



From Vaccine Hesitancy to Vaccine Acceptance

Introduction

A landmark global study [on the contribution of vaccination to improved survival and health as part of the WHO Expanded Programme on Immunization in its 50th year](#) was published in The Lancet in May 2024. It showed that “global immunization efforts have saved an estimated 154 million lives – or the equivalent of 6 lives every minute of every year – over the past 50 years. The vast majority of lives saved – 101 million – were those of infants.” As the WHO Strategic Advisory Group of Experts on Immunization is set to have its second meeting of the year from September 23-26, 2024, we cast a look at vaccine hesitancy and acceptance in this article. The article draws on research studies and webinars, particularly, a [vaccine hesitancy](#) webinar organized on June 10, 2024 by the Charité Center for Global Health as part of its [vaccine uptake in Africa seminar series](#).

History of Vaccine Mistrust

Vaccine hesitancy has become associated in the popular imagination with the COVID-19 pandemic. But the fact is that skepticism about vaccination is as ancient as the practice of variolation, which was used to treat smallpox according to an article Vaccine hesitancy in the time of COVID: How to manage a public health threat. Published in the Cleveland Clinical Journal of Medicine in September 2024, the authors Clifford Lane and Steven Gordon noted that in Boston, USA, in 1721, Dr Zabdiel Boylston attempted to stop the smallpox epidemic by using variolation. This method, which inserted material from smallpox blisters to stem future infection received support from the governor and the theologian of the time, but was opposed by local patriots, one of whom included none other than a young printer’s apprentice called Benjamin Franklin! By the 19th century, mandatory vaccination laws were in place after a court ruling that they were constitutional to ensure public safety. But the working class saw it as a means of controlling their bodies by the ruling class and strongly opposed them.

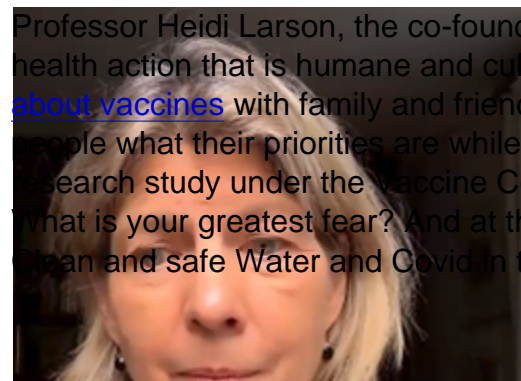
In a study published in Scientific Reports May 2024, by Kerstin Unfried and Jan Priebe, conducted in six Anglophone countries in sub-Saharan Africa, namely, Ghana, Kenya, Nigeria, South Africa, Tanzania, and Uganda, one of the reasons cited in research for mistrust in Africa is the belief that the continent has become a testing ground for new vaccines with its people being used as guinea pigs. This stems from the historical mistreatment of ethnic minorities as pointed out by Maeve Cullinan, Inside California's secret sterilisation programme – and its antivax legacy, published in Global Health Security Reporter on 16 January 2024. Speaking to Cullinan, Laura Bogart PhD, a Senior Behavioural Scientist at the RAND Corporation, a nonprofit think-tank said, "Based on the way Black Americans have been treated in the past in health care, it is understandable and justifiable not to see health care systems, organisations, and doctors as trustworthy, and as having ulterior motives, such as for-profit and status". Professor Heidi Larson, founder of the Vaccine Confidence Project at the London School of Hygiene & Tropical Medicine concurred: "medical injustices leave distrust not only in individual memories but community memories. If a community historically has not just one but multiple experiences, those memories get passed down over the generations."

Funnel of Misbelief

In their article, Clifford Lane and Steven Gordon, they mention the term "funnel of misbelief". It was coined by Psychologist Dan Ariely of Duke University "to describe the way in which rational people may end up with very different views of the world based on their emotions, degree of stress, cognitive biases, personality, and exposure to different types of social forces." And the latter, as the six-country study in sub-Saharan Africa found, is a neglected subject, with the literature on individual aspects of trust often overlooking societal aspects. How, then, is this funnel of disbelief that translates into vaccine hesitancy to be countered? Presented below are some highlights from the discussions at the webinar of Charité Center for Global Health and interviews by members of the organization.

