

Health Inequities in Sub-Saharan Africa (SSA) as Postcolonial Rejuvenation of Colonial Injustice: The Case of Antimalarial Interventions

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Abstract

The structural organization of healthcare governance in sub-Saharan Africa (SSA) frequently fails to strategically address the fundamental health needs of its populations. While health vulnerabilities are primarily shaped by social determinants that transcend sociopolitical boundaries, healthcare programming in SSA remains constrained within defined geopolitical frameworks—territorial borders and administrative systems—originally designed in Europe and imposed upon the region. Within this paradigm, national leaders often function as disguised legatees of colonial interests. Consequently, health inequalities intensify, leading to the systemic destruction of public wellbeing while leaving marginalized populations to suffer and die in destitute conditions. This study utilizes the dynamics of malaria and antimalarial interventions in SSA to demonstrate the causal link between colonial history, neocolonial hegemony, and contemporary health disparities. Although many international healthcare partners engaged in antimalarial efforts self-identify as philanthropists, their operations often prioritize countries with lingering colonial attachments or environments where neocolonial influence aligns with their strategic interests. Thus, antimalarial initiatives in SSA are frequently hindered by compromised governance structures that fail in their sovereign responsibility to ensure the welfare of their populations. Ultimately, populations in malaria-endemic regions are abandoned within fragmented aid systems, and are often forced to fully rely on informal support or on "natural mercy" through prayers or incantations for survival.

Résumé

L'organisation structurelle de la gouvernance des soins de santé en Afrique subsaharienne (ASS) échoue fréquemment à répondre de manière stratégique aux besoins fondamentaux de santé de ses populations. Alors que les vulnérabilités sanitaires sont principalement façonnées par des déterminants sociaux qui transcendent les frontières sociopolitiques, les programmes de santé en ASS demeurent confinés à des cadres géopolitiques définis — frontières territoriales et systèmes administratifs — conçus à l'origine en Europe et imposés à la région. Dans ce paradigme, les dirigeants nationaux fonctionnent souvent comme des légataires déguisés des intérêts coloniaux. En conséquence, les inégalités de santé s'intensifient, conduisant à la destruction systémique du bien-être public tout en laissant les populations marginalisées souffrir et mourir dans des conditions de dénuement. Cette étude utilise la dynamique du paludisme et des interventions antipaludiques en ASS pour démontrer le lien causal entre l'histoire coloniale, l'hégémonie néocoloniale et les disparités contemporaines en matière de santé. Bien que plusieurs partenaires internationaux engagés dans les efforts antipaludiques se présentent eux-mêmes comme des philanthropes, leurs opérations privilégient souvent les pays où subsistent des attaches coloniales ou des environnements dans lesquels l'influence néocoloniale s'aligne sur leurs intérêts stratégiques. Ainsi, les initiatives antipaludiques en ASS sont fréquemment entravées par des structures de gouvernance compromises qui échouent dans leur responsabilité souveraine d'assurer le bien-être de leurs populations. En définitive, les populations vivant dans les régions endémiques du paludisme sont abandonnées au sein de systèmes d'aide fragmentés et se voient souvent contraintes de dépendre entièrement du soutien informel ou de la « miséricorde naturelle », à travers les prières ou les incantations, pour survivre.

Keywords: sub-Saharan Africa, colonization, neocolonialism, malaria, health inequities, health inequalities

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Introduction

From a broad perspective, this presentation examines the intersection of health and politics through the interdisciplinary convergence of healthcare and neocolonialism in Africa. More specifically, it analyzes the dynamics of malaria in sub-Saharan Africa (SSA) to address the sensitive questions connecting the health and wellbeing of Indigenous Africans with the legacy of colonial imperialism. In this context, wellbeing is defined as the human state of being able to enjoy all conditions necessary for an individual or group to be healthy and flourish (Onyango & Kangmennaang, 2020). Furthermore, health is defined as “a state of complete physical, mental, and social wellbeing, and not merely the absence of disease or infirmity” (WHO & OHCHR, 2008, p. 1). Although the health consequences of colonization are felt across the entire continent, this analysis focuses on healthcare issues within SSA from East to West, excluding the Republic of South Africa. This delimitation is informed by a plethora of sociocultural, sociopolitical, and socioeconomic similarities across these nations. Their ensemble enables a more cohesive analysis of findings and the generalization of results.

The political imbalances between the colonizer and the colonized that characterized the colonial era in SSA have significantly contributed to the stagnating health inequalities experienced by local populations. We mean by health inequalities the avoidable and unfair disparities systematically observed between groups of people from different social settings. These are considered unfair, yet preventable and avoidable, because they result from healthcare imbalances driven by key determinants such as wealth, power, and social advantage—factors that can be mitigated through health equity. Health equity, in this regard, refers to the ethical principle that motivates healthcare stakeholders to strive to eliminate or

minimize these unfair and avoidable disparities (Braveman, Arkin, Orleans, Proctor, & Plough, 2018).

