carter SE, Gobat N, Pfaffmann Zambruni J, et al What questions we should be asking about COVID-19 in humanitarian settings: perspectives from the Social Sciences Analysis Cell in the Democratic Republic of the Congo BMJ Global Health 2020;5:e003607.

CASS Lessons Learned from Ebola for COVID-19. Four Guidance Briefs developed with CASS global partners <https://www.socialscienceinaction.org/blogs-and-news/social-science-support-covid-19-briefings-cellule-danalyse-en-sciences-sociales/>

CASS The [impacts of the COVID-19 outbreak response on women and girls in the Democratic Republic of the Congo](#)

Collis A, Garimella K, Moehring A, Rahimian A, Babalola S, Gobat N, Shattuck D, Stolow J, Eckles D, Aral S (2020) [Global survey on COVID-19 beliefs, behaviors, and norms](#)

Omoleke S.A Bayugo Y, Oyene U, Abrahams J, Gobat N, Good S, Manandhar M, Elfeky, S, Hernandez Bonilla A. G., Valentine N, Alger J, Huda Q, Mustafa S, Echavarria M.I, Rakesh A, Warren T, Moreno Lapitan J, Mier-Alpano, J.D, Spencer-Walters D, Del Pilar Labarda M, Mihuti M., Bhatiasavi A., Obinna I. Ekwunife O. I., PhD (under review) WHO Community Engagement Package: A Reinforcement of an Inclusive Approach to Global Public Health.

Role of information technology in COVID19 vaccination drive: an analysis of the COVID-19 Global Beliefs, Behaviors, and Norms Survey <https://doi.org/10.20944/preprints202104.0552.v1>

Tam WJ, Gobat N, Hemavathi D, Fisher, D. Risk communication and community engagement (RCCE) during the migrant worker COVID-19 outbreak in Singapore [Manuscript in Preparation for the Bulletin for the World Health Organization].

Voo TC, Reis R, Ho CHL, Tam CC, Kelly-Cirino C, Emanuel E, Beca JP, Littler K, Smith MJ, Parker M, Kass N, Gobat N, Lei R, Upshur R, Hurst S, Munsaka S (2021) Immunity certification for COVID-19: ethical considerations, WHO Bulletin, 99 155-161



Additional publications from group members:

- Burns, R., Enria, L., Bowmer, A., Vanderslott, S. and Lees, S. (2020) 'Clinical and Vaccine Trials for COVID-19: Key Considerations from Social Science', Brighton: Social Science in Humanitarian Action Platform (SSHAP)
- Camargo, Kenneth Rochel de Trying to make sense out of chaos: science, politics and the COVID-19 pandemic. *Cadernos de Saúde Pública* [online]. v. 36, n. 4 [Accessed 1 May 2021] , e00088120. Available from: <<https://doi.org/10.1590/0102-311X00088120>>. ISSN 1678-4464. <https://doi.org/10.1590/0102-311X00088120>.
- Castillio-Carandang N, Leaving no one behind: Imperatives for Equity and Solidarity in COVID-19 vaccination programs
- Chan EYY, Huang Z, Lo ESK, Hung KKC, Wong ELY, Wong SYS (2020). Sociodemographic predictors of health risk perception, attitude and behavior practices associated with health-emergency disaster risk management for biological hazards: the case of COVID-19 pandemic in Hong Kong, SAR China. *International Journal of Environmental Research and Public Health*, 17:3869. 2020.05. <https://doi.org/10.3390/ijerph17113869>
- Chan EYY, Shahzada TS, Sham TST, Dubois C, Huang Z, Liu S, Ho JYE, Hung KKC, Kwok KO, Shaw R. Narrative review of non-pharmaceutical behavioural measures for the prevention of COVID-19 (SARS-CoV-2) based on the Health-EDRM framework. *British Medical Bulletin*. 2020;Idaa030. doi:<https://doi.org/10.1093/bmb/Idaa030>
- Chung RYN, Chung GKK, Marmot M, Allen J, Chan D, Goldblatt P, Wong H, Lai E, Woo J, Yeoh EK, Wong SYS. COVID-19 related health inequality exists even in a city where disease incidence is relatively low: a telephone survey in Hong Kong. *Journal of Epidemiology & Community Health* 2021 <http://dx.doi.org/10.1136/jech-2020-215392>
- Dong D, Xu RH, Wong ELY, Hung CT, Feng D, Feng ZC, Yeoh EK, Wong SYS. Public Preference for COVID-19 Vaccines in China: a Discrete Choice Experiment. *Health Expectations* Sept 2020. <https://doi.org/10.1111/hex.13140>
- Dong D, Xu RH, Wong ELY, Hung CT, Feng D, Feng ZC, Yeoh EK, Wong SYS (2020). Public preference for COVID-19 vaccines in China: A discrete choice experiment. *Health Expectations*, published online ahead of print. <https://doi.org/10.1111/hex.13140>
- Enria L, Bangura M H, Kamara A S, Lees S, Remembering the Future: Epidemic Anticipation in Sierra Leone · PUBLIÉ 29 MAI 2020 · MIS À JOUR 13 JUILLET 2020
- Enria L, Waterlow N, Rogers NT, Brindle H, Lal S, Eggo R, Lees S, Roberts C ,(2020). Trust and Transparency in times of Crisis: Results from an Online Survey During the First Wave (April 2020) of the COVID-19 Epidemic in the UK. *medRxiv preprint* doi: <https://doi.org/10.1101/2020.09.01.20183822>
- Finlay BB...Giles-Vernick T. 2021. The hygiene hypothesis, the COVID-19 pandemic, and consequences for the human microbiome. *Proc Natl Acad Sci* 118,6:e2010217118. doi: 10.1073/pnas.2010217118.
- Fischer, Edward F. (Director), Napier, A. David (International Advisory Board Chair). 2021. Improving Pandemic Response: Global Lessons and Cultural Insights from COVID-19. Vanderbilt University and the Robert Wood Johnson Foundation: Cultural Contexts of Health and Wellbeing Initiative.



