

RESEARCH ARTICLE

‘Vaccines are for children only’? Some institutional roots of popular scepticism about vaccines for COVID-19 in Sierra Leone

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Abstract

Vaccines for COVID-19 began to be available in Africa from mid-2021. This paper reports on local reactions to the possibility of vaccination in one West African country, Sierra Leone. We show that the history of institutionalisation of vaccine is highly relevant to understanding these reactions. Given lack of testing for the disease, medical authorities could not be sure whether there was a hidden epidemic. In addition, many people associate vaccination with care of children under 5 years, and not adults, and an emphasis on vaccinating the old at first seemed strange and worrying. This paper examines evidence from ethnographic studies in two rural areas selected for varying exposure to Ebola Virus Disease (EVD), supplemented by some interviews in two provincial urban centres, Bo and Kenema. We describe local ideas about vaccination (*maklet*) and body marking with leaf medicine (*tɛwi*). We asked about attitudes to the idea of COVID-19 vaccination both before and after vaccines were available. A number of reasons were given for scepticism and hesitation. These included lack of experience with vaccines for adults and lack of experience of COVID-19 as a severe disease. Medical evidence suggests the vaccination protects against serious illness, but local people had their own views about control of infection, based both recent experience (notably EVD) and the history and institutionalisation of vaccination and public health measures in Sierra Leone more broadly.

Keywords: COVID-19; epidemiology; institutions; Sierra Leone; vaccines

Introduction

COVID-19 vaccines were rolled out across the world from early 2021 and this triggered renewed interest in the causes of vaccine acceptance and hesitancy. Much of the literature on vaccine acceptance and hesitancy relies on cross-sectional methodologies (Lazarus et al., 2023; Roy et al., 2022). Cross-sectional surveys are potentially problematic if questions on controversial topics cause people to give incomplete or misleading answers. In a study of reception of COVID-19 vaccines in urban Sierra Leone, Conteh et al. (2021) warn that their survey data may be undermined by ‘social desirability’ bias (responses reflecting official or group expectations). For a better grasp of what shapes how people accept or hesitate over vaccination, qualitative observational and in-depth interview material is required to test or support survey findings.

This has been attempted in work in medical anthropology and related disciplines on reception of vaccines (see, e.g., Closser et al., 2016; Enria et al., 2021; Larson et al., 2011). Such work often uses ethnography and in-depth interviews with key informants as a tool for penetrating deeper into cross-sectional findings (see, e.g., Leach et al., 2022; Tengbeh et al., 2018). Tibbels et al. (2022)

studied the acceptability of COVID-19 vaccines in Cote d'Ivoire and targeted attitudes to vaccines among key informants who had either been infected with or who had lost a loved one to COVID-19. Thereby, they were able to show how risks of disease were balanced against rumoured risks of vaccine harms. Vanderslott et al. (2022) found that better public information on vaccines led to a positive mood and reduced stress, while poor social cohesion and conspiracy beliefs lowered vaccine uptake. Some literature on vaccines and vaccine hesitation (e.g. a paper by Streefland et al., 1999) raises the importance of documenting past experiences of 'routine or campaign vaccination', an issue further developed in the present paper. Athias and Macina (2022) offer evidence that the 'signature' of a major traumatic historical occurrence – four centuries of African slave trade – can still be detected in the differing degrees of trust African communities place in vaccines. In short, history matters, in making correct assessments of vaccine response and vaccine hesitation. The present paper focuses on the local evolution of vaccination as an institution in rural Sierra Leone, from the early days of smallpox vaccination in the 19th century, and uses historically informed ethnography as a method to go deeper into reasons behind COVID-19 vaccine response in two rural communities in eastern and southern Sierra Leone.

In seeking a locally grounded understanding of vaccine response, this paper builds, in particular, on pioneering work by Leach and Fairhead (2007), who argued that people's concerns and responses rarely if ever reflect ignorance or wilful disregard of science, but that responses often make more sense in relation to community knowledge, understandings and experiences of vaccines, public health, and wider social and political institutions. Here, the institutional dimensions of vaccination are examined from a perspective provided by the anthropologist Mary Douglas (1986) on 'how institutions think' (Richards & 6, 2023). Douglas argues that all social action is shaped by institutionalisation. For Douglas, to institute means to 'put in order'. She is referring to processes of classification through which humans try to make sense of their often messy and sometimes disordered lives (Richards & 6, 2023). Institutionalisation is the product of classification and of responses to anomalies created by classification (Douglas, 1966). In the case of vaccines as institutions this implies that a history is needed of the classificatory work that has gone into shaping local understandings of vaccines, and how anomalies have been handled in arriving at a shared social understanding of what Douglas terms 'rightness of categories' (Douglas, 1992). This paper attempts a brief history of *maklet* as an institution in eastern and southern Sierra Leone and then shows how that history is reflected in village responses to COVID-19 vaccination. The findings support a conclusion that careful local history of vaccination exposure is an important requirement to understand specific vaccine responses.

Maklet as an institution: a brief history of vaccination in Sierra Leone

Maklet is the word in Krio (the national *lingua franca* of Sierra Leone) invariably used by informants to translate 'vaccination'. The Krio dictionary (Fyle and Jones, 1980) suggests the word derives from the English 'maculate', a term used by botanists to describe 'spotting' or 'marking'. Everybody in Sierra Leone uses and knows the word. Its use is sufficiently widespread in local understanding to suggest that vaccination is an accepted institution. Some villagers confirmed this by commenting that *maklet* is accepted by African and European doctors alike. They clearly differentiate it from *tɛwi*, which is a local practice of inserting herbal preparations under the skin (physically, a similar process to *maklet*). *Tɛwi* belongs to 'country medicine', *maklet* has a wider sphere of international reference.

The origins of *maklet* in Sierra Leone appear to lie with smallpox inoculation. The idea of using variola – inserting a small amount of infected material from a smallpox patient in the body to induce a mild illness giving subsequent protection against virulent disease – was widely known in coastal West Africa, even as early as the 18th century. Thomas Winterbottom, doctor to the original Sierra Leone settlement project in the 1790s, identified the Gambia and the Gold Coast

(to the north and east of Sierra Leone) as two localities in which the technique was practised (Winterbottom, 1803).

An early American account of smallpox inoculation, describing it as a practice derived from West Africa, was supplied by Cotton Mather, a pastor in Boston, who learnt the technique from Onesimus, an enslaved member of his household in 1716. According to Mather, Onesimus was Guramantese (Koromontine, i.e., from the Gold Coast). Onesimus explained the technique to him and showed him the scar on his arm in 1716.