Generally, while health inequalities indicate inaccessibility of healthcare facilities or opportunities, health inequities may signify a lack of social justice in healthcare governance. Consequently, beyond natural causes, health inequalities are frequently products of health inequities or the result of poorly executed healthcare interventions and policies. In other words, health inequalities represent a failure to overcome systematic disparities that infringe the fundamental human right to health and wellbeing (WHO, 2018; WHO & OHCHR, 2008). While the prevalence of health inequalities in SSA can be attributed to various factors, this study focuses specifically on those resulting from health inequities. Furthermore, it concentrates on inequities rooted in failures in sociopolitical governance, which I classify as the primary structural determinant of human health and wellbeing.

Problem Statement

Postcolonial governance across SSA has failed significantly as a structural determinant of the health and wellbeing of its citizens. Consequently, profound health inequalities have become a defining characteristic distinguishing this region from the rest of the world. When a governing system fails to strategically address the healthcare requirements of its population through the efficient allocation of resources—whether due to omission, ignorance, or negligence—it precipitates health inequities. These inequities either initiate health inequalities in previously unaffected areas or exacerbate existing disparities (Jasso, 2015).

This phenomenon is particularly evident in the management of malaria across SSA. The calibration and distribution of available antimalarial resources and services frequently fail to align with the context-

specific needs of populations. At worst, these resources are disproportionately invested, inverse to the natural geospatial malaria infection pattern across countries: more resources to comparatively lesser infected areas and fewer resources to comparatively more infected areas. This inverse intervention helps to widen the inequality gap as the conditions of the most vulnerable, the heavily malaria-afflicted populations, deteriorate. For this reason, this study focuses specifically on health inequalities resulting from non-strategic antimalarial interventions in SSA, despite the presence of various other diseases that also illustrate their escalating health disparities.

Historical Context and Colonial Legacy

Decades of stagnation of malaria control in SSA, together with the pattern of the intervention strategy, demonstrate a profound link to colonial heritage. While many other regions of the world have a history of malaria—for instance, India, where it was already described as "the king of diseases" as early as eight centuries BC (Arrow, Panosian, & Gelband, 2004)—and many have also experienced colonization, the outcomes clearly differ. Many formerly colonized malaria-endemic parts of the world have successfully minimized the disease's impact, yet SSA is still the global epicentre of malaria in the 21st century (WHO, 2022). Historical records indicate that malaria originated in the "Old World" (Africa, Asia, and Europe) before migrating to the "New World" (America and the Americas).

Paradoxically, malaria treatment initiatives followed the reverse trajectory, with Africa being the last continent to benefit. History also reveals that quinine—the first antimalarial drug—was initially produced from the bark of the cinchona tree in Peru by the Spanish, but it was most widely used by the Dutch. The cultivation of this tree intensified on Java Island, while the finished quinine stocks were conserved in the Netherlands. These two key sites—cultivation

and preservation—were entirely secluded from Africa. It is believed that this exclusion was driven partly by the fear of strengthening German colonial interests in Africa, and partly by a general indifference toward the continent's welfare (Nosten, Richard-Lenoble, & Danis, 2022). Subsequently, after a series of seizures of this stuff (from plantations to quinine products) by Germans, Japanese, and French forces, the quinine products and by-products were eventually transferred to an American company that developed what became chloroquine. While chloroquine was widely deployed and intensively utilized worldwide, its introduction to Africa was significantly delayed.

The Postcolonial Dilemma

Chloroquine was eventually introduced to SSA by the British, primarily in their Eastern African colonies. However, chloroquine-resistant malaria soon emerged, with cases diagnosed in Kenya and Tanzania (1978) and later in Zambia, Sudan, Uganda, and Malawi by 1983 (Arrow et al., 2004; Nosten et al., 2022). Conversely, the history of malaria treatment and resistance in Western SSA remains poorly documented, largely because France, the colonial power in much of that region, neglected to verify or address the issue. As a result, malaria surged across these nations before awareness grew in response to the escalating health crises of the 1990s.

Prompted by these historical disparities, this research examines the inequitable dynamics of antimalarial efforts in SSA through the lens of postcolonial inheritance. The goal is to determine if the current orientation of malaria inequalities replicates the injustices or strategic interests of former colonial masters. However, this inquiry raises a critical question: is colonization still a valid explanation for healthcare failure in SSA in the 21st century, given that formal colonial rule had ended decades ago, even if neocolonial hegemony appears to have intensified?