- Généreux M, David MD, O'Sullivan T, Carignan ME, Blouin-Genest G, Champagne-Poirier O, Champagne É, Burlone N, Qadar Z, Herbosa T, Hung KK, Ribeiro-Alves G, Arruda H, Michel P, Law R, Poirier A, Murray V, Chan EYY, Roy M. Communication strategies and media discourses in the age of COVID-19: an urgent need for action. *Health Promotion International*. 2020;1-8. doi:10.1093/heapro/daaa136
- Giles-Vernick T, Vray M, Heyerdahl L, Lana B, Gobat N, Tonkin-Crine S, Anthierens A. 2021. Public Views of COVID-19 Vaccination in Seven European Countries: Options for Response. Briefing to the ECDC, RECOVER project.
- Giles-Vernick, T., Kutalek, R., Napier, D., Kaawa-Mafigiri, D., Duckers, M., Paget, J., . . . Wilkinson, A. 2019. A new social sciences network for infectious threats. *Lancet Infectious Disease*, 19 (5), 461-463. doi:10.1016/S1473-3099(19)30159-8
- Henriëtte G. Van der Roest, Marleen Prins, Claudia van der Velden, Elske Stolte, Theo G. van Tilburg, Danny H. de Vries. The Impact of COVID-19 Measures on Well-Being of Older Long-Term Care Facility Residents in the Netherlands. *JAMDA*. September 10 2020.
- Hou Z, Du F, Zhou X, Jiang H, Martin S, Larson H, Lin L. Cross-Country Comparison of Public Awareness, Rumors, and Behavioral Responses to the COVID-19 Epidemic: Infodemiology Study. *Journal of Medical Internet Research*. 2020;22(8):e21143 (doi: 10.2196/21143)
- Hou Z, Song S, Du F, Shi L, Zhang D, Lin L, Yu H. Influence of the COVID-19 epidemic on prevention and vaccination behaviors among Chinese children and adolescents: results from an online survey *JMIR Public Health and Surveillance*. April 2021. (DOI: 10.2196/26372)
- Hou Z, Tong Y, Du F, Lu L, Zhao S, Yu K, Piatek S, Larson H, Lin L. Assessing COVID- 19 vaccine hesitancy, confidence and public engagement: a global social listening study. *Journal of Medical Internet Research*. (preprint: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3775544)
- Hrynck T, Ripoll S, Schmidt-Sane M (2020) Rapid Review: Vaccine Hesitancy and Building Confidence in COVID-19 Vaccine, Brighton: Social Science in Humanitarian Action Platform (SSHAP)
- Hrynck TA, Ripoll Lorenzo S, Carter SE COVID-19 response: mitigating negative impacts on other areas of health *BMJ Global Health* 2021;6:e004110.
- Kwok KO, Li KK, Wei WI, Tang A, Wong SYS, Lee SS. Influenza vaccine uptake, COVID-19 vaccination intention and vaccine hesitancy among nurses: a survey. *International Journal of Nursing Studies*, published online ahead of print. <https://doi.org/10.1016/j.ijnurstu.2020.103854>
- Osterrieder A, Cuman G, Pan-Ngum W, Cheah P, Cheah PK...Mackworth-Young CRS, Ongkili D, Chaviriyavuth R, Mukaka M, Cheah PY. Economic and social impacts of COVID-19 and public health measures: results from an anonymous online survey in Thailand, Malaysia, the United Kingdom, Italy and Slovenia. Preprint <https://doi.org/10.1101/2020.10.26.20209361> *BMJ Open*. In press
- Osterrieder A., Cuman G., Pan-Ngum W....Cheah PY. Economic and social impacts of COVID-19 and public health measures: results from an anonymous online survey in Thailand,