Mather later reported in a letter to the Royal Society in London that he had successfully applied Onesimus's instructions to control an outbreak in Boston in 1721 (Boylston, 2012). Some Boston residents refused the treatment because they saw it as African medicine and feared the slaves were seeking to poison their owners. A similar argument reflecting unresolved racial tensions, but now made in reverse, shows up in a local response to vaccination reported below; some Sierra Leoneans today suspect that COVID-19 vaccination is part of a plan by the international community to reduce African populations by poisoning.

In 1796, a British doctor, Edward Jenner, successfully carried out the first vaccination against smallpox using a less dangerous inoculate, cowpox. Despite rumours that this could turn people into cows, the technique was widely practised in Britain and parts of North America by the middle of the 19th century (WHO, 2022).

A powerful advocate for smallpox inoculation in 19th century Freetown – the capital of the Sierra Leone settlement for freed slaves – was James Africanus Beale Horton. Horton was born at Gloucester, in the Sierra Leone colony, about 1835, the son of an Igbo 'recaptive' (the name given to enslaved Africans liberated at Sierra Leone by the Royal Navy anti-slavery squadron). Educated in Freetown, Horton received an army scholarship to study medicine in London and Edinburgh (Graf, 2020). In Britain, he will have encountered Jenner's technique. He then served in the British army in West Africa, including on the Ashanti campaign of 1873, and there perhaps encountered vaccination against smallpox as an African practice.

Horton was a convinced nationalist and wrote books to prepare Sierra Leone for future self-rule. Also active as a botanist, he strongly advocated compulsory mass vaccination against smallpox (Horton, 1969 [1868], pp. 205–206). It seems likely that as an army medical officer he will have practised what he preached among the rank-and-file Sierra Leoneans recruited as foot-soldiers and carriers in the British army in West Africa. Rising to the rank of Lt.-General, he was the highest-ranking African officer in the British army in the 19th century, and doubtless his views on the medical management of troops carried weight. It would be reasonable to speculate, therefore, that the name *maklet* in Krio derives from Horton's advocacy of vaccination. The English word 'maculate' (marked or spotted) is not associated specifically with inoculation but was used mainly in technical descriptions by botanists. Horton was both a medical doctor and a botanist.

We do not know exactly what led to the widespread acceptance of *maklet* as an institution in Freetown and in the interior (from 1896, the Protectorate of Sierra Leone) but it seems reasonable to speculate that the institutionalisation of vaccination (i.e. in Douglas's terms, making it part of an expected social order) will have been the result of time served by many Sierra Leonean men in the British colonial army in Africa, as both carriers and soldiers. The British government enlisted men from Sierra Leone for the Ashanti campaigns in 1873–1874 and 1900, and for the expeditionary force to Benin City in 1897. In the great War (1914–1918), a further 13,000 carriers and 8000 fighting men from Sierra Leone were recruited to serve (mainly) in Cameroon, East Africa, and Mesopotamia. Three-quarters of the carriers were enslaved persons from the Protectorate, recruited by their Paramount Chiefs, with half of them being Mendes from Panguma and Bandajuma Districts (Rashid, 2011). *Maklet* was firmly anchored at the lowest levels of Sierra Leonean rural society, and especially among the Mende in the south and east of the country.

At about the time as troops and carriers were being recruited for the Great War, there was a major smallpox outbreak in Sierra Leone (Rashid, 2011; Cole, 2015). The colonial government

engaged in a vaccination programme to protect Freetown and districts along the recently completed government railway, running across the Mende-speaking region as far as Pendembu, close to the Liberian border. This will have taught many rural Sierra Leoneans that smallpox vaccination was a normal procedure, institutionalised to protect government assets.

Our team was well-established in its two field sites when vaccines for COVID-19 first arrived. We were able to talk to people and observe vaccine responses both before the vaccines arrived and, eventually, when they reached the two villages in which we were working. Initially, we recorded a lot of comment expressing scepticism and hostility to vaccines, though we observed that many people later changed their minds. Why, despite long exposure to *maklet* as an institution, did people in Sierra Leone initially hesitate over vaccination? For an explanation, we need to recognise that institutions are not fixed but shaped by changing experiences. Clearly, there is a local tradition overlapping with European medicine in *maklet*, so the problem is not that people lack knowledge or experience of science-based vaccination, but the institution has evolved and acquired locally specific associations as well. Sources of doubt and hesitation become clearer when we take these local institutional developments into account.

In 1956, the World Health Organisation (WHO) adopted a resolution to try and end global smallpox transmission. Africa was a special focus of attention. Advances in vaccine production techniques meant that heat-stable, freeze-dried smallpox vaccines could be stored without refrigeration (WHO, 2022). Sierra Leone was among 20 African countries where successful campaigns were mounted to eradicate rural infection in the mid-1960s (Foegen, 2011; Hopkins et al., 1971). The plan included measles vaccination. Young children were highly vulnerable to measles, and it was thought by the vaccine campaign teams that parents would be more willing to accept the need for smallpox vaccination if the same technique also protected their children from measles, a killer disease of infants.

What then happened is crucial for the story of *maklet*. Smallpox was eradicated in Sierra Leone by 1970, but measles vaccination, which was very successful, continued. Other childhood vaccinations were then added to the annual measles round of vaccinations, and coloured rubber bangles were distributed to nudge mothers to complete the series of childhood inoculations. Meanwhile, memory of adult vaccination began to fade as smallpox became history. This tendency was accelerated by a more general breakdown in rural health care due to a decade of civil war in the 1990s. But agencies did everything in their power to keep the vaccination of children going, despite the chaos in the country. It was in these circumstances that the institution of vaccination became firmly associated with childhood.

This short history of *maklet* as an institution in Sierra Leone can thus be summed up as follows. *Maklet* was introduced to Sierra Leone early (in the 1860s) with powerful advocacy from a nationalist army doctor, Africanus Horton, and became entrenched among Sierra Leonean troops during the Great War, many of whom came from a rural underclass of enslaved people and ex-slaves. Vaccination during the smallpox outbreak of 1916 consolidated the institution, especially in districts along the railway line in the south and east of the country. Later, after eradication of smallpox, vaccination evolved into a set of practices limited to children, while local understanding of *maklet* as treatment for adults was downgraded by disruption during the civil war (1991–2002).