Using the fight against malaria as our case study, as mentioned above, this presentation demonstrates the extent to which health inequalities in SSA manifest an enduring and unjust colonial hegemony. To analytically present these facts, I will address the following questions:

- What elements of antimalarial intervention in SSA are comparable to colonial mechanisms?
- What factors could alter the outcomes of these processes?
- What is the definitive "take-home" message for policymakers, stakeholders, and scholars?

The Intersection of Colonization and Antimalarial Intervention in SSA

It is beyond the scope and intent of this presentation to excavate the hidden intentions that encouraged colonization in SSA or those motivating contemporary antimalarial initiatives. Nonetheless, these underlying factors will inevitably surface when examining these two history-making phenomena. While the formal process of colonization was purportedly concluded with transition to independence, the struggle against malaria in SSA remains an ongoing conflict that curiously rejuvenates remnants of the colonial past. The objective here is not to define colonization, evaluate its utility, or blame it entirely for the persistence of malaria in SSA. Rather, this presentation aims to highlight the operational similarities between colonization and antimalarial intervention to discern their point of intersection. Understanding this relationship will reveal the extent to which postcolonial hegemony in SSA hampers antimalarial efficacy and lays a foundation for the positive structural changes necessary to improve their health outcomes.

Colonization in SSA: A Legacy of Denigrating Exploitation

While colonization was a global phenomenon—the Romans in Britain, the British in India, and European expansion in the Americas—the specific nature of colonial unfairness in SSA has uniquely marred its postcolonial experience. When the Romans invaded Britain, they encountered a population with established trading systems and fierce resistance. Consequently, the Romans sought inter-trade partnerships rather than total displacement (Boyce, 1911). Similarly, Spanish invaders in the Americas confronted indigenous societies governed by ancient laws, and their own colonization instead led to a history of settlement and intermingling. In India, the British met a skilled, hardworking population capable of mounting significant socioeconomic hurdles, and their own colonization instead became cooperative trading ties and joint infrastructure development.

In contrast, the European expansion into SSA was characterized by a different anthropological lens. This region was derogatorily classified as the "black spot of the world," home to what they perceived as the "lowest races of mankind" (Boyce, 1911, p. 394). This perspective facilitated French assimilation policies that claimed the responsibility of "civilization" while practicing deep exploitation. This "denigrating, inundating peculiarity"—involving geographical, demographic, and anthropological appropriation—reordered the social upkeep of the colonies to satisfy the interests of the colonial masters (Birhane, 2020).

While SSA was perpetually characterized as the "Dark Continent" (Phiri, 2022, p. 2), French policies dictated living conditions that favored colonial extraction at the expense of the citizenry. By effectively relegating local populations to laboring tools—reminiscent of Plato's Allegory of the Cave—colonizers established exploitative terms that were often

endorsed by their "stooge legates" as a precondition for assuming the presidency of pseudo-independent nations. Most of these conditions still persist. For example, the French central bank maintains significant control over the currency of its former colonies, and these nations are often required to grant business preferences to French firms regardless of efficiency. This leverage remains an active reality, distorting the daily lives and wellbeing of local citizens.

Health Inequalities and the Strategic Failure of Interventions

Healthcare is one of the many sectors suffering from these historical distortions. Despite the urgency of the malaria crisis in SSA, intervention efforts are frequently handicapped by the "insatiable avarice" of postcolonial governance. To be successful, antimalarial interventions must be strategically designed and conducted in sequential stages to address the complex "malaria vector-factor".

In this study, Funded Antimalarial Research (FAMR) is considered the primary indicator of effective antimalarial dynamics in SSA. The guiding theory is that a failure to strategically allocate FAMR results in unrepresentative data and eventually misguides the intervention process, thereby exacerbating malaria inequalities. This research hypothesizes that the colonial philosophies implemented in countries with high FAMR fostered specific policies that were inherited by postcolonial governments, thereby facilitating the penetration of external funding. Furthermore, the second hypothesis is that if highly funded countries are also among the highly malaria-infected countries, it suggests a proportionate (strategic) antimalarial dynamic; if not, it is deemed non-strategic.

Realization: Analyzing the Effect-Cause Relationship

Sourcing malaria data in SSA

To credibly realize this inquiry, we worked on malaria data collected from 38 countries ($\geq 80\%$) in SSA as was recorded between 2000-2016, the era of the Millennium Development Goals. The study recorded the number of FAMR initiatives, malaria infection rates (morbidity) per 1,000 people (MIR/000), and total malaria deaths (mortality) (MD). This method facilitated the evaluation of whether FAMR orientation aligns with the actual heterogeneity of malaria endemicity. It also helped to identify which former colonies receive more funding and determine the causal relationship between funding orientation, morbidity, and the evolution of malaria mortality. I considered the volume of FAMR in terms of and not in terms of funding size.