- Malaysia, the United Kingdom, Italy and Slovenia. medRxiv 2020:2020.10.26.20209361. doi: <https://doi.org/10.1101/2020.10.26.20209361>
- Pan-ngum W, Poomchaichote T, Cuman G, Cheah PK, Waithira N, Mukaka M, Naemiratch B, Kulpijit N, RChanviriyavuth R, Asarath S, Ruangkajorn S, Silan M, Stoppa S, Zuanna GD, Ongkili D, Cheah PK, Osterrieder A, Schneiders M, Mackworth-Young C, Cheah PY. Social, ethical and behavioural aspects of COVID-19. Wellcome Open Res 2020, 5:90 doi.org/10.12688/wellcomeopenres.15813.2
- Pan-ngum W, Poomchaichote T, Cuman G...Cheah PY. Social, ethical and behavioural aspects COVID-19 [version 2; peer review: 2 approved]. Wellcome Open Res 2020, 5:90 (<https://doi.org/10.12688/wellcomeopenres.15813.2>)
- Pan-ngum W, Poomchaichote T, Peerawaranun P, Kulpijit N, Osterrieder A, Waithira N, Mukaka M, Naemiratch B, Chanviriyavuth R, Asarath S, Ruangkajorn S, Kannika N, Cheah PY. Perspectives on public health interventions in the management of the COVID-19 pandemic in Thailand. Wellcome Open Res 2020, 5:245. doi.org/10.12688/wellcomeopenres.16293.1
- Pan-ngum W, Poomchaichote T, Peerawaranun P...Cheah PY. Perspectives on public health interventions in the management of the COVID-19 pandemic in Thailand [version 2; peer review: 1 approved]. Wellcome Open Res 2020, 5:(<https://doi.org/10.12688/wellcomeopenres.16293.1>)
- Rogers NT, Waterlow NR, Brindle H, Enria L, Eggo RM, Lees S and Roberts Ch (2020) Behavioral Change Towards Reduced Intensity Physical Activity Is Disproportionately Prevalent Among Adults With Serious Health Issues or Self-Perception of High Risk During the UK COVID-19 Lockdown. Front. Public Health 8:575091. doi: 10.3389/fpubh.2020.57509
- Stark L, Meinhart M, Vahedi L, et al The syndemic of COVID-19 and gender-based violence in humanitarian settings: leveraging lessons from Ebola in the Democratic Republic of Congo BMJ Global Health 2020;5:e004194.
- Van Der Westhuizen, H.-M., Kotze, K., Tonkin-Crine, S., Gobat, N. & Greenhalgh, T. Face coverings for covid-19: From medical intervention to social practice. BMJ 370, 1–6 (2020).
- Van Tilburg T.G., Steinmetz S., Stolte E., Van der Roest H., De Vries D.H. Loneliness and mental health during the COVID-19 pandemic: A study among Dutch older adults. August 5 2020. The Journals of Gerontology: Series B, gbaa111.
- Wang KL, Wong ELY, Ho KF, Cheung AWL, Yau PSY, Dong D, Wong SYS, Yeoh EK. Change of willingness to accept COVID-19 vaccine and reasons of vaccine hesitancy of working people at different waves of local epidemic in Hong Kong, China: repeated cross-sectional surveys. Vaccines 2021 (online) <https://www.mdpi.com/2076-393X/9/1/62/pdf>
- Wang KL, Wong ELY*, Ho KF, Cheung AWL, Chan EYY, Yeoh EK, Wong SYS (2020). Intention of nurses to accept coronavirus disease 2019 vaccination and change of intention to accept seasonal influenza vaccination during the coronavirus disease 2019 pandemic: A cross-sectional survey. Vaccine, 38(45):7049–7056. 2020.10. <https://doi.org/10.1016/j.vaccine.2020.09.021> (I.F. 2019: 3.143; Rank: 68/138 C)
- Wang Q, Xiu S, Zhao S, Wang J, Han Y, Dong S, Huang J, Cui T, Yang L, Shi N, Liu M, Wang X, Shen Y, Chen E, Lu B, Jin H, Lin L*. Vaccine hesitancy: COVID-19 and Influenza vaccine



- willingness among parents in Wuxi, China: a cross-section study. *Vaccines*. 2021 March. (doi: 10.3390/vaccines9040342)
- Wang X, Lin L, Xuan Z, Xu J, Zhou X. Risk communication on behavioral responses during COVID-19 among general population in China: a rapid national study. *Journal of Infection*. 2020. (doi: 10.1016/j.jinf.2020.10.031)
- Wu YS, Yan X, Dong D, Chung RYN, Yeoh EK (2020). [Letter to Editor] Equitable exit strategy is required: lessons learnt from Hong Kong's current resurgence of local outbreaks among individuals from highly deprived neighbourhoods. *Journal of Epidemiology and Community Health*, published online ahead of print. <https://doi.org/10.1136/jech-2020-215347>
- Zhou X, Song Y, Jiang H, Wang Q, Qu Z, Zhou X, Jit M, Hou Z, Lin L. Comparison of public response to containment measures during the initial outbreak and resurgence of COVID-19 epidemic in China: an infodemiology study. *Journal of Medical Internet Research*. 2021 Mar 11. (doi: 10.2196/26518)

Policy lessons

- Government Response Measures to COVID-19 Key Policy Lessons: From Experiences of Six Middle/ High Income Jurisdictions in the Western Pacific Region in the Early Stage of the Pandemic. Health System Impact Subgroup of the COVID-19 Social Science Working Group.
- Government Response Measures to COVID-19 Key Policy Lessons from Experiences of Six Middle/ High Income Jurisdictions in the Western Pacific Region in the Stage of New Normalcy, 1st June – 30th November 2020. Study Proposal by the Health System Impact Subgroup of the COVID-19 Social Science Working Group.

