

Willing but unable? Knowledge producers and users' knowledge, attitudes and practices (KAP) in translating research evidence into health policy and practice in Guinea, 2025

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Abstract

Background

Evidence-informed decision-making is increasingly recognised as essential for strengthening health systems. Yet, in low- and middle-income countries, the use of research evidence in policy and practice remains uneven. In Guinea, recurrent epidemics such as Ebola and COVID-19 have exposed systemic weaknesses, highlighting the urgent need for robust knowledge systems. This study explored the knowledge, attitudes, and practices (KAP) of knowledge producers (academics, research fellows and assistants) and users (decision-makers) regarding evidence-informed decision-making for health policy and practice and analysed the main barriers in Guinea.

Methods

A KAP survey using a sequential explanatory mixed-methods design was conducted between June and December 2025. The quantitative survey was completed by 173 health-system stakeholders. The qualitative component comprised 48 interviews with key informants in Conakry. Descriptive statistics and bivariate analysis were performed for quantitative data and thematic analysis for qualitative data.

Results

Findings reveal a paradox: although most knowledge producers and decision-makers report positive attitudes toward collaboration and evidence use, the actual use of research evidence in policy and practice remains limited. Structural barriers include the absence of communication bridges between knowledge producers and decision-makers, limited use of social media, and a weak culture of policy brief writing. Knowledge producers prioritise academic publications for career advancement, while decision-makers face political and financial pressures that limit structured engagement. Knowledge brokers are scarce.

Conclusion

Strengthening evidence-informed decision-making in Guinea requires capacity-building in policy-oriented communication, institutional reforms to align incentives with the production and use of research evidence, structured platforms for sustained dialogue, and resource mobilisation. This study provides novel insights into knowledge systems dynamics in francophone West Africa, offering a foundation for context-sensitive strategies to bridge the research-policy gap.

1. Background

Evidence-informed decision-making is increasingly recognized as essential for strengthening health systems [1]. The World Health Organization repeatedly emphasizes its central importance to achieving the Sustainable Development Goals and universal health coverage [2, 3]. The principle is straightforward – decisions about health policy and practice should be guided by the best available evidence, ensuring that interventions are effective, efficient, and equitable [4]. Yet, despite global consensus on its importance, the use of research in policy remains uneven, particularly in low- and middle-income countries (LMICs) [5]. The gap between knowledge production and its practical application has been described as one of the most persistent challenges in global health governance [6].

In Africa, the need for robust mechanisms to connect evidence with policy is particularly acute [6, 7]. Health systems across the continent face recurrent crises, ranging from infectious disease outbreaks to chronic underfunding and workforce shortages [8, 9]. These challenges underscore the necessity of evidence-informed decision-making to optimize scarce resources and improve population health outcomes. However, barriers such as limited institutional capacity, weak communication channels between researchers and policymakers, and inadequate incentives for evidence use often hinder progress [10, 11]. Studies have shown that while researchers frequently produce valuable findings, these results are not systematically integrated into policy processes, leading to missed opportunities for health system improvement [12].

Knowledge translation (KT) has been widely adopted to describe the synthesis, dissemination, exchange, and application of research evidence [13]. However, it has drawn increasing criticism for implying a linear, unidirectional process – one in which knowledge is produced by researchers and then "translated" for consumption by decision-makers [14]. This metaphor obscures the relational, iterative, and system-dependent nature of evidence use [15]. In practice, the uptake of research into policy is rarely a matter of packaging findings in accessible formats; it depends on sustained relationships, institutional incentives, political will, and the existence of platforms that bring knowledge producers and users into ongoing dialogue. Reflecting this complexity, scholars have increasingly called for approaches that move beyond individual behaviours and technical fixes to address the broader knowledge system – the system-level interventions and infrastructure designed to strengthen capacity for the production and use of knowledge in specific citizen, policy and practitioner spaces [16].