I applied purposeful sampling to select two groups: the first three countries with the highest malaria incidence rates (MIR/000) and the first three countries with the highest volume of foreign antimalarial funding (FAMR). This selection facilitated a comparative analysis to determine the orientation pattern of FAMR distribution across SSA relative to malaria endemicity—whether proportional or inverse. Methodologically, I employed a mixed-methods approach to validate these hypotheses through statistical triangulation: If FAMR distribution aligns with the heterogeneity of malaria endemicity (MIR/000) with at least one (≥ 1) intersection between the first three countries with the highest MIR/000 and the first three with the highest recipients of FAMR, then it is a proportional intervention. If FAMR distribution does not target malaria endemicity, there will be zero (≤ 0) intersections between the two sampled groups, making it an inverse intervention.

Findings: malaria versus antimalarial statistics

Our data reveal a glaring geographical strategic inverse relationship between malaria calamities and antimalarial investment. Of the 19,136,503 malaria-related deaths recorded across SSA between 1990 and 2017, a substantial majority—11,184,418 (58.45%)—occurred across countries in Western SSA. Within our study sample of 38 countries, the first three countries exhibiting the highest Malaria Infection Rates (MIR/000) as per our study period were all located in the Western region: Burkina Faso (389.2/000), Guinea (367.8/000), and Niger (356.5/000). Conversely, the first three countries that received the highest volume of FAMR initiatives within that period are in Eastern SSA: Tanzania (170 FAMR), Kenya (148 FAMR), and Uganda (115 FAMR). The malaria versus antimalarial sampling of our findings is presented in Fig. 1.

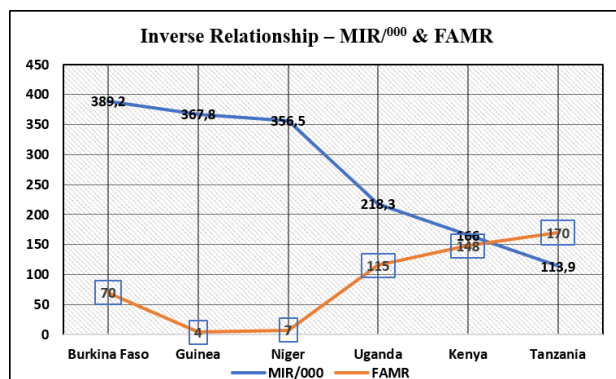


Fig. 1 The graphical representation of the findings

Key: FAMR activities decrease as malaria intensity or infection rate increases

Analysis

As illustrated in Fig. 1, the relationship between antimalarial funding and malaria incidence in SSA highlights a substantial misalignment as the orientation pattern of FAMR inversely relates to the heterogeneity of malaria endemicity (MIR/000). The concentration of FAMR activities appears to prioritize in the Eastern part of SSA over the more severely malaria-afflicted countries in the Western part. Dominantly directed by

international healthcare partners in the Global North, FAMR activities in SSA significantly deviate from malaria endemicity, which is the logical target. In other words, antimalarial funding and research are concentrated away from the most endemic regions, specifically neglecting Western SSA. Despite Western SSA accounting for 58.45% of total malaria deaths, 61.07% of the 1,061 FAMR activities recorded between 2000 and 2016 were conducted in Eastern SSA.

This inverse relationship renders many FAMR activities potentially misleading for SSA as they generate unrepresentative data that misinforms the broader intervention process. When data do not accurately reflect the burden of disease, the calibration and distribution of the available resources are inevitably diverted away from the most vulnerable populations. These systemic inequities drive malaria-endemic countries—principally in Western SSA—holoendemic (a state where almost everyone is perennially infected, and many have become asymptomatic carriers. This state results in devastating negative dynamics, where mortality rates escalate (Table 1) as the hard-hit populations remain untreated and succumb to the disease.

Country	MD 2000	MD 2016	Change in MD (2016–2000)
Burkina Faso	29,215	30,762	+1,547
Guinea	10,347	11,328	+981
Niger	17,791	30,848	+13,058
Uganda	57,160	22,489	–34,671
Kenya	15,573	4,625	–10,948
Tanzania	34,754	15,419	–19,335

Table 1: Analytical Consequences of Inverse Antimalarial Intervention (2000–2016) Note: Negative values (–) indicate a reduction in malaria deaths (positive outcomes), while positive values (+) indicate an increase in deaths (negative outcomes).

Table 1 quantifies the human cost of inverse antimalarial intervention in SSA. While the more-funded English-dominated Eastern countries (Uganda, Kenya, and Tanzania) achieved significant reductions in malaria mortality, the under-funded but highly endemic French-dominated Western countries (Burkina Faso, Guinea, and Niger) saw their malaria mortality rates continue to climb. These results confirm that current antimalarial dynamics in SSA do not merely reflect healthcare challenges, but rather a geopolitical allocation of health security that rejuvenates colonial-era preferences.