It should be emphasised that the evidence of *maklet* as an institution apparent in the evidence examined below applies specifically to districts along the former government railway line. Both communities in which ethnographic work was carried out lie within a day's walking distance of former railway stations (at Mano-Dasse and Daru). These were important centres of carrier recruitment in the Great War. A significant body of recent literature on vaccine acceptance in Sierra Leone derives from Ebola vaccine trials (Ebovac) begun in 2014 in the north and west of the country (Enria et al., 2016, 2021). Differences between what papers on Ebovac report and findings discussed below may reflect variations in local contextual factors. Specifically, those parts of the north covered by the recent vaccine trials have a somewhat different institutional experience of vaccination, shaped not by the history of the railway (which never ran to the north-west of the

country) but by the Ebola epidemic of 2014–2015. The two regions have a different history of exposure to *maklet*. These differences need to be borne in mind in assessing the findings reported below against the results apparent from other studies on vaccine reception in Sierra Leone cited above.

There was some initial vaccine hesitation among some Sierra Leoneans because the local history of the institution linked vaccination mainly with children, whereas COVID-19 vaccination was targeted on older adults. In addition, the technology had changed. Smallpox vaccination in the 1960s required a small (and sometimes greatly feared) machine that produced several small insertions on the arm; this was remembered by some of elderly respondents as being particularly painful. They wondered why vaccination was now delivered differently. Seemingly, unexplained changes of technology foster doubts about the true purpose of the treatment in question.

In addition, people had difficulty in recognising COVID-19 as a disease separate from other respiratory infections, so a common response was in effect ‘this all looks a bit uncertain – let me wait for some time to see what happens’. Initial reactions were not vaccine denial but hesitation on the part of those who thought byelaws for COVID-19 might be just as effective as byelaws for Ebola; it was only later that people began to realise that byelaws do not really suppress COVID-19 in the way they had expected.

It was also unclear why protection of children had been replaced by a concern to protect the elderly. At issue here is the specific way *maklet* evolved locally as an institution in the aftermath of smallpox eradication. If this institutional history had been considered it would have been possible to engage older members of the community, the custodians of memories of adult vaccination for smallpox, to explain to doubters why it was now necessary to focus again on the elderly. Nothing was done to address these concerns because no attention was paid to the changing institutionalisation of vaccination. For better vaccine planning, local histories of institutionalisation of vaccination need to be taken into account.

Methods and data gathering

Initially, our work was grounded in an ethnographic study of the post Ebola situation in Sierra Leone through which we hoped to learn the lessons of the Ebola epidemic for future pandemic preparedness. Members of the team began this observational work in the second half of 2019 (see Richards et al., this issue). However, fieldwork was soon overtaken by events – the onset of the COVID-19 pandemic. The field team was thereafter able to study an actual pandemic, by observations and interviews, as events unfolded. The present author was in charge of this fieldwork in the two communities. Household censuses were undertaken. These allowed interviews and observational materials to be tagged by informant and household, with interviewees revisited on a regular basis to update information. We then traced changing responses to COVID-19 and (later) to vaccination as the epidemic unfolded.

The field study was undertaken in two villages (here referred to by pseudonyms as Tawoveihun and Taninahun), one in Kamajei chiefdom and the other in Jawei chiefdom. Most inhabitants of these two communities rely on farming for their livelihoods, growing rice as their staple food, and crops such as cassava, sweet potatoes, groundnuts, and peppers as supplements and condiments. Some households also grow cash crops, which are processed and exported; cacao predominates in the eastern village. The topography and soils of the southern village are more suited to palm oil and coffee. Palm oil is produced in both villages, much of it for domestic purposes.

The country’s system of administration was divided at the start of the research into 190 chiefdoms (as of 2017), subdivided into administrative sections. Each chiefdom has a Paramount Chief, and a hierarchy of sub chiefs, from section chief and town (village) chief, down to quarter chiefs. These two villages were selected according to their different prior history of exposure to Ebola Virus Disease (EVD) in 2014–2015. ‘Taninahun’, in Jawei Chiefdom, had a substantial

number of Ebola cases while ‘Tawoveihun’, in Kamajei Chiefdom, was spared the disease, due to strong community response measures.

Field observation ran from late 2019 to mid-2022. To explore people’s understandings of vaccines and other topics, their behaviour, and the decisions they made, daily observations were complemented by in-depth interviews with key informants. These included roughly equal numbers of males and females, and elders and youths, and people from various occupational groups such as farmers, bike taxi riders, health workers, and traders identified through demographic surveys. The in-depth interview material discussed below was provided in all by about one hundred people across two communities. Additional interviews were carried out in vaccination centres in Bo and Kenema, the capital of the Southern and Eastern region, respectively, to gain a broader perspective.

Most village interviews were carried out in the Mende language since this is spoken by nearly all villagers daily, but Krio, the national lingua franca, was used where appropriate or necessary, including especially in urban areas. Pen and paper methods documented the interviews, and an Excel application was used to analyse responses comparatively. The study was approved for ethics by the Njala University Institutional Review Board, and speakers were guaranteed anonymity as part of an informed consent procedure. All statements were either written or recorded only after gaining the participant’s consent.

Initial questions about vaccines in all settings elicited many negative responses but when the vaccines arrived and were delivered through properly organised vaccine campaigns many people changed their minds. Thus, real-time observations could be made on how people adapted. It was discovered that what people will state in an interview at one point in time may be quite different from what they will say at some later point. A one-off set of interviews, however large and well-randomised, misses this crucial situational perspective as a process develops. The virtue of the ethnographic approach (especially when applied by researchers who are long-term residents of the affected area) is that it provides longitudinal observational materials (in this case, information gathered over 2–3 years) reflecting the approach, peak, and decline of epidemic waves. These data document where and why, during that period, people changed their views and adapted to changing disease threats and interventions.

Results 1. Prior experience of vaccination: a clash of institutions?

The arrival of vaccines for COVID-19 in Sierra Leone

According to the WHO, all countries should have equal vaccine access without incurring financial hardship (source: WHO Strategy to Achieve Global COVID-19 Vaccination by mid-2022). Vaccination for COVID-19 should be expanded across all age groups, beginning with older adults, health workers, and high-risk persons, to allow stabilisation of societies and economic activities to reduce the risk of new variant emerging and to reduce epidemiological transmission. The risk of having the disease (according to WHO) should be reduced by 70% of the world’s population be it in adult, adolescents, children, and those at high risk of disease.