Frameworks such as integrated KT represent an important advance beyond linear models, emphasizing collaboration between researchers and policymakers throughout the research and policy cycles, from problem identification to dissemination of research findings, from agenda-setting to policy evaluation. This approach has been shown to enhance the relevance and uptake of research evidence in several African countries [12]. Yet even integrated models depend on the broader knowledge system with enabling conditions such as the institutional architecture, incentive structures, and governance norms that determine whether research-policy collaboration is possible, valued, and sustained [17]. Where these enabling conditions are absent, even the most collaborative intentions may fail to produce meaningful evidence uptake [17–19].

In Guinea, the knowledge system through which research is communicated, interpreted, and incorporated into health policy and practice remains insufficiently understood. Limited empirical evidence is available on how knowledge producers and decision-makers perceive and engage in the use of evidence, or on the institutional and contextual factors that facilitate or hinder collaboration between them. Knowledge brokers – actors who mediate between research and policy – may play an important role in fostering communication, dialogue, and trust between these groups. However, the availability and role of such actors, as well as the factors influencing sustained interaction between knowledge producers and decision-makers, have not been systematically assessed in Guinea. These questions are particularly important in the context of the country's health system, where recurrent epidemics, including Ebola and COVID-19, have exposed deep structural weaknesses and underscored the urgent need for evidence-informed responses [20].

The only available report on KT in Guinea indicates that medical research may struggle to shape policy because of constrained infrastructure, limited resources, and weak institutional linkages [21]. However, further empirical research is needed to examine how these and other contextual factors influence interactions between knowledge producers and decision-makers. A deeper understanding of how these actors perceive and engage in evidence use – and of the contextual factors that shape their engagement – remains lacking. To address this gap, the present study aimed to explore the knowledge, attitudes, and practices (KAP) of knowledge producers and decision-makers regarding the use of research evidence for health policy and practice, and to analyze the related barriers in the Guinean context.

Ultimately, this study aims to inform strategies for knowledge systems strengthening, fostering stronger synergies between research, policy and practice, and ensuring that evidence not only informs academic discourse but also drives tangible improvements in health outcomes in Guinea.

2. Methods

2.1. Study design and general setting

We conducted a knowledge, attitudes, and practices (KAP) survey designed as an explanatory sequential mixed-methods study (quantitative→qualitative). The choice of an explanatory sequential mixed-methods design is justified by the very nature of the study topic and the research context. First, the quantitative phase, consisting of a questionnaire survey administered to a broader sample of knowledge producers, knowledge brokers and decision-makers, was used to measure KAP related to KT – the term adopted in the survey instrument as the one most widely recognised by Guinean stakeholders (pretest of the survey questionnaire) – and to identify the main barriers reported at the national level. However, this approach alone cannot capture the complexity of the underlying mechanisms shaping evidence use or explain the discrepancies observed between discourse and actual practices. Therefore, the qualitative phase, comprising semi-structured interviews with key informants selected on the basis of the quantitative findings, was conducted to deepen understanding of the perceptions, courses of action, and contextual constraints (infrastructural, institutional, and relational) that shape evidence-informed

decision-making in Guinea. This sequential design thus offers a dual advantage: it provides an overall and generalizable view of KAP while enabling an in-depth exploration of the explanatory factors, in a context where the literature on evidence uptake in health policy remains very limited. It also follows a methodological triangulation approach, thereby strengthening the validity and richness of the findings. The study was conducted over a seven-month period (June – December 2025) in the Republic of Guinea, a French-speaking West African country with an estimated population of 17,521,167 in 2025 and an area of 245,857 km² [22]. It is a baseline assessment of knowledge systems in Guinea, conducted under the 'Partnership for Stronger Knowledge Systems in Guinea' (PASCOR Guinée) project [23]. PASCOR is an Alliance-funded initiative [24]. The paper was written in accordance with the Good Reporting of A Mixed Methods Study (GRAMMS) guidelines [25].