Inverse FAMR in SSA: The Rejuvenation of Unfavourable Colonial Disorientation

This narrative employs a simple analytical logic, comparing two historical dynamics—colonization and the fight against malaria—to establish their contemporary interrelationship in accordance with the central hypothesis of this research. Colonization in SSA was characterized by an adventurous "scramble" by various European powers—notably Spain, Portugal, France, Britain, Germany, and Belgium—to invade and occupy the continent (Müller-Crepon, 2020). Among the colonial powers that appropriated territories in SSA, this analysis focuses primarily on the British and the French. This focus is strategic: these two powers controlled the largest portions of SSA, and they expanded their ideological and physical spheres of influence following the expulsion of the Germans. Effectively, the British and the French bisected SSA, with Britain administering the influential majority in Eastern SSA and France governing the majority in Western SSA.

According to the aforementioned analytical logic, the statistics in Figure 1 indicate that the majority of FAMR in SSA is concentrated in British-descended territories (the Eastern part), while malaria continues to devastate populations in French-descended territories (the Western part). In the Eastern part of SSA, Madagascar—a former French colony—

stands out with relatively few FAMR activities and heavy malaria endemicity (22 FAMR vs. 104.2 MIR/000) compared to its Anglophone neighbours. Notably, it was only after Rwanda joined the Commonwealth and adopted English as an official language that the country experienced positive antimalarial shifts, bolstered by increasing partnerships with the Netherlands and the United States.

In the Western part of SSA, Ghana—a British colony—remains an exception with high FAMR activity and relatively mild malaria endemicity (83 FAMR vs. 266.4 MIR/000) compared to Francophone neighbours, ex., Côte d'Ivoire (11 FAMR vs. 348.8 MIR/000), Senegal (70 FAMR vs. 389.2 MIR/000). Furthermore, Ghana was the only West African country where the initial stages of RTS,S/AS01—the first African-based malaria vaccine candidate—were tested (Aaby, Rodrigues, Kofoed, & Benn, 2015). While this analogy demonstrates how antimalarial inequities are rooted in colonial disorientation, my intention is not to valorize one colonial philosophy over another, nor to determine which colonial master possessed "better" intentions.

Rather, I acknowledge that no colonial power deserves praise, given the systematic dehumanization of indigenous Africans and the subsequent installation of "stooge" legates as local sociopolitical leaders. My objective remains to demonstrate that postcolonial antimalarial interventions disproportionately disadvantage populations in French colonies, to investigate the causes of this disparity, = and propose potential mechanisms for possible solutions. To that end, it is necessary to examine the peripheral comparisons between British and French colonial policies in light of the current disorientation of antimalarial initiatives. One must ask: is the unfavourable orientation of FAMR linked to the postcolonial governance systems inherited by these countries?

This is a critical consideration because the British and the French applied distinct

colonial tactics with tangible post-independence inheritance. Historically, the British employed "indirect rule," a system that maintained local governing structures and leaders as auxiliaries to the colonial administration. This explains the persistence of traditional rulers and chiefs in many former British colonies, where they continue to function as auxiliary powers and representatives of customary tradition.

In contrast, the French implemented a policy of "assimilation" paired with "divide-and-rule" tactics to create "French states" instituted according to their interests. This policy destabilized pre-existing traditional systems, centralizing all power within a ruling system directed from Paris. Through assimilation, France maintained a hegemonic grip on the political, economic, and cultural welfare of its colonies to preserve its own prestige and interests. Within this framework, the benefits to indigenous populations were marginalized or trivialized. For example, after 150 years of French rule in the Central African Republic (CAR), the nation had only one indigenous doctoral graduate and no single local medical officer at the time of independence in 1960 (Cençoglu, 2021). Furthermore, major projects in Francophone colonies, including antimalarial initiatives, are often managed by French firms with minimal local supervision. Any other external companies wishing to operate in many of these territories must often navigate a complicated bureaucratic process to obtain authorization from French-led entities, such as the Centre Pasteur.

But the relatively relaxed "indirect rule" of British colonialism allowed more space for the rule of law and competitive markets, which sometimes fostered local development. However, the British colonization was also extractive, and their eventual departure often left colonies as "orphans" with distorted institutions (Müller-Crepon, 2020). Nevertheless, this model provided a degree of liberty for self-determination and survival. It is within this relative operational freedom

that various antimalarial partners find it easier to engage with independent British colonies. And also, making it easier to establish institutional facilitating factors, such as research centers, within those countries. Thus, the concentration of antimalarial research in Anglophone countries in SSA may stem from the difficulty of penetrating the conservative tentacles of French hegemony in Francophone SSA. Alternatively, it may reflect a tactical preference by international partners to operate within the "vulnerable liberty" of British-descended states. For these reasons, the stagnation of the malaria crisis in SSA rejuvenates the ugly reality of colonial injustice.

