

## **ETHICS, SOCIAL SCIENCE AND HUMANITIES**

1.

**Amy Paterson, University of Oxford**

### **Developing and Validating the RAPID Stigma Scales: A Cross-Outbreak Tool for Monitoring Infectious Disease Stigma**

Amy Paterson is a South African medical doctor and final year DPhil candidate at the University of Oxford. Her research focuses on stigma in infectious disease outbreaks.

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Minimising stigma in infectious disease outbreaks is crucial for optimising response efforts. However, there are currently no standardised tools for assessing stigma across outbreak contexts, and outbreak-specific tools are developed too slowly to inform timely interventions.

To address this gap, we developed and validated the (Re)-emerging and EPidemic Infectious Diseases (RAPID) Stigma Scales. The scale development process included a systematic review, 32 stakeholder interviews, a regionally representative expert Delphi process, and community cognitive interviews. We then conducted field testing and psychometric validation in communities affected by Ebola disease in Uganda, mpox in the UK, and Nipah virus disease in Bangladesh, with 1,008 respondents across the three countries.

The final RAPID Community Stigma Scale (12 items) assesses initial social stigma, authority/provider-related stigma, structural stigma, and enduring social stigma. The RAPID Self-Stigma Scale (4 items) is unidimensional. Both scales demonstrated strong psychometric properties, including content validity, structural validity (factor loadings  $\geq 0.6$ ), and reliability (alphas: 0.79–0.92). Higher stigma scores were associated with greater hesitancy to report symptoms and seek care.

The RAPID Scales offer responders a validated, deployable tool for real-time stigma assessment across diverse outbreaks, enabling the design of targeted stigma reduction interventions.

2.

**Devika Kapoor, RAND Europe, and Sumair Nizammuddin, Nuffield Council on Bioethics**

### **Integrating social science research into epidemic responses in Africa**

Devika Kapoor is an Analyst at RAND Europe within the Science and Emerging Technology team. Her work includes exploring the interface between emerging technologies, health and public services, and the mechanisms driving technological development and knowledge creation across sectors.

Sumair Nizamuddin is a Policy Project Officer at the Nuffield Council on Bioethics, supporting the 14-day embryo research rule and Genomics Network. He previously spent

three years at Cancer Research UK, focusing on ethical patient and public engagement in clinical trials and research strategy.

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This study, conducted as part of the EDCTP PANDORA ID NET initiative through UCL, in partnership with Chatham House, The Global Health Network, and Africa CDC, examines the integration of social science research into epidemic responses across Africa. The research combined literature review, expert interviews, and focus group discussions, alongside a two-day workshop that brought together over 350 field experts, academics, and first responders.

Our analysis reveals that while social sciences' role in epidemic response has gained acceptance since the West African Ebola outbreak, their integration remains largely confined to community engagement and risk communication. Key barriers identified include insufficient local research capacity, limited interdisciplinary collaboration, inadequate data-sharing mechanisms, and persistent colonial perspectives in research approaches. Social science research also is often commissioned anew during outbreaks without utilizing existing knowledge.

The emergence of "epidemic social science," exemplified by the Integrated Outbreak Analytics approach, shows promise, yet the research landscape operates largely within disciplinary boundaries. The study emphasizes the need for systematic coordination between response pillars and strengthened local research capacity, while highlighting the importance of contextually relevant, locally-led research in developing effective, culturally sensitive intervention strategies.

3.

**Kerrie Wiley, Sydney School of Public Health, The University of Sydney**

### **Protecting people and livelihoods at the human-animal interface: How can lessons learned from the social science of human vaccination be applied to other species?**

Dr Kerrie Wiley is a Senior Lecturer and Sydney Horizons Fellow / NHMRC Emerging Leadership Fellow with the University of Sydney's School of Public Health, and co-lead of the Behavioural and Social Insights in Immunisation group. Dr Wiley is interested in the social and behavioural aspects of immunisation, and her current work includes childhood vaccination, mosquito borne disease prevention, aquaculture, and public health policy.