Let People Lead

Professor Heidi Larson, the co-founder and Director, [Vaccine Confidence Project](#) (VCP) called for "public health action that is humane and culturally relevant" and cited the tips offered by [UNICEF on how to talk about vaccines](#) with family and friends. But more importantly, she stressed the importance to first ask people what their priorities are while working in the field to promote vaccination. During the 15-country research study under the Vaccine Confidence Project, for instance, the first question posed to people was, "what is your greatest fear?" And at the peak of the Covid crisis, the answers were Malaria, Food security, Clean and safe Water and Covid in that order.



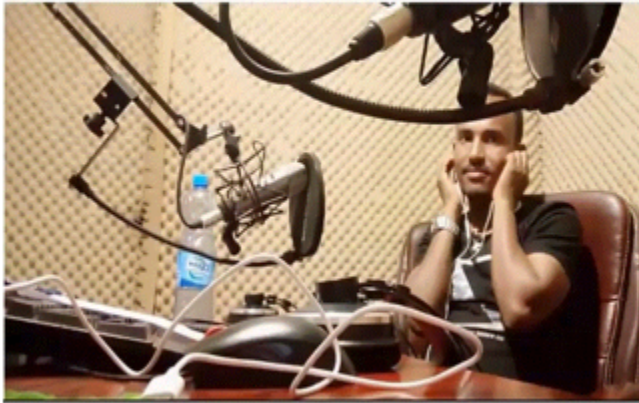
Professor Beate Kampmann, Scientific Director, Charité Center for Global Health reiterated this point in an interview during World Immunization Week, on 24 April, 2024: "We gave out COVID vaccines in The Gambia and they asked, 'Why have you not brought us a malaria vaccine? It would be much better, that's really what we need.'"



The shift in communication, Prof. Larson noted has been from being instructive to creative engagement where it's more of a dialogue where people feel they're being heard. Moreover, what emerged during Covid – "the fantastic energy needs to also be sustained – the whole new engagers like youth activists

and the revival of the use of radio spots, for instance, to actively reach out to counter misinformation through an online network of volunteers such as uInfluence.” (see below)

Innovative Citizen Engagement in Ethiopia During the COVID-19 Pandemic: Radio Shows Promote Accountable Service Delivery



<https://www.worldbank.org/en/news/feature/2021/01/25/innovative-citizen-engagement-in-ethiopia-during-the-covid-19-pandemic-radio-shows-promote-accountable-service-delivery>



uInfluence
Use your influence for good.


What is uInfluence?
Separating fact from fiction online can be hard. uInfluence is here to help. uInfluence is a global network of people who use their influence on social media for good.

Here's how it works:
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Professor Larson stressed that the patient experience matters to draw them back when they face another medical issue. Dr Penda Johm in her co-authored article [Factors influencing acceptance of vaccination during pregnancy in The Gambia and Senegal](#) noted that “women’s acceptance of vaccination during pregnancy is based on previous vaccination experiences and individual weighing of risks and benefits.» However, social media may also play a part. A study in the Asia-Pacific under the VCP found that in Fiji, Japan, and Philippines, social media information had a growing impact on the vaccination choices of mothers and women of childbearing age. Prof Larson stated that when there is any failure during vaccine trials, it tends to get magnified and known through social media. Hence, the VCP now works further upstream at the stage of the trials so as to boost confidence and be clear and transparent in communication and engagement. A novel engagement system of a social science team was used, for instance, during a clinical trial of a candidate Ebola vaccine within an outbreak setting.

A social science team act as the 'eyes and ears' for the trial, listening to what individuals are saying about the study through ethnographic observation, clinic exit interviews, in-depth interviews with participants and key stakeholders, and focus group discussions. The social science team provide daily feedback to the community liaison team on any rumours or concerns circulating in the community, to inform prompt dialogue on the issue.

A portrait of Dr. Jens Pedersen, a man with short blonde hair, wearing a dark jacket over a light-colored shirt. He is looking directly at the camera with a neutral expression.