Discussion: Reforming Negative Dynamics to Protect or Rescue the Vulnerable

The stagnation of the malaria crisis in SSA, despite decades of intervention efforts, serves as a rejuvenation of colonial injustice. The "non-strategic" distribution of FAMR is not a geographical accident, but a by-product of a postcolonial system that still operates under the shadow of 19th-century administrations. The difficulty of gaining access to countries estranged by the "exploitative tentacles" of the French hegemony likely encourages researchers to turn toward countries with British heritage. Whether this is due to administrative barriers in Francophone states or a strategic choice by donors to exploit the "vulnerable liberty" in Anglophone states, the result is the same: the most burdened populations are often the least supported. To rescue and save these populations, we must acknowledge that health equality cannot be achieved without first assuring the sovereignty of health governance by dismantling the neocolonial barriers that isolate some parts of SSA. But which intervention mechanisms could help us realize this measure to rescue those vulnerable local populations?

1. Contextualization of Antimalarial Initiatives in Sub-Saharan Africa (SSA)

The fight against malaria in SSA reflects the operational prolongation of colonialism. Just as colonial administrative policies were conceived in Europe and executed in SSA, most antimalarial initiatives executed in SSA are still planned "extra-contextual" in the Western environment. Most of those measures often result in execution failure "intra-context" within SSA. Like other forms of health disparity, the heterogeneous malaria intensity across SSA is conditioned by diverse context-sensitive determinants. Consequently, antimalarial intervention processes require a context-sensitive structural organization to avoid perpetuating inequities. While healthcare principles may be universal, their interpretation and application must be culturally and geographically specific. Therefore, antimalaria stakeholders and partners in SSA need to abandon prototypical intervention models in favor of insights gained through contextualization. The process of contextualization bridges the gap between knowledge and context, drawing on the theory of ethical governance in healthcare to bring knowledge to context and context to knowledge (Cortina, García-Marzá, & Conill, 2017).

This pragmatic interdisciplinary framework of applied ethics assembles context-based findings through a sequential questioning and exploration of the issue at hand. It emphasizes the complementary use of autoregulatory and heteroregulatory ethical methods to gather substantive information (Rondeau, 2007). On one hand, contextualization would nuance the analyses of malaria realities and unveil the heterogeneity of its endemicity across different countries in SSA. By doing so, it aligns care and justice with the specific needs of populations, centering social justice as the primary operational factor. This proactive interdisciplinary approach would endow antimalarial processes—from funding and

research to implementation—with the context sensitivity required to assure efficiency. On the other hand, it would demonstrate the sociopolitical critique of colonization wherein territorial boundaries and governing systems were designed in Europe, detached from African realities. Had this contextualization perspective influenced African independence, territorial boundaries might have aligned with historical kingdoms, and the governing systems could have been adapted to the Ubuntu lifestyle and morality. Such a sociopolitical constellation would have significantly enhanced healthcare delivery for local populations, and it could also benefit the fight against malaria.

While literature affirms that "initiatives framed in international health terms often served the political and commercial interests of the dominant nations" (Pinto, Birn, & Upshur, 2013, p. 7), successful malaria eradication in SSA necessitates interdisciplinary methodologies enriched by both context and content. In context, these methodologies need to navigate and harmonize the sociocultural, socioeconomic, and sociopolitical factors that particularly determine malaria vectors in SSA. In terms of content, insights are needed from health anthropology, applied ethics, clinical sciences, and medical philosophy to deconstruct the complex variables surrounding the reality of malaria in SSA. Generally, interdisciplinary approaches are essential for synthesizing knowledge from diverse schools of thought. Particularly, the involvement of social and human scientists is vital in theorizing the rationality of human rights to health and wellness for the vulnerable populations in SSA.

2. Structural Organization and Governance of Antimalarial Initiatives in SSA

Health determinants are traditionally categorized under the broad connotation of "social determinants of health." From a pragmatic interdisciplinary perspective, these determinants require structural

harmonization into a coherent framework. Without this harmonization, they may misinform stakeholders and disadvantage marginalized communities. Given the intensive heterogeneity of malaria prevalence in SSA, this structural harmonization is indispensable to facilitate the equitable distribution of resources, envisaging a reduction in morbidity and mortality.

To this effect, I propose good governance as the structural determinant responsible for the harmonious organization of all social determinants. I refer to this process as ethical governance because it assumes the ethical responsibility of organizing all other determinants to ensure interventional success. Ethical governance would inspire and encourage stakeholders and partners to involve local pharmaceutical scientists and companies in the entire antimalarial process, from research to drug production. By exploiting local talent and knowledge, stakeholders can harmonize context-sensitive determinants according to specific malaria realities of SSA.