People's health and wellbeing is impacted globally by diseases affecting multiple species, such as Hendra virus, Rabies, highly pathogenic avian influenza, and bacterial diseases in farmed fish. In all these cases, vaccines are available or in development, but uptake or intention is either low, decreasing, or unknown.

Current social research on vaccine uptake focuses on human diseases through a Public Health lens. Understanding the drivers of animal vaccination in context with human vaccination is an important next step toward a truly One Health paradigm, but what drives vaccination of other species is not well understood. Here I present novel applications of human vaccine acceptance frameworks as a potential way to inform effective vaccine rollout in other species to enhance One Health approaches to pandemic preparedness planning. I will show parallels between research with vaccine-rejecting parents and vaccine-rejecting horse owners. I will then present novel applications of human vaccine acceptance

frameworks to equine Hendra virus vaccination, and vaccination of farmed fish against production limiting diseases. I will then discuss future directions for this research and its potential application in vaccine programme delivery for disease control and pandemic preparedness.

Leveraging similarities and accounting for differences in the drivers of human and animal vaccine acceptance provides a new lens for vaccine program implementation and intervention development.

4.

**Charlotte Waltz, Erasmus University Rotterdam and Pandemic & Disaster Preparedness Center**

### **Bridging Epistemic Divides: Evaluating Integrated Scientific Advice in Pandemic Decision-Making**

Charlotte Waltz is a postdoctoral researcher at Erasmus University Rotterdam and the Pandemic & Disaster Preparedness Center whose work bridges anthropology, sociology, STS, and public health, with a focus on governance, policy, and care. Grounded in feminist methodologies, her research critically examines how power, social norms, and institutional structures inform policy responses.

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In crises like pandemics, it's crucial to swiftly translate scientific knowledge into policy advice. While broad 'evidence-to-decision' frameworks exist, the process of converting data and knowledge into actionable advice varies by country and crisis specifics. A key challenge of integrated advice is that it extends beyond quantifiable methods and types of knowledge. Different disciplines operate under distinct epistemologies—varying in their standards of evidence, approaches to uncertainty, and ways of generating insights. Accommodating these differences within a coherent advisory framework requires balancing rigor across diverse knowledge domains. The COVID-19 pandemic has prompted many nations to enhance their advisory mechanisms, challenging traditional methods and raising questions about the efficacy of new approaches. In the Netherlands, we are examining how to provide integrated scientific advice that combines insights from various disciplines. Currently, biomedical, social, and economic scientists offer separate recommendations.

To develop an evaluative framework for high-quality integrated advice, we have established criteria based on the EC's Scientific Advisory Mechanism report Scientific advice to European policy in a complex world, feedback from simulation exercises comparing separate and integrated advisory practices, and a prioritization session with multidisciplinary experts. Key criteria include timely and phase-dependent advice; transparency; communication of uncertainties and diverse perspectives; clarity of evidence-to-advice pathways; presentation of multiple policy options; and scenario-based approaches.

Our next challenge is to develop evaluation methods that reflect the multidimensional nature of integrated advice. This requires moving beyond conventional quantitative assessments to capture the value of interdisciplinary synthesis, the negotiation of epistemic differences, and the practical impact of advisory processes on decision-making.

5.

**Jamie Webb, University of Oxford**

## **The ethics of selective deployment of AI in an infectious disease outbreak**

Jamie Webb is a postdoctoral researcher in bioethics in the Ethox Centre at the University of Oxford. He works as part of the Oxford-Johns Hopkins Global Infectious Disease Ethics Collaborative (GLIDE).