Sierra Leone had its first doses of AstraZeneca vaccine in March 2021 from the COVAX facility, a partnership between the Government of Sierra Leone, CE CEPI, Gavi, UNICEF, and WHO. The country received 5,387,130 doses for an assumed population of 8.14 million people. As of July 2022, 2,645,261 individuals have had at least one vaccine dose, and 1,917,745 are fully vaccinated with one of four vaccines (AstraZeneca, Pfizer, Johnson and Johnson, and Sinopharm – Ministry of Health and Sanitation, 16-07-2022, COVID-19 Vaccination SitRep.pdf). The gender division is male (47.3%) and female (52.7%).

After vaccines began to be distributed, research resources were directed to studying how they were being received. Was there a problem with COVID-19 vaccines because people were insufficiently familiar with vaccination? Would better information make a positive difference to

vaccine uptake? It was quickly discovered that the concept of vaccination does not need to be explained to Sierra Leoneans. People know the history of vaccination and this is figured into their reasoning and thinking about vaccines today.

According to Douglas (1986), knowledge and experience become institutionalised through ritualised processes of classification, exemplification, and anomaly management (the process is, of course, complex and a fuller explanation would require more space than available here; the reader is referred for further detail to Richards & 6, 2023, especially Ch. 5). Institutionalisation grows out of local experience. Local experiences differ, and it is by noting these differences that varied responses can be explained. In effect, the research results document how people in Sierra Leone compared their institutional model based on experience of vaccination with what was happening under COVID-19.

An important initial question concerned whether there was confusion between ‘country [herbal] medicine’ and vaccination. Part of ‘country medicine’ is to insert leaf medicine under skin as a kind of tattoo, on the arm, chest, calf, etc., as protection against snake bites, food poison, witches, etc. Was this also *maklet*? That there was no confusion is seen in several responses that clearly differentiate this protective marking and *maklet*. The following is one of several similar responses:

Traditional mark and maklet are not the same to my belief. Herbalist marks (tewi, tevi) are given to people for their own beliefs to prevent them from evil while maklet is an injection for prevention of diseases.

Experience of *maklet* was widespread. Everyone we asked said they had *maklet* at some time in their lives to prevent them from various kinds of disease. When asked what reason people had for being given *maklet*, some older people brought up memories of smallpox, measles, and polio mass vaccination campaigns.

I have taken plenty. When I was a small boy, I took it for measles and polio . . .

In those days maklet was given to us on our upper left arm with needle [BM, 52, shopkeeper, Kenema, August 2021].

Maklet was also clearly distinguished from traditional marking as something approved by white doctors:

Maklet is recognized by white people and recommended for certain diseases while traditional marks are from us. [TC, 56, ‘Taninihun’, August 2021].

The herbalist cuts are on the body like the shoulder (and) the back of the foot while maklet are injections given on the arm or buttock [BM, 52, shopkeeper, Kenema, August 2021].

So, *tewi*, marking for snake bites, poison, etc. is seen as a local treatment not approved by western doctors, but *maklet* is seen as something approved by doctors. It is part of international medical practice.

People have definite expectations of *maklet*. When someone talks about it, they bring in their historical experiences relating to polio, measles, smallpox, yellow fever, and tetanus prevention. This last form of *maklet* goes back to the 1940s when Dr (later Sir) Milton Margai, a Mende medical doctor, brought in and trained the *soweisia* (elders of the women’s Sande society) for better mother and baby health care, because they were carrying out operations without knowing about infection – and specifically the risks of tetanus infections. Children and mothers died of neo-natal tetanus infections in those days. So, he wanted the *soweisia* to become knowledgeable

about tetanus infection risks if they used razors or anything similar in their traditional practices. This was then joined to the need to take vaccinations against neo-natal tetanus, and these injections became part of the institutional knowledge of one of the most influential of local social institutions. That made them part of ‘our’ knowledge and not just a tool in the kit of foreign doctors (Margai, 1948).

Informants made clear that *maklet* in the olden days was not only for the children, and that large-scale vaccination campaigns for all ages were organised at community level with military precision (they will be referring to the smallpox eradication campaigns of the 1960s):

I saw a team of vaccinators give [vaccination] to everyone, small or big. The turnout rate was very great. We used to stand in a queue to receive the maklet. [MA, farmer, female, Tawoveihun, 31 July 2021].

Elders made sure the town crier informs people about the category of vaccination, for children or adults. [AN, farmer, male, Tawoveihun, 30 July 2021]

Smallpox vaccination (the last outbreak was in 1967–1968) included all ages. But polio and measles campaigns thereafter focused on babies and children. As explained, measles vaccination was introduced as part of the smallpox eradication campaign in 1967 but has continued since, with some disruptions up during the civil war from 1991. Of particular significance was the Ministry of Health’s EPI (the Expanded Programme for Immunisation) supported by WHO and UNICEF and rolled out countrywide in the 1980s through local health centres (Amin et al., 1992). This promised mothers their children would be given coloured rubber bangles to mark the vaccination stages, thereby making it clear to all persons in the community which children had been vaccinated. Parents competed to make sure their children had the full set. This visually promoted the idea of vaccination as something especially associated with the young child.

Some adults continued to go for tetanus and yellow fever inoculations, however, and with the fuller restoration of medical services after the civil war this continues today:

At this my old age, [I take] tetanus, to prevent me from disease. [senior official, government office, Kenema, male, August 2021]

I go for maklet because if I’m pregnant and get a cut if I am not prevented it will kill my baby in my womb. [RJ, female, 35, ‘Taninhun’. 9 September 2021]

Some people, however, noted that over time vaccination came to be seen as something largely or exclusively for children:

Since then [those days], maklet only comes for babies and not adults. [AN, male, elder, farmer, ‘Tawoveihun’, 30 July 2021]

As the institution of *maklet* has developed over time, it has settled in people’s minds that it is most important for children to go for vaccination:

I take my children for maklet/vaccine for them not to get sick of that disease or any other disease. [RJ, female, 35, nursing mother, ‘Taninhun’, 29 August 2021]

This also gives vaccination a gendered dimension. Jalloh et al. (2022) report vaccination rates among children in one district of Sierra Leone depend on whether the responsibility for taking the child lies with the mother, father, or some other relative: 80% of children are vaccinated if the mother is responsible, but only 69% are vaccinated if the father assumes the responsibility, and

50% if other relatives (grandmother, sister, guardians, etc.) are responsible (Jalloh et al., 2022). This suggests that *maklet* is a gendered institution; mothers have best internalised the message over time that vaccination is important for children and that it is a priority for them to be taken for vaccination.