Since this insight is currently undervalued in SSA, few foreign-led antimalarial drug candidates have successfully reached the Phase III clinical trials stage: many promising malaria drug projects have been abandoned at the Phase II clinical stage. However, the development of the Mosquirix RTS,S vaccine represents a breakthrough where African scientists spearheaded an innovative candidate. This was the first antimalarial candidate to ever reach the Phase III clinical trials stage in SSA (Aaby et al., 2015; Kakkilaya, 2015). It is reported to perform significantly better than any previous drug attempts, despite not yet at its optimum performance. While more local initiatives could offer hope, the progress of such "adventures" still depends on authorization from the European Medicines Agency (EMA).

Whether the fact of soliciting foreign regulatory measures is a genuine act of care or a means of maintaining African

dependency, it is difficult to gauge. Regardless of the EMA's intentions, there is a concern that factors such as ignorance of contextual realities, professional negligence, or conflicts of interest may overshadow the ethics of care regarding local vulnerability. The context-sensitivity of the ethics of care would suggest that healthcare for the vulnerable must transcend a purely principle-based approach to integrate deeper moral considerations (Goodin, 1986). Whatever the case, I would like to inform healthcare stakeholders and policymakers in SSA to rethink and establish their healthcare laws and regulations in the way that favours their citizens.

Conclusion: The Take-Home Message

Reflecting on the discouraging persistence of malaria (as Plasmodium or as a disease) in SSA, one is left to wonder why it has remained such a stagnant health nuisance. But this research unveils that the remote cross-influence between colonial injustice and contemporary inverse antimalarial intervention patterns tends to complicate the structural organization of its response. During and after colonization, SSA was deprived of the strategic structural determination necessary to ensure robust local subsistence. It is profoundly disturbing that colonialism in SSA—and its subsequent evolution into neocolonialism—took such a denigrating turn with severe consequences for the wellbeing of the local populations. Although the era of "colonial" or "tropical" medicine had transitioned into "global health," the root causes of health inequities in SSA remain tethered to the unfair political and economic dominance. This hegemony creates practical obstacles in regulating the distribution of antimalarial resources and services, often prioritizing external self-interest over the needs of populations in dire distress (WHO, 2018).

The struggle against malaria in SSA is particularly acute in former French colonies, where self-centered systemic bottlenecks

persist despite rampant malaria fatalities. These colonial legacies may explain the dominance of the Centre Pasteur—a French-backed healthcare institution—and its affiliates as healthcare "watchdogs" in various Francophone countries. Such discouraging barriers likely account for the limited number of FAMR activities in these countries. It is plausible that various partner organizations and foundations that might be willing to invest find it difficult to penetrate these secluded neocolonial circles. To a significant extent, this hegemony has isolated many countries, relegating their citizens to a state of profound vulnerability. Ultimately, one must ask: who bears the responsibility for this antimalarial decadence more than sixty years into the postcolonial experience?

As long as the stewardship of colonial legacies remains consolidated through leadership in certain countries in SSA, the citizenry will continue to will always suffer in their slums and surrender to death in misery. As demonstrated above, malaria statistics across Francophone SSA are visibly more severe than those in Anglophone countries. This imbalance sustains the disease's grip in SSA as the encouraging decreases in former British colonies are counter-balanced by discouraging increases in Francophone nations (Table 1). Consequently, SSA remains the global epicenter of malaria.

Nevertheless, a "glass-half-full" perspective acknowledges a positive, although lower-than-average, reduction in malaria calamities in SSA. Yet, the situation remains challenging after decades of multidimensional antimalarial struggle. Notwithstanding the adage that "he who pays the piper dictates the tune," I contend that even if funders

determine investment locations, the effective orientation of antimalarial strategy must be designed within SSA. While limited economic capacity may handicap domestic ambitions, a robust political will among African leaders is an essential, yet often missing, requirement.

This lack of progress may persist as long as colonial "hypnotism" blinds certain leaders into an egocentric servitude—disguising themselves as redeemers while acting as conspirators in the neglect of their compatriots. By measuring their legacies through alignment with external interests rather than the welfare of their people, they abandon citizens whose fates are decided by mosquitoes. Healthcare systems cannot achieve fairness when sociopolitical demagoguery and the embezzlement of the available resources hamper the structural harnessing of health determinants.