Additional publications from group members:

- Atkinson P, Gobat N, Lant S, Mablesen H, Pilbeam C, Solomon T, Tonkin-Crine S, Sheard S (2020) Understanding the policy dynamics of COVID-19 in the UK: Early findings from interviews with policy makers and health care professionals, *Social Science & Medicine*, Volume 266, <https://doi.org/10.1016/j.socscimed.2020.113423>
- Chan EYY, Lam HCY. Research in Health-Emergency and Disaster Risk Management and Its Potential Implications in the Post COVID-19 World. *Int J Environ Res Public Health*. 2021;18:2520. doi:10.3390/ijerph18052520
- Kwok KO, Li KK, Chan HHH, Yi YY, Tang A, Wei WI, Wong SYS (2020). Community Responses during early phase of COVID-19 epidemic, Hong Kong. *Emerging Infectious Diseases*, 26(7):1575–1579. 2020.07. <https://doi.org/10.3201/eid2607.200500>
- Leach, M, MacGregor M, Ripoll S, Scoones I & Wilkinson A (2021) Rethinking disease preparedness: incertitude and the politics of knowledge, *Critical Public Health*, DOI: 10.1080/09581596.2021.1885628
- Lv, A., T. Luo and J. Duckett Centralization vs Decentralization in Covid-19 Responses: Lessons from China (under review).



- MacGregor, H., Leach, M., Tshangela, A., Hrynicky, T. A., Lees, S., Niederberger, E., Parker, M., Ripoll Lorenzo, S., Rohan, H., Schmidt-Sane, M., Tulloch, O., & Wilkinson, A. (2021). One size does not fit all: adapt and localise for effective, proportionate and equitable responses to COVID-19 in Africa. *Family medicine and community health*, 9(2), e000709. <https://doi.org/10.1136/fmch-2020-000709>
- Rubin, O., Errett, N. A., Upshur, R., & Baekkeskov, E. (2021). The challenges facing evidence-based decision making in the initial response to COVID-19. *Scandinavian Journal of Public Health*. <https://doi.org/10.1177/1403494821997227>
- Rubin O., De Vries D.H. (2020) Diverging sense-making frames during the initial phases of the COVID-19 outbreak in Denmark. *Policy Design and Practice*. <https://doi.org/10.1080/25741292.2020.1809809>.
- Wong ELY, Yeoh EK, Dong D. Covid-19: transforming healthcare will require collaboration and innovative policies. *BMJ*. 2020 Jun 5;369:m2229. doi: 10.1136/bmj.m2229. PMID: 32503864.
- Wong ELY, Ho KF, Wong SYS, Cheung AWL, Yau PSY, Dong D, Yeoh EK. Views on Workplace Policies and its Impact on Health-related Quality of Life During Coronavirus Disease (COVID-19) Pandemic: Cross-sectional Survey of Employees. *International Journal of Health Policy and Management* Aug 2020. Online https://www.ijhpm.com/article_3879.html
- Wong NS, Lee SS, Kwan TZ, Yeoh EK* (2020). Settings of Virus Exposure and their implications in the propagation of transmission networks in a COVID-19 outbreak. *The Lancet Regional Health – Western Pacific*, 4:100052. 2020.11. <https://doi.org/10.1016/j.lanwpc.2020.100052>
- Wong SYS, Kwok KO, Chan FKL* (2020). What can countries learn from Hong Kong's response to the COVID-19 pandemic? *Canadian Medical Association Journal*, 192(19):E511–E515. 2020.05. <https://doi.org/10.1503/cmaj.200563>

Health systems and clinical care

- Marshall JC, Murthy S, Diaz J, Cheng A, Denholm J, Hodgson C, Tong S, Webb S, Bozza F, Adhikari NK, Foster N, Fowler, A Turgeon. China X Feng, R Qiu, L Shi, J Zhang. France R, Kojan, D Malvey. M Bauer, F Brunkhorst, T Glueck, T Wolf. C Gomersall. B Kumar. Ireland, M Clarke, J Laffey, I Martin-Loeches. Italy S Piva. N Shimizu. Myanmar S Phyu. M Bonten, M de Jong, L Derde, M Netea, F van de Veerdonk. C McArthur, S McBride, S McGuinness, S Morpeth. H Salisu-Kabara. J Sinclair. Y M Arabi. Y Kim, M-D Oh. UK K Baillie, J Dunning, T Fletcher, N Gobat, A Gordon, P Horby, D McAuley, L Merson, P Williamson, B Blackwood. USA D C Angus, S Berry, M Harhay, D Needham, T Uyeki. Vietnam V Q Dat. A minimal common outcome measure set for COVID-19 clinical research, *The Lancet Infectious Disease* 20(8) E192-197
- Nouvet E, Strachan PH, Luciani M, de Laat S, Conti A, Oliphant A, Monette E, Kapiri L, Schwartz L (2020) Triaging Critical Care during COVID-19: Global Preparedness, Socio-cultural considerations, and communication



Wu YS, Yan X, Zhao S, Wang JX, Ran JJ, Dong D, Wang M, Fung H, Yeoh EK, Chung RYN. Association of time to diagnosis with socioeconomic position and geographical accessibility to healthcare among symptomatic COVID-19 patients: a retrospective study in Hong Kong. *Health & Place* Nov 2020;66:102465
<https://doi.org/10.1016/j.healthplace.2020.102465>

Additional publications from group members:

- Barnett, D., Knieser, L., Errett, N., Rosenblum, A., Seshamani, M., & Kirsch, T. (2020). Reexamining Health-Care Coalitions in Light of COVID-19. *Disaster Medicine and Public Health Preparedness*, 1-5. doi:10.1017/dmp.2020.431
- Chan EYY, Kim JH, Lo ESK, Huang Z, Hung H, Hung KKC, Wong ELY, Lee EKP, Wong MCS, Wong SYS (2020). What happened to people with non-communicable diseases during COVID-19: Implications of H-EDRM Policies. *International Journal of Environmental Research and Public Health*, 17(15):5588. 2020.08.
<https://doi.org/10.3390/ijerph17155588>
- Hung KKC, Walline HK, Chan EYY, Huang Z, Lo ESK, Yeoh EK, Graham CA. Health service utilization in Hong Kong during the COVID-19 pandemic – a cross-sectional public survey. *Int J Health Policy Manag*. 2020.doi:10.34172/IJHPM.2020.183
- Hung KKC, Walline JH, Chan EYY, Huang Z, Lo ESK, Yeoh EK, Graham C. Health Service utilization in Hong Kong During the Covid-19 Pandemic – A Cross-sectional Public Survey. *International Journal of Health Policy Management* Oct 2020. DOI: 10.34172/ijhpm.2020.183
- Hung KKC, Walline JH, Chan EYY*, Huang Z, Lo ESK, Yeoh EK, Graham CA (2020). Health Service Utilization in Hong Kong During the COVID-19 Pandemic – A Cross-sectional Public Survey. *International Journal of Health Policy and Management*, published online ahead of print. <https://doi.org/10.34172/ijhpm.2020.183>
- Pilbeam C., Malden D., Newell K., Dagens A., Kennon K., Michelen M., Gobat N., Sigfrid L. Accessibility, inclusivity, and implementation of COVID-19 clinical management guidelines early in the pandemic: a global survey doi: <https://doi.org/10.1101/2021.03.31.21254680>
- Rhodes T, Lancaster K, Lees S and Parker M (2020) Modelling the pandemic: Attuning models to their contexts. *BMJ Global Health*.
- Silverberg S. L., Puchalski Ritchie L.M., Gobat N., Nichol A., Murthy S (2020) Clinician-researcher's perspectives on clinical research during the COVID-19 pandemic (2020) *PLOS ONE* <https://doi.org/10.1371/journal.pone.0243525>
- Tang, K., Gaoshan, J., Ahonsi, B. *et al.* Sexual and reproductive health (SRH): a key issue in the emergency response to the coronavirus disease (COVID- 19) outbreak. *Reprod Health* 17, 59 (2020). <https://doi.org/10.1186/s12978-020-0900-9>
- Wang, Z., & Tang, K. (2020). Combating COVID-19: health equity matters. *Nature medicine*, 26(4), 458-458.
- Wang, Z., Lin, L., Guo, Y., Xiong, H., & Tang, K. (2021). The Uncounted Casualties of a Hidden COVID-19 Epidemic in China: Cross-sectional Study on Deaths Related to Overwork. *Journal of Medical Internet Research*, 23(4), e23311.



Health workers and infection control

Perceptions of Healthcare Workers regarding local infection prevention and control procedures for COVID-19: Research protocol

Cellule d'Analyses de Science en Sociaux (CASS) and Guidance for Health Care Worker (HCW) Surveys in Humanitarian Contexts in LMICs (online at reliefweb)

Conly, J., Seto, W.H., Pittet, D. *et al.* Use of medical face masks versus particulate respirators as a component of personal protective equipment for health care workers in the context of the COVID-19 pandemic. *Antimicrob Resist Infect Control* **9**, 126 (2020). <https://doi.org/10.1186/s13756-020-00779-6>

Perdigão Neto LV, Oliveira MS, Pinhole ARG, Dias, MBGS, Sakata KN, Padoveze MC, Levin AS. Perceptions of Healthcare Workers Infection Prevention and Control Procedures for COVID-19: State of São Paulo, Brazil. Research report. July 2020

Silverberg S; Puchalski Ritchie LM; Gobat N; Murthy S; Perceptions of Healthcare Workers on Infection Prevention and Control Procedures for COVID-19 in Canada; Canadian Journal of Anesthesia (in press)

van Hout D; Hutchinson P; Wanat M; Pilbeam C; Goossens H; Anthierens S; Tonkin-Crine S; Gobat N; The experience of European hospital-based health care workers on following infection prevention and control procedures for COVID-19 BMC Infectious Disease (under review)

Additional publications from group members:

Anna Galle, Aline Semaan, Elise Huysmans, Constance Audet, Anteneh Asefa, Therese Delvaux, Bosede B. Afolabi, Alison El Ayadi, Lenka Benova (2020). A double-edged sword - Telemedicine for maternal care during COVID-19: Findings from a global mixed methods study of healthcare providers. doi: <https://doi.org/10.1101/2020.11.25.20238535>

Bielicki JA, Duval X, Gobat N, Goossens H, Koopmans M, Tacconelli E, van der Werf S (2020) Monitoring approaches for health-care workers during the COVID-19 pandemic *Lancet Infectious Disease* 20(10)

Semaan A, Audet C, Huysmans E, et al. Voices from the frontline: findings from a thematic analysis of a rapid online global survey of maternal and newborn health professionals facing the COVID-19 pandemic. *BMJ Global Health* 2020;5:e002967. doi:10.1136/bmjgh-2020-002967

Wang K, Wong EL, Ho KF, Cheung AW, Chan EYY, Yeoh EK, Wong SYS. Intention of nurses to accept coronavirus disease 2019 vaccination and change of intention to accept seasonal influenza vaccination during the coronavirus disease 2019 pandemic: A cross-sectional survey. *Vaccine*. 2020;38(45):7049-56.