Throughout this manuscript, KT is used when referring to the survey instrument, participants' own vocabulary, and the established literature. However, the study was conceptually designed and is analytically framed within a broader knowledge systems perspective [16]. This dual usage reflects a pragmatic choice: KT remains the term most widely recognised by Guinean stakeholders and was therefore retained in the survey instrument, while the study's analytical contribution is to situate individual and relational findings within the structural conditions of Guinea's knowledge system.

2.2. Quantitative strand

Specific setting

The quantitative component, conducted using an electronic questionnaire, targeted all levels of the health system (central, regional, and district) across all eight health regions of the country.

Study population

The study participants included academics, research fellows, research assistants, knowledge brokers and decision-makers from research, academic, or policy institutions. In this study, knowledge brokers were defined as individuals or organizations that facilitate the link between research and decision-making. They may include technical advisers, research officers, liaison officers, or institutional units (such as knowledge management units, planning departments, and documentation centers) that translate, disseminate, and communicate evidence to policymakers and practitioners. They therefore differ from academics, researchers and research assistants (hereafter, knowledge producers) and decision-makers (end users) through their intermediary or interface role [26, 27].

Selection criteria

Within academic and research institutions, we targeted: (1) research assistants, research fellows, lecturers, associate professors, research directors, and full professors who had been engaged in research for at least two full years; and (2) researchers without an academic rank who had worked at the selected institutions for at least two full years. Within policy institutions, we targeted selected health-sector stakeholders from the Ministry of Health and Public Hygiene at the central, regional, and district

levels. Individuals whose telephone numbers and/or email addresses were not included in the lists obtained from the secretariats of the respective institutions were excluded from the study.

Sampling

We used a non-probability, exhaustive sampling approach among participants who met the inclusion criteria. This approach was chosen because no comprehensive sampling frame was available and because the target population in Guinea was finite and geographically dispersed. It enabled us to invite all eligible participants to achieve the required minimum sample size and ensure maximum coverage of the profiles of stakeholders involved in evidence-informed decision-making.

Sample size

The sample size was determined using the Schwartz formula: $n = (z^2 \alpha \times p(1 - p)) / e^2$.

The calculation was based on estimating a parameter (proportion or prevalence) in a population. Because this study addressed a topic for which we found no previous study to provide a reference prevalence, p , we used an estimated prevalence of 50%.

Here, n represents the minimum sample size; Z is the critical value for $1 - \alpha/2$ ($Z = 1.96$); p is the estimated prevalence of stakeholders involved in translating research findings into health policies and practices; and e is the estimated margin of error, set at 8%. Applying the formula yielded a minimum sample size of 150 participants. After adding 10% to account for nonrespondents, the minimum sample size for the study was 165 participants.

Variables

Quantitative data were collected on sociodemographic variables (age, sex, profession, position, educational level, number of years of experience in the current position, and affiliated institution), as well as participants' knowledge, attitudes, and practices related to KT (the term adopted in the survey instrument; see Terminology note above).

Quantitative Data Collection

Six data collectors were trained in questionnaire administration. Quantitative data collection lasted one month, from August 1 to 30, and preceded the qualitative data collection. Data were collected in French using an electronic questionnaire developed in KoboToolbox. The questionnaire was pretested online and in-person and participants' suggestions (e.g., to use the knowledge translation terminology) were integrated. The final questionnaire was distributed via email addresses, professional WhatsApp groups, and social media platforms (Facebook and LinkedIn). In-person questionnaire administration was organized in September 2025 to achieve the minimum required sample size.

Data Analysis

Quantitative data were analyzed using descriptive statistics in SPSS, version 30. Pearson's chi-square and Fisher's exact tests were used to examine associations between sociodemographic variables, participants' knowledge, and their attitudes and practices regarding the use of research findings in policies and practices.