Some women were asked why they were not going for COVID-19 vaccination when they had reported prioritising taking their young children for vaccination. A young mother (cited above) explained:

Yes, I am interested in taking my children because the maklet protects them from malaria, convulsion, polio and measles. We see evidence with children when their parents refuse to take their children for maklet. [RJ, female, 35, nursing mother, 'Taninihun', 29 August 2021]

But she then defended her own refusal to take a COVID-19 vaccination in the following somewhat paradoxical terms:

If I'm not sick, why should I go for something that I don't (know) what it is? [RJ, female, 35, nursing mother, 'Taninihun', 29 August 2021]

It could be pointed out, of course, that the child likewise does not need the vaccination when she receives it because she has not yet got polio or tetanus. One possible explanation for such a response lies in the commonly held local belief that children are vulnerable and in need of protection, including the protection of vaccines, whereas adults are manifest survivors. They have proved they are strong by coming through childhood alive. A strong person is thought not to need medication, unless obviously sick. Popular ideas about the abnormality of adult sickness reinforce the idea in Sierra Leone that *maklet* is a child-centred institution.

The woman's hesitation was also probably buttressed by fears communicated over social media (*I don't know what it is*). It was clearly stated by several informants that they had heard bad things about COVID-19 vaccines through rumours on social media:

I have seen a lot of examples sent through mobile phones that the area injected lights up, and people are crying that they are dying because of taking the vaccine. [MK, male, youth, bike taxi rider, 'Tawoveihun', 28 July 2021]

Most people in the media were saying that the rampant death [rate?] is done [due?] to the vaccine that people are taking. [medical professional, male, Bo, 27 September 2021].

In WhatsApp, Chinese people accused Americans of making vaccine that will cause the sickness of Corona. [male, 51, Kenema, August 2021].

Well people who don't understand are misleading others. I was standing with someone when her sister called her saying that the vaccine kills. It is killing people; let her don't take it. If it actually kills, we should not be talking about our President because he has taken it some time ago and he is still live. [Male, Pastor/Farmer, Gondama, August 2021]

While people did not always take such rumours at face value, they did intersect with the uncertainties they already felt about COVID-19 and some old racial tropes re-emerged to reinforce these doubts.

As a lay-man I'm thinking that the white men want to kill or reduce the African population. Because all this pandemic comes from them. Even the Ebola All the vaccines are not manufactured in Africa; there is a tendency that they will poison the vaccine, or send vaccines that are expired. [Male, Town chief/farmer, Gondama, August 2021]

How far such ideas were widely believed is unclear, but they clearly did contribute to a general atmosphere of uncertainty and distrust. People often stated that they felt ‘confused’ and needed clearer guidance about the actual risks they faced. Media pictures of hospital chaos and high death rates in Europe and North America had added to this general sense of unease.

There is, in addition, an important alternative to vaccination, resulting from the way the institution of *maklet*, as an aspect of scientific medicine, was undermined by the experience of EVD. Hospital treatment was widely feared because it was a known source of Ebola infection. The effective local alternative protection from Ebola was to adopt community byelaws constraining the movement of people of ‘unknown status’ (i.e. untested for Ebola). Anything else (especially seeking help from a clinic or hospital) was to put your life at risk.

Behaviour modification offered a clear and effective means of protection from Ebola. People came to think that these rules were an alternative to more medicalised interventions. Vaccines for Ebola, although under development at the time, played no part in the communities from which we gathered data in the east and south of the country, because although these vaccines were under development none was released in time to have a major impact on the outbreak, which ended at an earlier period than in the north-west of the country. So, for the most part, vaccination did not develop a public track record under Ebola, and later when COVID-19 arrived, false messages about vaccination – that it might be dangerous – began to circulate. One local response was, in effect, ‘why run that risk’. It does not work 100%, and it may be dangerous, but more importantly, there was a proven alternative; people need to follow the rules (Kamara et al., 2020). An informant summed up the position bluntly:

I prefer the precautions or rules.

Again, according to Mary Douglas, rules follow on from the ritual reinforcement of any classification of hazards (Richards and 6, 2023, Chapter 6). In this way, rules have been absorbed and believed by people, and so become part of their institutionalised world of norms, values, and habits. Bad things will happen if we do not follow rules, and good things will result if we do.

One informant explained her vaccine refusal by arguing that there was no need, because:

I am always wearing my mask [JKS, female, college lecturer, Kenema, July 2021]

This suggests she did not see mask wearing in contextual terms, as something to be done when risks were high, for example, when travelling in crowded transport, but as rule-following type of behaviour, invariably applied. To wear a mask, as required, seems to have been this person’s talisman that she would always avoid infection, and therefore needed no vaccine.

Rule-following even explained one case in which a vaccine refuser changed his mind and took the vaccine. At first, S. (a youth leader) reported that there was no way he would take a COVID-19 vaccination. But later he turned up for the injection. When he was asked why he had had this change of heart he stated that he took the vaccine only to avoid accusation from his people of not following the rules:

I took it because many of my people here would have asked if I have taken it, [and] to avoid that [i.e., looking like a rule breaker, when a leader is expected to be a rule enforcer] I went and took the maklet vaccine [AJB, 46, youth leader, ‘Tawoveihun’, 30 August 2021].

Institutional alignment is a powerful means to ensure conformity. It was apparent in the British response to Ebola in Sierra Leone in 2014, when initial plans to confine all cases to large, centralised Ebola Treatment Centres were modified, and a series of about 55 small Community Care Centres (CCCs) was introduced in regions where the epidemic was expanding (Mokuwa, 2020; Mokuwa and Maat, 2020). The large Treatment Centres were highly disliked and avoided by

communities affected by the disease. They were distant and closed off from families, so there was no scope to follow the local patterns of caring for the sick, which included visiting and offering home cooking to the sick.

On the other hand, CCCs offered some scope for family contact; families could communicate with patients through the open-sided walls of tented wards, divided only by a chain link fence, and home food was carried into wards for sick patients by centre staff, even though actual visiting was not possible. Thus, in effect, international Ebola response planners had listened to the voice of local institutions of care (Richards et al., 2015; Mokuwa and Maat, 2020) and as a result patients reported more promptly, and Ebola case identification was accelerated (Van der Windt and Voors, 2020).