Vandersluis & Savulescu (2024) have argued in favour, in some particular circumstances, of the selective deployment of AI technologies where algorithmic performance levels is materially worse for subgroups. These include contexts where the benefits to the majority group of AI deployment are sufficiently high, and where non-algorithmic solutions can be provided to relevant subgroups whilst steps are taken to redress the epistemic causes of less effective model performance. The case-studies they provide to justify this claim focus on the use of AI in routine clinical care. This presentation considers whether selective deployment can be ethically justified or practically feasible if AI is used during an infectious disease outbreak. This presentation will evaluate the applicability of Vandersluis & Savulescu's arguments for selective deployment considering the differences between clinical and public health ethics. These include the latter's focus on populations rather than the individual, the different balance between equity and utility, the different ethical paradigms for treatment versus prevention, and the importance of solidarity as an ethical value. It will conclude by making recommendations for the possible deployment of AI technologies in an infectious disease outbreak.

### **References**

Vandersluis, R., & Savulescu, J. (2024). The selective deployment of AI in healthcare. *Bioethics*, 38, 391–400. <https://doi.org/10.1111/bioe.13281>

6.

## **Bryain Maradiaga Mendoza, The Global Health Network**

### **Advancing Pandemic Preparedness, Prevention, and Response Through a Community of Practice and Knowledge Sharing**

I am a Honduran physician and global health professional with clinical training throughout Latin America and the United States. I am the Regional Coordinator for LAC, the AI for Global Health (AI4GH) initiative. I lead efforts to advance responsible AI research, foster international collaboration, and promote equitable healthcare innovation in low-resource settings.

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As global health systems continue to recover from the COVID-19 pandemic, the role of AI in epidemic and pandemic preparedness, prevention, and response (EPPPR) has gained significant momentum. The Global Health Network has joined the Artificial Intelligence for

Global Health (AI4GH) Initiative, funded by the International Development Research Centre and the Foreign, Commonwealth & Development Office, focusing on knowledge sharing, capacity building, and responsible AI deployment. This aims to build a community of practice and a knowledge hub on using AI in EPPPR, and sexual and reproductive health. Since 2023, the trilingual AI4GH knowledge hub has connected experts in the field, provided interactive tools, and shared over 128 resources related to the ethical development of AI. A series of virtual workshops were held in 2024 that focused on AI applications in epidemiology, data science, community engagement, and the ethical use of AI in outbreak prediction and surveillance. Working groups, including those on EPPPR and Responsible AI, are a key part of the programme, and are critical to engaging global stakeholders in identifying challenges and finding solutions towards ethical and equitable AI use in pandemic response. The AI4GH initiative illustrates how a knowledge community can accelerate the generation and dissemination of evidence while supporting responsible policies and practices that utilise AI to enhance health equity and resilience against future pandemics.

7.

**Kate McNeil, University of Oxford**

### **Organisational Practices Promoting Frontline Worker Wellbeing as a Component of Pandemic Preparedness**

Kate McNeil is a politics and public policy researcher working on systems resilience in crisis preparedness and response, focusing on health emergencies. Her work has explored frontline healthcare worker wellbeing during health crises and science-policy interfaces during the covid-19 pandemic. Prior to embarking on an academic career, she worked in politics and communications for knowledge translation.

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In building health system preparedness for future pandemics, there is a need to deepen understandings of organisational-level challenges to frontline healthcare workers' (FHCWs) wellbeing and resilience during health crises. During these events, organisational resilience and the wellbeing of healthcare staff are intertwined, and potentially mutually reinforcing. Organisational practices may facilitate staff wellbeing, team interactions and organisational resilience, or act as drivers of moral distress and psychological harm. Poor healthcare workforce wellbeing poses risks for FHCWs, for team relationships, and for the communities they serve. It may also challenge health systems functioning – including through impacts upon organisational routines, staff retention and staff commitment to professional values. We draw on emerging evidence from recent health crises, including the covid-19 pandemic, to explore health workplaces as sites of potential intervention to minimize moral distress and promote resilience as part of preparedness for and responses to health crises. We focus on steps to support FHCW wellbeing that might be built into organisational planning in pandemic preparedness. We will share learning on how interventions which focus on individuals within the workplace could be complemented by meso level interventions focused on changes in workplace environments or organisational practices, how these interventions interplay, and implications for health system resilience.