Dr Jens Pedersen, Africa CDC shared about the Treatment Action Campaign ([TAC](#)), which demonstrates how patients can be involved in decision-making and have a role to play in access and rollout of treatment including vaccine deployment. It's part of the larger mission of the TAC towards [building activism](#) to make healthcare systems accountable. But it is the geopolitics of vaccine distribution that can take centre stage and hinder vaccine acceptance as happened during COVID-19: "In developing countries it is a question of timing and the amount of availability impacts acceptance. If in crude terms the message is you will have only once we have had ours it has devalued already the essence of the product. There can be no distinction about who is most relevant for treatment as it will impact acceptance. If you do not get vaccines when it's really necessary, then there's likely to be less interest when you do get them. It's because the narrative changes. We need transparency in development and distribution. For full confidence in what we're being injected with so that we accept it." And that confidence often is also linked to the locus of manufacturing.

A portrait of Dr. Penda Johm, a woman with dark hair, wearing a light-colored top. She is looking slightly to the side with a neutral expression.

According to Dr. Penda Johm, Medical Research Council Unit, The Gambia at the London School of Hygiene and Tropical Medicine (MRCG at LSHTM), skepticism about locally made products is because no one really explains to the public about the entire infrastructure and regulatory framework that goes into local manufacturing.

There is a need for the science community and global public health institutions to simplify concepts and join the chorus to remarket the vaccines in terms of its value additions as Prof Muhammad Ali Pate, Coordinating Minister of Health and Social Welfare, Nigeria had pointed out at the GAVI conference in June 2024. And research backs this. A literature review of research on the interventions to reduce COVID-19 vaccine hesitancy among Black and African American population residing in the USA was published in *Vaccine* in August 2024. Its authors Evelyn Masterson, Emma Anderson and Elena Savoia refer to a study by Peteet et al., which «describes the delivery of a 1.5 hour-long, dialogue-based webinar on the development of the COVID-19 vaccine and the psychology of fear to Black churchgoing adults. It was hosted by a community-academic partnership team, to reduce vaccine hesitancy. The intervention resulted in an increase in how many participants reported they would definitely or probably get the COVID-19 vaccine pre-webinar vs. post-webinar. Participants often felt that the most influential aspect of the webinar was the discussion of vaccine facts.»

There is also a need to transform medical education. Prof. Larson shared that when trials in Ghana were suspended due to rumours going viral, a resource person from VCP went around and took a [video to understand all the angles of the controversies swirling around the ebola vaccine trials in Ghana](#). This has become an important resource, which is used as study material in educational institutions like the Ghana Medical School because as Prof Larson pointed out, "often education is centred around what is to be done, the process and how to get to the intended goal. But no one talks about what happens if you do get there and nobody wants it!"

At its most basic as Dr Jens Pedersen, Africa CDC put it in simple terms, "The key for any of us and it applies to all of us is what risk we are willing to take for something that is essentially preventative against something else." And research studies show the jury's still out on that. In a study by Jeffrey Lazarus et al

published in Nature Medicine in April 2024, on the Influence of COVID-19 on trust in routine immunization, health information sources and pandemic preparedness in 23 countries in 2023, the majority of respondents (74.9%) expressed confidence in the collective might of society to manage the next health crisis better than the COVID-19 pandemic. Ghana (51.5%), India (51.3%) and Kenya (49.2%) scored high on this aspect. Yet, only 63.3% of all respondents in the study “reported trusting a hypothetical WHO recommendation to vaccinate if such a crisis was announced”. More worrisome is the fact that “a substantial proportion of individuals express resistance to vaccination and that concerns about COVID-19 vaccination appear to have spilt over to affect other vaccine-preventable diseases.”

Conclusion

There is a new strain of COVID-19, in the UK, there's been an outbreak of measles, and as pointed out in our last issue's article on [antimicrobial resistance: focus on Africa](#), more than 30 million children under the age of five continue to suffer from vaccine-preventable diseases annually in Africa. And this is a bitter irony because the smallpox treatment procedure that this article began with was undertaken by the doctor on being informed about it by the theologian Cotton Mather, who in turn had learned of it from an enslaved African he'd bought. WHO's Expanded Immunization Program in its 50th anniversary must seize the initiative towards getting out vaccines quickly for those in need overcoming patent barriers. It's already tardy as Beate Kampmann vented on Twitter before the WHO rollout of the Mpox vaccine: “It's difficult to understand why the mpox vaccines are not already on the ground in the DRC [Democratic Republic of Congo] – do we really always have to have a global emergency called before we do what we said we would aim for after COVID – more equitable access to vaccines?”

Reference

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