The COVID-19 vaccine roll-out did not learn this lesson of alignment with the institution of *maklet* as it had evolved after a generation of focus on young children. COVID-19 vaccination was offered to the elderly and withheld from children. This immediately aroused suspicions. The reason given was that supplies were limited, and older people were more vulnerable to severe disease. But people in Sierra Leone also heard messages from the rest of the world that children were not being vaccinated due to precautionary concerns. This inevitably added to local suspicion that there might be something not quite right about COVID-19 vaccine. It might have been better to include children from an early date, since this would have aligned COVID-19 vaccination more closely with the existing institution of *maklet*.

Results 2. What happened when vaccines arrived?

Seeing the disease

How were people's views of COVID-19 vaccines shaped by their views and experiences of COVID-19 as a disease? People were first specifically asked about COVID-19 in April 2020, when the first cases of the disease in Sierra Leone were detected. Specifically, informants were asked what they felt about the idea of COVID-19. Many people denied it existed. It was hard to distinguish from other common respiratory diseases, and it was not as dramatically deadly as Ebola. Rules on COVID-19 were announced but their effect was hard to trace, since the disease was also hard to trace, and community testing was limited. At this juncture, people were in a confused state.

Because Sierra Leoneans live in a challenging environment, they develop a lot of potential immunities to a range of little-known infections. A 2018 study showed that 70% of a Sierra Leonean sample showed antibodies to an adenovirus known to cause symptoms of respiratory disease and a study finding percentage of Sierra Leoneans with antibodies reacting to seasonal coronaviruses was also higher than for American blood donors (Busen Wang et al., 2018; Borrega et al., 2021). A participant in a discussion said, rather wearily:

All the illnesses [we had] before have [now] been taken as signs and symptoms for Corona.
[AN, male, elder, farmer, 'Tawoveihun', 30 July 2021]

The implication was that Africans are used to all these challenges, nothing serious has happened to them, and COVID-19 is just one more of these challenges.

The reason COVID-19 is not so recognisable in Sierra Leone is not just because of low levels of testing. It is also because people see themselves as having suffered from so many diseases and fought their way back against them that they are covered against all contingencies, and that was a view frequently expressed:

I know I'll not get Covid and I can assure you that I'll keep strong; my immune system is very strong. Ebola came and I was never affected, so I know that I'll not get affected in this Corona virus pandemic time. [MK, male, businessman, Kenema, July 2021]

This is a version of an idea often expressed as a joke: *There are no germs in the African stomach*, a comment frequently heard when a fly falls in a drink and the drinker continues or food drops from a plate and is picked up and dusted off.

Initial responses to COVID-19 vaccines

The first COVID-19 vaccines arrived in mid-2021 (mainly AstraZeneca and the Chinese vaccine Sinopharm). Rumours from social media quickly brought negative comments from people overseas that COVID-19 was a kind of population control, or that the vaccine was dangerous. In a context in which people were not seeing the disease, this encouraged people to feel that there was no rush for vaccination. Many sat back, saying they will wait and see how others react to the vaccine. It is also interesting to note that this vaccine hesitation was often expressed by the most highly educated, who had better access to social media.

One senior civil servant stated:

Well, I will hesitate to take the vaccine of corona because of past histories like the white people were trying to do experiments. I will take it reluctantly. [MY, male, office worker, Kenema, April 2021].

Another informant stated:

I was afraid due to the disturbing messages that were all over the social media that they have made the vaccine in order to kill us slowly. [LJ, male, teacher, 'Taninihun', 9 June 2021].

Politics also came into vaccination. The two main political parties are the Sierra Leone Peoples Party (SLPP) and All Peoples Congress (APC), and any crisis in the country tends to be downplayed in the strongholds of either APC or SLPP, depending on which party is in power and might be blamed for the crisis. During the Ebola crisis in 2014, people saw it as an APC 'disease' intended to kill the opposition supporters of SLPP. In 2020, the SLPP was in power, and COVID-19 was seen as an SLPP disease sent to damage the opposition, especially in Freetown and parts of the north most loyal to the APC:

Today politics has entered everything in the country. More especially when Ebola struck during the APC regime and Covid-19 during SLPP regime. To fight [politics] the pandemic was downplayed in the strongholds of the APC. In Sierra Leone if we don't see with our naked eyes, we will not believe. Ebola for example, most people saw what it did and there was no way to deny. [RM, male, contractor, 'Tawoveihun', 31 July 2021].

The same approach of seeing first was applied to COVID-19 vaccination. Early hesitators said they will wait to see if those who have taken it will have an overwhelming reaction. Hesitation affected the highly educated, because they saw that not much research had been done on the vaccine yet. Below are responses from a member of staff at Eastern Technical University in Kenema and a farmer:

I am yet waiting for a year observing those who have taken the vaccine to see what will happen to them. I am not hesitating, but I think lots of research was not done and the timing was too short to produce a vaccine. [JSK, male, Eastern Polytechnic College (EPC), Kenema, June 2021].

If I see people taking it, I will take it. It will not just start and rush to take it. [MA, female, farmer, 'Tawoveihun', 31 July 2021]

However, the same responses were encountered at village level as well. One of the things that frequently came up in this context is the use of WhatsApp, Facebook, and Twitter as sources of false messages over COVID-19 and its vaccines. Not many villagers have direct access to electronic social media, but there are few villagers without a relative in a town who has such access, and a willingness to pass on 'helpful' messages by phone.

Vaccine rollout

The first batch in March 2021 and subsequent shipments prioritised frontline health professionals, vulnerable aged people, and people with underlying health conditions. (UNICEF, 2021, <https://www.unicef.org/wca/press-releases/covid-19-vaccines-shipped-covax-arrive-sierra-leone>). However, informants – some of whom had expressed strong reservations about taking the vaccine – were revisited to find out what happened when the COVID-19 vaccines started to roll out. Some were interviewed when the vaccine teams had arrived. There was now a much more differentiated response and lots of practical reasons why people did not go for vaccination. There are some striking statements like:

I don't have time to stand for a vaccine and it consumes time. [IBK, medicine peddler, male, 'Taninahun', 2021].

