Are we prepared for the "unexpected" in the next pandemic? Comments on draft GEVIT Practical guidance on use of Ebola vaccine, 30 June, 2017

To date, hope for a successful response to the next pandemic seems to be hinging on the rapid development of vaccines.¹ The cavalcade of announcements by *The Lancet*, *Nature* and New England Journal of Medicine for the Coalition for Epidemic Preparedness Innovations (CEPI) initiative to develop and stockpile vaccines for future pandemic threats ^{2,3,4} should not blind us to the fact that effective epidemic preparedness requires a combination of strategies.⁵ Even seemingly straightforward interventions – such as vaccine delivery - require legitimate strategies to gain people's trust and assure uptake through commitments with communities that work with local on-the-ground realities and emerging events. This ethical engagement is being too narrowly conceptualized as 'communication' without taking into account the historical, economic, political and often unexpected hidden and emerging socio-cultural matrix.⁶ The draft WHO Global Ebola Vaccine Implementation Team (GEVIT) guidance on the use of vaccines in outbreaks suggests that we are once more ready to walk blindfolded towards the next challenge by excluding a critical social scientific approach to understanding local realities and people's behaviour,⁷ and by limiting the interaction with local communities to mere 'communication' techniques.⁸ The limits of communication – when conceived as a topdown deployment of knowledge by national and international actors - has been identified as one of the main shortcomings of the response to some of the most important epidemics of our time. Lessons learned from the beginning of the HIV/AIDS pandemic, and echoed by WHO Director General Margaret Chen after the 2009 H1N1 pandemic - "We did not anticipate that large numbers of people would decide not to be vaccinated"⁹ – went unheeded. Again, at the beginning of the Ebola epidemic, anthropologists cautioned against approaches that draw upon overly simplistic interpretations of risky behaviours and traditional practices.¹⁰

Unexpected Contexts and Consequences. Building on anthropologists' involvement in clinical trials, emergency responses and interventions, we highlight the vital role of scientific knowledge production on human behaviour, social structure and sociocultural aspects of local field conditions for epidemic preparedness. We argue that mechanisms need to be in place to actively witness and document unexpected events and unforeseen consequences of implementations. An unintended consequence of the rapid EVD response, for example, was the lack of recognition of the collective need to mourn and bury the dead in Guinea, Liberia and Sierra Leone, leading to enforced undignified burial practices, anonymous burial sites and violent reactions in communities, limiting the effectiveness of the response. After anthropological research identified this problem, safe and dignified burial practices were implemented.^{11,12,13,14} The negotiation of procedures for vaccine trials during Ramadan fasting in Guinea illustrates the added value of anthropological engagement with communities in response to emerging events. The unexpected discrepancies between norms (vaccination is allowed by most Muslim scholars) and practices (more than half of lay Muslims interviewed in Guinea consider vaccination impossible during Ramadan fasting) required context-sensitive negotiations.¹⁵ Mechanisms and methodologies beyond "communication" are necessary to interpret 'emergent' factors, whether part of the implementation or caused by it, and

need to be in place to assure both effectiveness and ethical conduct. This has important disciplinary and methodological implications. Quantitative measures, such as KAP-surveys and routine data collection, aim at evaluating the impact of pre-established variables. In a similar way, the content of health messages and communication strategies for outbreak response is based on pre-existing theory and knowledge. They are not suited, however, to uncover and integrate unexpected factors and generate the in-depth contextual knowledge *as* interventions unfold. By training, anthropologists recognize that sociality is historically contingent, does not follow strict rules, is extremely complex, and is *unpredictable*. Here, ethnography proves vital as a methodology that can capture emergent knowledge in "real time".

Uneven power dynamics. Effective implementation and engagement with communities even direct communication strategies - require an understanding of local micro-power dynamics as highlighted in the following four examples from the EVD response. Decisions based on mistaken assumptions by response teams sometimes destabilized local power structures, creating discontent and mistrust when trust is probably the most decisive condition for successful health interventions and key for vaccine uptake. Anthropological analyses during the outbreak revealed socio-political dimensions that helped to explain why some communities suspected international actors of colluding with corrupt local elites and offered ways to overcome this distrust. Assumptions about the role of politically-appointed authorities at the start of a vaccine trial in Sierra Leone highlighted the inability and unwillingness of local leaders to act as spokespeople for the trial in their communities that had witnessed the subversion of their power by that of national and international response teams.¹⁶ Taking into account what are essential, but often hidden and unspoken, power relations and contestations of power within communities is fundamental to anthropological research and to effective communication and implementation. Regular interactions with people in communities at every level, from villages, to local and national leaders, to multilateral boardrooms, allowed anthropologists to propose adapted strategies to these emerging barriers and point to overly shallow interpretations associated, for example, with recurring violence attributable to ethnic specificities. In Gueckedou, for example, an MSF cartographer had started to map violent responses to his NGO's intervention using ethno-linguistic partitions to demonstrate an association between ethnicity and violence to foster wellintended ethnic-centred programs within his organization. Called to consult, anthropologists proposed a focus on access to care instead of ethnicity as the source of discontent came from historically unequal relationships between the local population and the Guinea State that had restricted access to basic health services in the region.

Defined by immersion in the field and the production of knowledge bridging local and global realities, anthropologists' contributions to alleviating suffering in the emergency response to the West African Ebola crisis and in ongoing clinical trials did not go unnoticed by the global health community.¹⁷ So the absence of any reference to the social sciences in the GEVIT draft at the time of our writing is both striking and unacceptable. Toward the goal of health for all, we insist that planning, responding and trial science include anthropologists to properly account for "social complexity"— that is, the

unexpected events, ever-shifting power relations and cultural specificity—as we prepare for the next generation of vaccine trials, intervention roll-out, and rapid crisis response.

Respectfully submitted, 30 June 2017,

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