8.

**Goodness Odey, Global Health Focus and London School of Hygiene and Tropical Medicine**

## **The Impact of COVID-19 on Period Poverty and Menstrual Inequities in Rural Nigeria: Lessons from the EduPad Yala Project for Future Pandemic Preparedness**

Goodness Ogeyi Odey is a Public Health Practitioner from Nigeria specializing in health systems strengthening and sexual reproductive health and rights (SRHR). She holds an MSc in Health Policy, Planning and Financing from the London School of Hygiene and Tropical Medicine (LSHTM) and The London School of Economics and Political Science (LSE). Her work focuses on evidence generation, advocacy, and community-centered interventions in resource-constrained settings.

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**Background:** The COVID-19 pandemic worsened period poverty and menstrual health inequities in Nigeria, where 25% of women already lacked adequate privacy for menstrual hygiene management (MHM). Inflation, supply chain disruptions, and movement restrictions limited access to sanitary products, with some girls resorting to transactional sex, increasing risks of STIs and GBV. The EduPad Yala Project developed sustainable, community-driven solutions to address these challenges, building resilience for reproductive health services during crises.

**Methods:** Implemented in Yala, Southern Nigeria, the project used community-based MHM education to combat stigma, and training in reusable pad production to reduce economic barriers. A cross-sectional study of 1,018 adolescents (612 girls, 406 boys) assessed menstrual knowledge, perceptions, and practices before and after the intervention through structured surveys.

**Results:** Baseline findings showed 69.2% of girls could not afford sanitary products, with many using unsafe alternatives. Also, 77% of boys viewed menstruation as dirty. Post-intervention, reusable pad adoption rose to 83.5%, period-related absenteeism dropped from 58.7% to 22.3%, and 63.7% of boys reported confidence in supporting female relatives.

**Conclusions:** The Project highlights the need to integrate menstrual health into pandemic preparedness. Addressing MHM as a critical component of public health response can help mitigate gendered health inequities in future crises.

9.

**Omotolani Ebenezer Ekpo, Federal University Wukari, Nigeria**

### **Pan-African Sonic Early Warning Systems (PAfSEWS): Jukun Traditional Music and Oral Tradition as Epidemic Indicators**

Omotolani Ebenezer Ekpo holds a PhD in music theory and Composition, she is passionate about preserving endangered musical cultures and exploring the intersections of music, identity, and sustainability. Her work focuses on documenting indigenous music traditions of minority ethnic groups and integrating them into contemporary contexts for cultural resilience and societal impact.

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This study investigates how indigenous Jukun musical practices and oral traditions encode knowledge of disease outbreaks and function as early warning systems. Traditional African societies, including the Jukun people of the northeastern Nigeria, have historically relied on drum signals, horn blasts, and environmental sound cues (such as changes in animal vocalizations) to anticipate and respond to crises, including conflicts, environmental changes, and health epidemics. These systems reflect deep ecological wisdom, emphasizing the role of indigenous knowledge in disaster risk reduction and sustainable development. Integrating such sonic practices with modern technology can strengthen community resilience while preserving cultural heritage. The study employs ethnographic analysis of musical expressions related to illness, omens, and spiritual interpretations of health crises. Through fieldwork interviews with Jukun traditional musicians, ritual priests, community leaders, and community members, the study explores how musical knowledge systems contribute to epidemic response. It applies textual/lyric analysis, rhythm and structural analysis, and acoustic and bioacoustic analysis to evaluate selected songs' efficiency and their potential application in global responses to disease outbreaks. The study attempts two broad questions: 1. How do Jukun musical traditions encode and transmit knowledge about disease outbreaks and health crises? 2. What are the potentials and limitations of integrating Jukun indigenous sonic warning systems into modern public health and epidemic response frameworks? This study aims to bridge indigenous knowledge and contemporary disaster management, offering insights into culturally rooted, community-driven approaches to crisis response.