I have a lot of farm work. Now there is no food. If I take that vaccine, I will not be able to go to the farm and to dig the bush for bush yam, [because] the pain will be on my hand [in my arm]. [MKB, male, 'Taninahun', August 2021]

The government: they tried but the only thing is that they are only giving the vaccine and there is no food in the country [MB, 38, female, farmer, 'Taninahun', 9 September 2021]

People's views were changing. The explanations flying around the internet and on social media began to be discounted in Sierra Leone when people were injected without apparent harm. Instead, the main issue shifted towards practical concerns. Life is precarious for many rural villagers as well as for many urban dwellers, such as bike taxi riders, who earn their survival as they go. The following comments make the problem clear:

Like for my family, as the wife, I'm finding it hard to get food except I go and get bush yam [a common hungry season staple] for our feeding. [MB, female, farmer, 38, 'Taninahun', 9 September 2021]

Yes, because medicine goes with food and there are people when they take maklet [who] will take them three days with their hands heavy, which cannot allow them to do any hard work for those days. There is no money for now, things are hard [MB, female, farmer, 38, 'Taninahun', 9 September 2021]

The rice got finished because it is from that rice I sell to get money for the sauce that I cooked, and I sell to buy other things which might be needed in the home. My husband – the moment rice is cultivated, that is the end; he does not care, neither gives [me] any money for cooking or any other things. Even as it is now, he doesn't care. [MB, female, 38, farmer, 'Taninahun', 9 September 2021]

The actual objections to vaccination were thus much more related to practical constraints rather to ideas coming from social media influencers.

Unsettled institutions?

Some descriptions of people's experiences of the vaccine roll out can now be offered, concerning what happened when people went for vaccination, and what problems they encountered. The people needed proof that the vaccine was safe, so the first shot was given to President of Sierra Leone, Julius Maada Bio. There were mixed messages about side effects from those who took the vaccine; some people had headaches, dizziness, and heavy arms. One person mentioned that since she had taken the vaccine her menstrual flow resumed. There were others reported beneficial side effects some which were surprising:

I took that maklet/vaccine the dizziness stopped [HBB, female, 70, 'Taninihun', 30 August 2021].

I was having pains, but the pain went off after taking the vaccine. [JB, female, 52, petty trader, 'Taninihun', 9 September 2021]

One woman even reported benefits bordering on the miraculous:

[I was] always with flu, headache, and fever but since [taking the vaccine] I do not experience those sicknesses anymore. [FB, female, 52, petty trader, 'Taninihun', 9 September 2021]

Some evidence of organisational bottlenecks in vaccine rollout was apparent:

The challenges were the logistics, in terms of fuel, vaccine cards, and access to a vehicle. I am happy to say that we are having many people coming for the vaccination; what at times hinders us is the limitation of cards and vaccine itself. [MG, male, coordinator, Kenema, 3 June 2021].

Over-confidence in vaccine results was also reported by the same source:

When you met with anyone who has taken the vaccines, especially the second dose, they will tell you that I am free from Covid-19 [MG, male, coordinator, Kenema, 3 June 2021].

Still there was hesitation among some rural people. One chief thought he would accelerate the process by telling his people categorically that anyone who does not take the vaccine and offer proof via the card will not benefit from a local loan scheme, then being rolled out in his chiefdom. This message created panic, and people turned up for vaccination in greater numbers than could be handled, which then presented the chief with a further problem. He now had to inform the chiefdom Community Health Officers that people needed the vaccine very urgently.

Despite promise of hungry season loans, one group of villages still had doubts.

My main worry is with [village name withheld] and its surrounding villages where people have refused to take the vaccine. [MS, female, senior health professional, Kamajei chiefdom, 29 August 2021].

There were hitches in some communities due to lack of vehicles, fuel, vaccination cards, and the vaccine itself.

Many complained about [vaccine supply] and the cards. [MS, female, senior health professional, Kamajei chiefdom, 29 August 2021].

The government – they always failed to send cards [enough for] the actual amount of vaccine supplied. Vaccine is not enough in the country. Supply comes by bits and the country depends on donors. [PG, female, senior medical professional, Kamajei chiefdom, 29 August 2021].

Some graphic and moving accounts of the problems faced by the elderly and those with disabilities were offered. The following case is representative:

Q. Have you taken the vaccine?

A. No, I have not. I am blind and I am just sitting here; I cannot do anything on my own. I have been sick since 2007. I cannot see, but I can walk. I am please asking for help. I am finding difficulties as I cannot even afford food to eat. My mother is too old. [MB, male, blind, without occupation, ‘Taninihun’, September 2021]

Q. Will you take the maklet if they [the team] come back to [village name withheld]?

A. Yes, if I have somebody to take me there, I will willingly take the maklet.

At times, it was hard to see whether poor organisation, misunderstanding, or a rumour that vaccination was going to be compulsory resulted in some people not being available when vaccinators arrived. In ‘Tawoveihun’, for example, there was some avoidance of the vaccination team:

I have heard [about] is this corona vaccine which I’m getting from rumour that they are going to give [it to] people with force. [AN, male, elder, ‘Tawoveihun’, 30 July 2021]

On the other hand, the vaccination team gave little or no warning of its arrival, and most people had gone to their farms when it arrived. Whether this was avoidance due to fear or lack of information is hard to tell:

I was still afraid but now I have seen my people have taken it and nothing went wrong with them so I will take it whenever they come here again to vaccinate. [JB, 52, female petty trader, ‘Tawoveihun’, 30 August 2021]

Discussion

Vaccination in Sierra Leone: addressing an anomaly

Athias and Macina (2022) point out that in Africa issues such as trust in medicine are affected by histories of violence associated with four centuries of slave trade. Streefland et al. (1999) suggested that ‘local vaccination cultures, with their own health practices, knowledge and beliefs about immunization and past experiences with routine or campaign vaccination’ will determine whether parents continue to have their children vaccinated. This paper has built on these insights by attempting to map out the institutional history of a specific local vaccination culture, in eastern and southern Sierra Leone, to show that *maklet* is specific to its context, subject to local historical change, and indeed an important key to understanding vaccine responses.

The processes through which such cultures are shaped and evolve were carefully examined by Douglas (1992), in one of her most important papers on the ‘rightness of categories’ (Richards & 6, 2023, Chapter 6). Change in response requires the categorisation process to be carefully unpacked, in terms of classificatory logics and processes of exemplification. Change is always better handled, she argues, ‘from within’, and that the responsibility of the authorities, in this case, is to

understand and allow for those local processes of adaptation. This is because a culture is a defensive mechanism. Attacking it from outside provokes perverse effects. People double down on schemes of classification they feel essential to their survival. These schemes generate anomalies, and anomalies require ritual resolution, not appeals to science and logic.

