

**'Blood as Medicine': Why Recognizing the Social Meaning of Blood is Essential
for the Success of the Imminent Ebola Clinical Trials**

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'People here think that the Red Cross is taking blood out of the dead people when they come to prepare the burials in order to send it to Europe and make money out of it' – Interview with a man from Macenta, Guinea.

The urgent need to contain the Ebola epidemic has led to fast-tracked clinical treatment trials, including blood or plasma from Ebola survivors.¹ However, blood sampling is associated with considerable fear and reticence throughout sub-Saharan Africa, including rumours of 'blood stealing'.² In the context of the convalescent blood trial, 'blood' has ambiguous meaning: while the blood of sick people should be avoided, the transfer of blood from previously infected people is a potential therapy. There are anecdotes that blood from Ebola survivors is being traded informally, suggesting it is already a valuable commodity. Meanwhile, rumors are circulating that Ebola patients in treatment centres are being injected with infected blood to hasten death.

Such perceptions should not be dismissed as 'superstitions' or 'ignorance' as they function as a means of understanding the cause of misfortune, framed in magico-religious beliefs such as sorcery, the influence of ancestors or the will of God.³ Furthermore, they reflect a historically forged mistrust towards certain institutions, reinforced by social inequality, conflict and a conviction that some people are rich and influential at the cost of the poor.⁴ For example, the epicentre of the Ebola epidemic was also the location of epidemics of sleeping sickness that were fought in colonial times with measures including forced internment in treatment camps.⁵ The legacy of these campaigns should be recognised when considering current suspicions about the Ebola response.

In addition, ongoing stigmatization of Ebola survivors, who will donate blood for the treatment of Ebola cases, will be affected by the outcome of the trial. A positive result

may foster the re-integration of survivors into their communities or, conversely, if convalescent blood treatment proves ineffective, donors may be suspected of causing more deaths. The post-trial follow up of participants therefore becomes an ethical requirement.

Ebola trials must consider local perceptions of blood and other contextual factors. Unfortunately, despite anthropological insights, there has been insufficient opportunity for interdisciplinary research to investigate the impact of beliefs about blood on clinical trials and consequently little evidence on which to base recommendations for Ebola trials. While this approach is paramount for the fight against Ebola, many of the considerations discussed here have broad applicability.

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Conflict of interest

None to declare

Authors' contributions

MBT, CG and KPG wrote the manuscript. Members of the Ebola Tx Trial Platform edited the manuscript and provided additional insights.

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