Full title of stud: COVID-19 Social Science and Public Engagement Action Research in Vietnam, Indonesia and Nepal (SPEAR): Exploring the experiences and impacts of COVID19 for healthcare workers and vulnerable communities
OXTREC Approval Reference: 547-20
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Principal Investigator: Dr. Ravi Shakya
Sponsor: Oxford University Clinical Research Unit-Vietnam

Listed Investigators	MaryChambers, Sonia Lewycka, Jennifer Ilo Van Nuil, Raph Hamers, Abhilasha Karkey
Study Start and End date (As per protocol)	Study starts: Sep 2020 Study ends: March 2022
Actual Start and End date	Approval date: 5 March 2020 Enrollment started: Oct 2020 Enrollment ends: Jan 2022 Study ends: March 2022
Study Design	Mixed methods Social science study, combining survey and interview methods, Key Informant Interview, Digital Diary social media surveillance
Sample size (As per protocol)	In Nepal, we will sample a. A minimum of 300 staff from Patan Hospital, following a similar stratified sampling procedure as for NHTD. For the community survey, we have estimated the minimum sample size based on 50% prevalence and 5% precision for the range of factors considered giving the most conservative sample size estimate, and a minimum of 385 per country, rounded up to 400. Enrolling a higher number of participants through online surveys will allow us to perform substantive analysis, and the granularity of analysis (for instance stratification of data by location, and groupings) will be increased in line with increasing sample size.

	Justification (interviews and digital diaries): The sample size estimates for the qualitative components were determined based on an estimate that would maximize the diversity of the sample (i.e. include enough participants to have a range of experiences) while also following the concept of theoretical saturation (i.e. include participants up until after the point where no new categories and experiences were being discovered in the interviews for a particular group).
Actual number of participants enrolled	This study is being conducted in Indonesia, Nepal and Vietnam with a total enrollment of 4254 (as of 11/11/2021) • 1281 participants from Nepal - **Survey 1191** Health care workers- 732 Community – 459 - **Indepth Interview 77** Health care worker- 44 Community- 33 - **Key Informant Discussion 6** Health care Worker- 4 Community- 2 - **Digital Diaries 10** Health Care Worker- 2 Community- 8
Inclusion Criteria	Links to online surveys will be posted on institutional websites, and shared through professional networks and social media channels to reach as wide an audience as possible. We seek permission to contact discharged COVID-19 patients and people within or discharged from quarantine centers, in sites where applicable. Extensive networks within the healthcare systems and communities in each country to target specific vulnerable communities to increase participation, identify participants without internet access to take part in telephone interviews, and to recruit participants for in-depth interviews and digital diaries. For targeted healthcare worker interviews, we will use random sampling from staff lists at selected hospitals linked to our partner institutions. For Targeted community interviews, we will use purposive sampling to identify participants who would be most likely to be unable to access the online survey. We will use purposive sampling to select participants for in-depth interviews based on gender, age and vulnerability to obtain a wide range of experiences and perspectives. Participants for interviews

	may also be identified through discussions with key stakeholders and through already established contacts in the research sites.
Exclusion criteria	If a participant did not provide consent, they will be excluded from the study.
Investigational Medicinal Product(s) & Mode of administration	N/A
Duration of Treatment	N/A

Primary and Secondary Objective(s)	<u>Primary Objective</u>
	• Identify and describe the experiences and perceptions of HCWs, CHWs and other healthcare staff during/after the COVID-19 pandemic in Nepal, Indonesia, and Vietnam, with emphasis on:
	  ○ PPE access and practices in the complex healthcare landscapes across the sites,
	  ○ Impact of COVID-19 on HCWs' and health-related staff's mental health across the sites;
	• Explore the impact of the COVID-19 outbreak on vulnerable communities in Nepal, Indonesia, and Vietnam;
	• Identify mis-information circulating within these populations and co-design targeted evidenced-based public engagement.

Endpoints. Outcome Measure (s)	The qualitative part of this study analyzed qualitative interview data with HCWs and health-related staff to explore their experiences during the pandemic between 2020 and 2021 in Vietnam, Indonesia, and Nepal. Using Bahers' sociological framework, Community of Fate, we describe five themes reflecting the formation of a community of HCWs and the social cohesion underlying their efforts to survive hardship. The first three themes characterise the HCW community of fate, including (1) Recognition of extreme work-related danger, (2) physical and figurative closures where HCWs restrict themselves from the outside world, (3) chronic ordeals with overwhelming workload and responsibilities, encompassing recurrent mental health challenges. Against such extreme hardship, cohesive bonding and social resilience are reflected through two additional themes: (4) a mutual sense of moral and professional duty to protect communities, (5) the vertical and horizontal

	convergence among HCWs across levels and among government departments. We discuss these HCWs' challenges in relation to systemic vulnerabilities while advocating for increasing investment in public health and collaboration across government sectors to prepare for emergency situations.
Statistical Methods	N/A
Conclusions	This cross-country mixed-methods social science study employs a comprehensive approach, integrating online and in-person surveys, in-depth interviews, key informant discussions, digital diaries, and social media surveillance to examine the experiences and perceptions of healthcare workers (HCWs), community health workers (CHWs), and other healthcare staff during and after the COVID-19 pandemic in Nepal, Indonesia, and Vietnam. A total of 4,254 participants were recruited across the three countries. The study investigates the impact and lived experiences of individuals during the pandemic, with a particular focus on the effects of the COVID-19 outbreak on vulnerable communities. Additionally, it explores public knowledge and perceptions regarding COVID-19 vaccines, providing critical insights into the broader societal and healthcare-related implications of the pandemic.
List of Publications (or plans for publications) including those for patients (if applicable)	1. https://pmc.ncbi.nlm.nih.gov/articles/PMC11190837/ 2. DOI:10.12688/wellcomeopenres.17314.1 3. The manuscript for the cross-country vulnerable paper has been drafted and summitted to BMC Medical Ethics on Oct 2024 for potential publication.

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