If SSA is to challenge its historical classification as the "Dark Continent" and improve its narrative, its leaders must be African in both mind and action, seeking their legacy in the protection of their citizens' basic human rights, of which rights to health and wellbeing are paramount. This research serves as a call to stakeholders and policymakers to remember that the assurance of population health is still a rare priority in SSA in the 21st century. It is a paradox of human understanding that while populations in SSA face extreme health inequalities, many of these nations are simultaneously ranked as both the most corrupt and the poorest in the world. Beyond healthcare alone, the foundations of African independence should have been built upon insights empowered by contextual interest, had the true intention been the wellbeing of the local populations.

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References

- AABY, P., RODRIGUES, A., KOFOED, P. E., & BENN, C. S. (2015). RTS,S/AS01 malaria vaccine and child mortality. *Lancet*, 386(10005), 1735-1736. doi:[https://doi.org/10.1016/S0140-6736\(15\)00693-5](https://doi.org/10.1016/S0140-6736(15)00693-5)
- ARROW, K., PANOSIAN, C., & GELBAND, H. (Eds.). (2004). *A Brief History of Malaria*. Institute of Medicine (US) Committee on the Economics of Antimalarial Drugs – Washington DC: National Academies Press.
- BIRHANE, A. (2020). Algorithmic Colonization of Africa. *SCRIPTed*, 17, 389. doi:<https://doi.org/10.2966/scrip.170220.389>
- BOYCE, R. (1911). The Colonization of Africa. *Journal of the Royal African Society*, 10(40), 392-397. Retrieved from <http://www.jstor.org/stable/714738>
- BRAVEMAN, P., Arkin, E., Orleans, T., Proctor, D., & Plough, A. (2018). What is Health Equity? *Behavioral Science & Policy*, 4(1), 1-14. doi:<https://doi.org/10.1353/bsp.2018.0000>
- CENÇOĞLU, H. (2021). The legacy of French colonialism in Africa. Retrieved from <https://uwidata.com/20956-the-legacy-of-french-colonialism-in-africa/>. Retrieved February 17, 2023., from United World <https://uwidata.com/20956-the-legacy-of-french-colonialism-in-africa/>
- CORTINA, A., García-Marzá, D., & Conill, J. (Eds.). (2017). *Public Reason and Applied Ethics: The Ways of Practical Reason in a Pluralist Society*. London/New York: Routledge-Taylor & Francis.
- GOODIN, R. E. (1986). *Protecting the Vulnerable: A Re-Analysis of Our Social Responsibilities*. Chicago: University of Chicago Press.
- JASSO, G. (2015). Inequality Analysis: Overview. In J. D. Wright (Ed.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 885-893 / doi: <https://doi.org/10.1016/B1978-1010-1008-097086-097088.032199-097087>). Oxford: Elsevier.
- KAKKILAYA, B. S. (2015). *Malaria Vaccines*. Malaria Site. Retrieved from <https://www.malariasite.com/malaria-vaccines/> (Accessed 15/04/2021).
- MÜLLER-CREPON, C. (2020). Continuety or Change? (In)direct Rule in British and French Colonial Africa. *International Organization*, 74, 107-141. doi:<https://doi.org/10.1017/S0020818320000211>
- NOSTEN, F., Richard-Lenoble, D., & Danis, M. (2022). A brief history of malaria. *La Presse Médicale*, 51(3), 104130. doi:<https://doi.org/10.1016/j.lpm.2022.104130>
- ONYANGO, E. O., & KANGMENNAANG, J. (2020). Wellbeing in Place. In A. Kobayashi (Ed.), *International Encyclopedia of Human Geography (Second Edition)* (pp. 265-272). Oxford: Elsevier.
- PHIRI, A. (2022). Migrating narratives: re-inscribing black diaspora cultures. *Cultural Studies*, 1-17. doi:<https://doi.org/10.1080/09502386.2022.2104895>
- PINTO, A. D., BIRN, A.-E., & UPSHUR, R. E. (2013). The context of global health ethics. In A. D. Pinto & R. E. Upshur (Eds.), *An Introduction to Global Health Ethics* (pp. 3-15). New York: Routledge.

RONDEAU, D. (2007). Lieux et contextes de l'autorégulation en éthique. *Ethica*, 16(2), 9-23.

WHO. (2018). Gender, Equity and Human Rights. <https://www.who.int/gender-equity-rights/en/> (Accessed 20/01/2018). Retrieved from <https://www.who.int/gender-equity-rights/en/>

WHO. (2022). World health statistics 2022: monitoring health for the SDGs, sustainable development goals (Licence: CC BY-NC-SA 3.0 IGO.). Retrieved from Geneva:

WHO, & OHCHR. (2008). The Right to Health. Retrieved from <https://www.who.int/gender-equityrights/knowledge/right-to-health-factsheet/en/> (Accessed 02/09/2017). from Office of the High Commissioner for Human Rights, and World Health Organization <https://www.who.int/gender-equityrights/knowledge/right-to-health-factsheet/en/> (Accessed 02/09/2017).