Wong ELY, Dong D, Griffiths S, Lui SF, Hung CT, Fung H, Chan EYY, Yeoh EK. What is appropriate PPE? Lessons learned from healthcare worker COVID-19 infection in Hong Kong. *BMJ*. 2020;370. doi:<https://www.bmj.com/content/370/bmj.m2641/rr-0>

Wong ELY, Ho KF, Dong D, Cheung AWL, Yau PSY, Chan EYY, Yeoh EK, Chien WT, Chen FYH, Poon S, Zhang QP, Wong SYS. Compliance with Standard Precautions and Its



Relationship with Views on Infection Control and Prevention Policy among Healthcare Workers during COVID-19 Pandemic. *International Journal of Environmental Research and Public Health* March 2021; 18(7):3420
<https://doi.org/10.3390/ijerph18073420>

Wong ELY*, Ho KF, Wong SYS, Cheung AWL, Yau PSY, Dong D, Yeoh EK (2020). Views on workplace policies and its impact on health-related quality of life during coronavirus disease (COVID-19) pandemic: cross-sectional survey of employees. *International Journal of Health Policy and Management*, published online ahead of print. <https://doi.org/10.34172/ijhpm.2020.127> (I.F. 2019:

Homebased care for people infected with COVID-19

Chan EY, Lo ES, Huang Z, Kim JH, Hung H, Hung KK, Wong ELY, Wong SY, Gobat N. Characteristics and well-being of urban informal home care providers during COVID-19 pandemic: a population-based study. *BMJ Open*. 2020 Nov 17;10(11):e041191. doi:10.1136/bmjopen-2020-041191. PMID: 33203637; PMCID

Chan EYY, Gobat N, Hung H et al. A review on implications of home care in a biological hazard: The case of SARS-CoV-2/COVID-19. Collaborating Centre for Oxford University and CUHK for Disaster and Medical Humanitarian Response CCOUC 2020 (Health-Emergency and Disaster Risk Management Technical Brief Series #202001

Chan EYY, Gobat N, Kim JH, Newnham E, Huang Z, Hung H, Dubois C, Hung KKC, Wong ELY, Wang SYS (2020). [Commentary] Informal home care providers: the forgotten health care workers during the COVID-19 pandemic. *Lancet*, 395(10242):1957–1959. 2020.06.

Macgregor H, Hrynck T. COVID-19: Strategies to support home and community-based care. Social Science in Humanitarian Action Platform: 2020 (<https://www.socialscienceinaction.org/resources/covid-19-strategies-to-support-home-and-community-based-care/> accessed 20 July 2020).

Verberk J, Anthierens S, Tonkin-Crine S, Goossens H, Kinsman J, de Hoog M, Bielicki J, Bruijning Verhagen P, Gobat N (2021) Experiences and Needs of Persons Living with a Household Member Infected with SARS-CoV-2 - a Mixed Method Study, *PLOS One* 10.1371/journal.pone.0249391

Psychosocial impacts of COVID-19

Bao Y, Sun Y, Meng S, Shi J, Lu L. 2019-nCoV epidemic: address mental health care to empower society. *Lancet*. 2020;395(10224):e37-e8.

Généreux M, Schluter PJ, Hung KK, Wong CS, Pui Yin Mok C, O'Sullivan T, David MD, Carignan ME, Blouin-Genest G, Champagne-Poirier O, Champagne É, Burlone M, Qadar Z, Herbosa T, Ribeiro-Alves G, Law R, Murray V, Chan EYY, Pignard-Cheynel N, Salerno S, Lits G, d'Haenens L, De Coninck D, Matthys K, Roy M. One Virus, Four Continents, Eight Countries: An Interdisciplinary and International Study on the Psychosocial Impacts of the COVID-19 Pandemic among Adults. *Int J Environ Res Public Health*. 2020;17(22):8390.doi:10.3390/ijerph17228390