Douglas's argument fits COVID-19 in eastern and southern Sierra Leone. The disease arrived after an earlier traumatising experience – an epidemic of Ebola (2014–2015). As already mentioned, that disease was managed without vaccination. Control over Ebola was established by social discipline – acceptance of quarantine measures, community imposition of self-sequestration, reduction in inter-community movement, extensive contact tracing, and imposition of biosafety measures when burying corpses. These measures were imposed via chieftdom byelaws, and these byelaws were first developed by paramount chiefs and their chieftdom councils when first attacked by early outbreaks of Ebola. These local byelaws were effective because people in the rural areas highly respect their chiefs and believe that what the chiefs and council decrees should be obeyed as the law of the land (Mokuwa and Maat, 2020; Richards, 2016). During Ebola, communities saw that byelaws controlled Ebola. People were fined in courts for breaking rules on local movement. As soon as people stopped moving in from other communities, and there was no overnight stay, Ebola case numbers began to decline. In other words, byelaws worked.

Papkalla and Schroven (2016) reported that in a post-Ebola national consultation in Sierra Leone byelaws were mentioned as the top consideration for controlling future epidemics. People then tried to apply the same constraints for COVID-19 by insisting that byelaws were the main line of defence against infectious disease. There was a widespread assumption that COVID-19 was a similar disease to Ebola; many Sierra Leoneans concluded that as a result they did not need the vaccine. One route to acceptance became apparent when one chief, previously hostile to vaccination, started to advise people to take COVID-19 vaccine not because it was needed but because it would further demonstrate that people who obey rules are protected against disease.

This provided a route through which older memories of *maklet* could be fitted into a revised scheme of classification, and people began to feel reassured. As Leach and Fairhead (2007) have suggested, when parents in the UK raised doubts about the childhood triple vaccination for measles, mumps, and rubella (MMR), they were displaying neither wilful refusal nor ignorance of science. They had genuine questions which made sense in relation to their experiences of their children's health. Many parents were willing to be persuaded to accept MMR vaccines but needed an institutional framework within which questions could be posed and answered. The very act of being able to ask and then having these questions answered provided a ritual resolution of lingering doubts. In the present case, people also needed to be able to relate recent experiences to older categories of knowledge in a way that made sense within a local framework of 'rightness of categories'. Fragmentary older experiences of *maklet* and more recent experience of Ebola byelaws needed to be brought together into some kind of synthesis, in which major classificatory anomalies were addressed. As Douglas suggests, people had to find their own way, but they did find a way, and COVID-19 began to settle into an enlarged institution of *maklet* as something that 'fits' into 'our' culture.

'Lots of vaccine, but no food'

How can the right environment be created for this local process of ritual adaptation? As Douglas pointed out on many occasions, human culture places great importance on meals, as being among the most basic of ritual processes for institutional ordering (Douglas, 1972). Ritual accommodation is facilitated by an abundance of food, and adjusting to vaccine regimes is no exception. Food security is a recurrent issue for the poor in Sierra Leone, who live from day to day. Many comments on whether to take a vaccine or not raised the issue of daily precarity. Similar

comments were made in Uganda, where people said they preferred cassava to COVID-19 vaccines (Macgregor et al., 2022).

There is a saying in the Mende language: *ndo nya ni tia yagbai va* – a country does not spoil itself alone. Precarity runs across all communities and affects vaccine uptake. It sounds trivial for people to say that they had to stand in a line and wasted a morning's work waiting for a vaccination, but for someone living day-by-day, like urban bike taxi riders, losing half a day's work puts no food on the table for the family. More could be done to decentralise vaccination programmes, with vaccination teams visiting outlying villages and making use of community facilities such as mosques and churches and trading centres and periodic markets (*dowei*). Even so, due to transport costs (Treacy et al., 2018), many rural people may have to walk a substantial distance to a place of vaccination, and this could easily cost them a working day. The WHO has advised that Sierra Leone should vaccinate 70% of the total population, to force infection rates down. In this case, it would make sense for the Government of Sierra Leone to ask the international community for funding to give everybody food for the day.

Conclusion

Vaccination became institutionalised as *maklet* in Sierra Leone from the 19th century onwards. But COVID-19 was a new and unfamiliar kind of *maklet*. Important aspects of public health had broken down in Sierra Leone or had been changed due to the civil war and subsequent Ebola emergency, and institutional memory had faltered. Without recent experience of vaccination to reinforce its institutionalisation, COVID-19 vaccination was assimilated to older stereotypes – what people remembered, often in a very fragmentary way, about pre-war *maklet*. The oldest informants recalled a painful procedure with a machine scarring the upper arm for smallpox protection. For a younger age range, vaccination was something largely given to children, and a process vividly remembered because the child received a rubber bangle of a distinct colour for each shot. EVD (2014–2015) then overwrote these older institutional memories with the message that social discipline protects against infection.

Almost without warning, vaccination for COVID-19 arrived as a swift and relatively painless shot in the upper arm, with a limited lifespan, and to be repeated on multiple occasions, for a disease that mostly resembles a common cold, with the elderly prioritised for treatment. This was because WHO excess death calculations suggested that COVID-19 killed as many or more people in countries like Sierra Leone than Ebola ever did (Richards et al, this issue), but these deaths occur among the very elderly, who form a miniscule proportion of a demographically 'young' country. To reduce vaccine hesitation, much work was needed to re-institutionalise *maklet* as a sensible precaution for all age groups. Reporting on local discourses, this paper has suggested that people were finding their way, by recovering and revising memories, and responding to anomalies, much as the Douglasian theory of institutions suggested they would. By documenting memories, epidemiologists gain direct access to institutional values as they are being formed, thus opening more viable routes to positive vaccine acceptance than through social obligation alone.

The overall conclusion of this paper, then, is that the institutionalisation of vaccination takes distinct forms, depending on variations of local experience, including discontinuities in implementation. Institutionalisation recalls memories selectively. Recollections crop up unexpectedly and threaten to derail even the most meticulously planned vaccine distribution exercises. The institutionalisation of vaccination needs to be documented and analysed, but adaptation is work for communities, not outsiders, since so much of what needs to be known is hidden in corners of group memory. In this paper, ethnographically contextualised interviews have been offered as a way of reading these community memory banks, and revealing some of the vaccine reception pitfalls that lie in wait for the unwary.

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