- Liu JJ, Bao Y, Huang X, Shi J, Lu L. Mental health considerations for children quarantined because of COVID-19. *Lancet Child Adolesc Health*. 2020;4(5):347-9.
- Loneliness and mental health during the COVID-19 pandemic: A study among Dutch older adults. *The journals of gerontology. Series B, Psychological sciences and social sciences*, gbaa111. Advance online publication. <https://doi.org/10.1093/geronb/gbaa111>
- Pan YH, Xin MQ, Zhang CH, Dong W, Fang Y, Wu WH, Li MZ, Pang J, Zheng ZL, Wang ZX*, Yuan JQ, He YL (2020). Associations of mental health and personal preventive measure compliance with exposure to COVID-19 information during work resumption following the COVID-19 outbreak in China: cross-sectional survey study. *Journal of Medical Internet Research*, 22(10):e22596. 2020.10. <https://doi.org/10.2196/22596>
- Que J, Shi L, Deng J, Liu J, Zhang L, Wu S, et al. Psychological impact of the COVID-19 pandemic on healthcare workers: a cross-sectional study in China. *Gen Psychiatr*. 2020;33(3):e100259.
- Que J, Yuan K, Gong Y, Meng S, Bao Y, Lu L. Raising awareness of suicide prevention during the COVID-19 pandemic. *Neuropsychopharmacol Rep*. 2020;40(4):392-5.
- Shi L, Lu ZA, Que JY, Huang XL, Liu L, Ran MS, et al. Prevalence of and Risk Factors Associated With Mental Health Symptoms Among the General Population in China During the Coronavirus Disease 2019 Pandemic. *JAMA Netw Open*. 2020;3(7):e2014053.
- Sun Y, Bao Y, Kosten T, Strang J, Shi J, Lu L. Editorial: Challenges to Opioid Use Disorders During COVID-19. *Am J Addict*. 2020;29(3):174-5.
- Sun Y, Bao Y, Lu L. Addressing mental health care for the bereaved during the COVID-19 pandemic. *Psychiatry Clin Neurosci*. 2020;74(7):406-7.
- Sun Y, Li Y, Bao Y, Meng S, Sun Y, Schumann G, et al. Brief Report: Increased Addictive Internet and Substance Use Behavior During the COVID-19 Pandemic in China. *Am J Addict*. 2020;29(4):268-70.
- Van der Roest, H.G., Prins, M., van der Velden, C., Steinmetz, S., Stolte, E., van Tilburg, T.G., de Vries, D.H. (2020). The Impact of COVID-19 Measures on Well-Being of Older Long-Term Care Facility Residents in the Netherlands, *Journal of the American Medical Directors Association*, 21 (11) <https://doi.org/10.1016/j.jamda.2020.09.007>.
- van Tilburg, T. G., Steinmetz, S., Stolte, E., van der Roest, H., & de Vries, D. H. (2020).
- Wong SYS*, Zhang DX, Sit RWS, Yip BHK, Chung RYN, Wong CKM, Chan DCC, Sun W, Kwok KO, Mercer SW (2020). Impact of COVID-19 on loneliness, mental health, and health service utilization: a prospective cohort study of older adults with multimorbidity in primary care. *British Journal of General practice*, published online ahead of print. <https://doi.org/10.3399/bjgp20X713021>
- Wu YS, Yan X, Zhao S, Wang JX, Ran JJ, Dong D, Wang MHT, Fung H, Yeoh EK, Chung RYN* (2020). Association of time to diagnosis with socioeconomic position and geographical accessibility to healthcare among symptomatic COVID-19 patients: A retrospective study in Hong Kong. *Health and Place*, 66:102465. 2020.11. <https://doi.org/10.1016/j.healthplace.2020.102465>
- Xin MQ, Luo ST, She R, Yu YQ, Wang SH, Tao FB, Zhao JF, Hu DS, Gu J, Wang HM, Wang ZF, Hu GQ, Li LJ, Ma L, Zhang JX, Li LP, Zhang GH, Lin DH, Cai Y, you H, Lau JTF*



(2020). Negative cognitive and psychological correlates of mandatory quarantine during the initial COVID-19 outbreak in China. *American Psychologist*, 75(5):607–617. 2020.07. <https://doi.org/10.1037/amp0000692>

Yue JL, Yan W, Sun YK, Yuan K, Su SZ, Han Y, et al. Mental health services for infectious disease outbreaks including COVID-19: a rapid systematic review. *Psychol Med*. 2020;50(15):2498-513.

Humanitarian contexts and vulnerable populations

Analytics for Operations working group. How to maximise the use of social sciences evidence for public health emergencies in humanitarian settings

Carter SE, Gobat N, Pfaffmann Zambruni J, et al. What questions we should be asking about COVID-19 in humanitarian settings: perspectives from the Social Sciences Analysis Cell in the Democratic Republic of the Congo. *BMJ Global Health* 2020;5:e003607. doi:10.1136/ bmjgh-2020-003607

Additional publications from group members:

Anthrologica (2020) Compliance with Physical Distancing Measures for COVID-19 and Implications for RCCE in Eastern and Southern Africa; Brighton, Social Science in Humanitarian Action Platform

Ashworth, H. C., Dada, S., Buggy, C. & Lees, S. (2020) The Importance of Developing Rigorous Social Science Methods for Community Engagement and Behavior Change During Outbreak Response. *Disaster Med. Public Health Prep*. 1–6

Bhatia A , Fabbri C, Cerna-Turoff I, Tanton C, Knight L, Turner E, Lokot M, Lees S, Cislighi B, Peterman A, Guedes A & Devries K (2020) COVID-19 response measures and violence against children. *World Health Bulletin*

Butler N, Tulloch O (2020) Considerations and Principles for Shielding People at High Risk of Severe Outcomes from COVID-19; Brighton, Social Science in Humanitarian Action Platform

Chu Y, Alam P, Larson H, Lin L* Social consequences of mass quarantine: a systematic literature review of global evidence. *J Travel Medicine*. taaa192. 2020. (doi: 10.1093/jtm/taaa192)

de Vries, D.H., Pols, A.J., M'charek, A.A., van Weert, J.C.M. (2021) *International Journal of Care and Caring*, in press.

Duclos D, Palmer J (2020) Background Paper: COVID-19 in the Context of Forced Displacement: Perspectives from the Middle East and East Africa; Brighton, Social Science in Humanitarian Action Platform

Enria, L, Bangura, M, Abass K, Lees S (2020) Remembering the Future: Epidemic Anticipation in Sierra Leone. *Politique Africaine*. <https://polaf.hypotheses.org/6468>

Fairhead J, Leach M, Millimouno D Spillover or endemic? Reconsidering the origins of Ebola virus disease outbreaks by revisiting local accounts in light of new evidence from Guinea *BMJ Global Health* 2021;6:e005783.

Jones L COVID-19: Why Are Prisons a Particular Risk, and What Can Be Done to Mitigate This? Brighton, Social Science in Humanitarian Action Platform



- Jones L, Schmidt-Sane M (2020) COVID-19 RCCE Strategies for Cross-Border Movement in Eastern and Southern Africa; Brighton, Social Science in Humanitarian Action Platform
- Lees S & Enria L (2020) Comparative Ethnographies of Medical Research: Materiality, Social Relations, Citizenship and Hope in Tanzania and Sierra Leone. *International Health* (Special Issue: Spotlight on Global Health Research)
- McKay G, & Lees S (2020) Another Missed Opportunity to Include Pregnant Women in Research During the Coronavirus Disease 2019 (COVID-19) Pandemic) *Obstetrics & Gynecology*
- Moore K, Tulloch O, Ripoll S, (2020) Dying, Bereavement and Mortuary and Funerary Practices in the Context of COVID-19; Brighton, Social Science in Humanitarian Action Platform
- Napier, A. D. (2020). I heard it through the grapevine: On herd immunity and why it is important. *Anthropology Today*, 36 (3), 3-7. doi:10.1111/1467-8322.12572
- Napier, A. D. (2020). Rethinking vulnerability through Covid-19. *Anthropology Today*, 36 (3), 1-2. doi:10.1111/1467-8322.12571
- Napier, A. D., & Fischer, E. F. (2020). Misunderstanding a Viral Pandemic: The Social and Cultural Contexts of COVID-19. *SOCIAL RESEARCH*, 87 (2), 271-277.
- Napier, A.D., & Fischer, E.F. (2020). The Culture of Health and Sickness: How Uganda Leads on Covid-19. *Le Monde diplomatique*, n.2007, July, 6-7. <https://mondediplo.com/2020/07/04uganda>
- Osborne J, Paget J, Napier D, Giles-Vernick T, Kutalek R, Rodyna R, Ahmed S.M, Dückers M. Addressing vulnerabilities in communities facing infectious disease threats: A need for social science-driven assessments. *Journal of Global Health* (forthcoming).
- Osborne, J., Paget, J., Napier, D., Giles-Vernick, T., Kutalek, R., Rodyna, R., . . . Dückers, M. 2021. Addressing vulnerabilities in communities facing infectious disease threats: A need for social-science driven assessments *J Glob Health*, 11, 03003. doi:10.7189/jogh.11.03003
- Pickard, J., Srivastava, S., Bhatt, M.R., Mehta, L. (2020) In-Focus: COVID-19, Uncertainty, Vulnerability and Recovery in India; Brighton, Social Science in Humanitarian Action Platform
- Rashid SF (feature article July 1, 2020), Research on community resilience, (interview) *Bulletin of the World Health Organization* 2020;98:447-448. doi: [http:// dx.doi.org/10. 2471/ BLT.20.030720](http://dx.doi.org/10.2471/BLT.20.030720)
- Rashid SF, BAKhtar B, Farnaz N, Theobald S, Ali S, Alam W, Ozano K (June 2020), Fault-lines in the Public Health Approach to Covid-19: Recognizing Inequities and Ground Realities of Poor Residents Lives in the Slums of Dhaka city Bangladesh
- Rashid SF, Theobald S, Ozano K, 2020. Towards a socially just model: balancing hunger and response to the COVID-19 pandemic in Bangladesh, *BMJ Global Health* 2020; 5: e002715. doi:10.1136/bmjgh-2020-002715
- Rima A. Afifi, Nicole Novak, Paul A. Gilbert, Bernadette Pauly, Sawsan Abdulrahim, Sabina Faiz Rashid, Fernando Ortega, Rashida A. Ferrand, (2020), 'Most at risk' for COVID19? The imperative to expand the definition from biological to social factors for equity, *Preventive Medicine*, <https://doi.org/10.1016/j.ypmed.2020.106229>



- Schmidt-Sane, M., Jones, L., Tulloch, O (2020) Key Considerations: Emerging Evidence on Shielding Vulnerable Groups During COVID-19; Brighton, Social Science in Humanitarian Action Platform
- Schmidt-Sane, M., Ripoll, S. , Wilkinson, A. (2020) COVID-19 Management in Marginalised Populations in Southeast Asia; Brighton, Social Science in Humanitarian Action Platform
- Shimizu K, Lin L. Defamation against healthcare providers in Japan during COVID-19 pandemic. International Journal of Health Policy and Management. 2020. (doi: 10.34172/IJHPM.2020.184)
- Social Science in Humanitarian Action Platform (2020) Quarantine in the Context of COVID-19; Brighton
- Stark L, Meinhart M, Vahedi L, et al. The syndemic of COVID-19 and gender-based violence in humanitarian settings: leveraging lessons from Ebola in the Democratic Republic of Congo. BMJ Global Health 2020;5:e004194. doi:10.1136/bmjgh-2020-004194
- Wilkinson A (2020) Key Considerations: COVID-19 in Informal Urban Settlements; Brighton Social Science in Humanitarian Action Platform
- Wilkinson, A., Ali, H., Bedford, J., Boonyabancha, S., Connolly, C., Conteh, A., . . . Whittaker, L. (2020). Local response in health emergencies: key considerations for addressing the COVID-19 pandemic in informal urban settlements. Environment and Urbanization doi:10.1177/0956247820922843
- Wilkinson, A., Ripoll, S., Schmidt-Sane, M., McLeod, K. (2020) COVID-19 in the Context of Conflict and Displacement – Myanmar; Brighton, Social Science in Humanitarian Action Platform