2.3. Qualitative strand

Specific setting

The qualitative component was conducted in the Special Zone of Conakry (the country's capital), which hosts the majority of the organizations where the key informants work, notably universities with faculties of health sciences and techniques, research institutes, the relevant ministries (Ministry of Health and Public Hygiene, and Ministry of Higher Education and Scientific Research), national hospital facilities, non-governmental organizations, and international institutions.

Participants and selection process

Participants came from five professional categories – academics (A), research fellows (RF), research assistants (RA), knowledge brokers (KB), and decision-makers (D). Purposive selection [28] was done, taking into account their role in the production, dissemination, and use of knowledge relevant to health decision-making in Guinea. It followed the maximum variation strategy [29], including participants from a range of institutions (ministries, universities, hospitals, national programmes, international organizations), in order to reflect the plurality of actors involved in the production and use of research evidence.

The number of participants was determined by the principle of data saturation (no new information and no further relevance). In total, 48 key informants were interviewed.

Study themes

This component aimed to provide a qualitative explanation of the following elements: the low use of social media, the low frequency with which knowledge producers write policy briefs, and the barriers related to the use of research findings for policy development or political decision-making (such as the lack of communication/collaboration between researchers and policymakers, political resistance, and budgetary/administrative constraints). These elements emerged as the main findings of the quantitative part of the study.

Data collection

Six interviewers were trained in qualitative data collection with a focus on key informant interviews. The key informant interviews were conducted in French over a two-month period (from 1 September to 30 October 2025), following the collection and analysis of the quantitative data. They were carried out using an individual interview guide, face-to-face, with participants who had indicated their willingness to take part in individual interviews when completing the online questionnaire and during the in-person

administration of the questionnaire aimed at reaching the minimum sample size for the quantitative component. Three teams of two interviewers conducted the interviews under the supervision of the principal investigator (TMM).

Interview appointments were made by telephone. Some key informants did not keep the appointments made, even those rescheduled to a later date of their own choosing. Interviews were conducted in various locations at the convenience of the key informants, notably in participants' offices, at their homes (on the terrace), in meeting rooms at their workplaces, and in restaurants. Some interviews that had begun were not completed because of the unavailability of the respondents (partial interviews).

Data analysis

The interviews, including the partial interviews, were transcribed in full and then analysed using NVivo 14 software. Coding was carried out inductively, in accordance with the principles of thematic analysis [30], and consisted of identifying units of meaning, grouping them into categories, and organizing them into major themes reflecting the information provided by respondents. Coding consistency was ensured through cross-review by several researchers involved in the study (TMM, PAN, MS, MJN, AK, TL, JGYS).

An integrated thematic analysis was carried out to explain certain quantitative results. The viewpoints of knowledge producers were compared with those of decision-makers. This comparison made it possible to highlight the convergences and divergences in perspectives between knowledge producers and decision-makers. Since only one knowledge broker took part in the in-depth individual interviews, his account was not included in the comparison of viewpoints. However, his remarks were drawn upon illustratively in the presentation of the results below, in order to highlight the mediating role that these actors can play in linking research and policy.

2.4. Ethical considerations

The research protocol was approved by the National Ethics Committee for Health Research of Guinea (No.: 124/CNERS/25). Informed written consent was obtained from all key informants (qualitative component). Confidentiality and anonymity were guaranteed through the coding of data and the removal of identifying information.

2.5. Researcher positionality

The researchers involved in this study are themselves actors within the Guinean health system. This proximity facilitated access to participants and enriched the understanding of the dynamics studied, but it could also introduce interpretation bias. To address this, particularly for the qualitative component, a reflexive stance was adopted, combined with cross-validation mechanisms (review and coding by several team members), in order to maintain analytical distance and strengthen the credibility of the findings.

3. Results

We structured the results into six subsections: 1) the sociodemographic characteristics of participants (knowledge producers, brokers and users), 2) the knowledge of participants regarding the translation of research evidence, 3) the attitudes of knowledge producers and decision-makers regarding the translation of research evidence, 4) the practices of knowledge producers and decision-makers regarding the translation of research evidence, 5) the results of the bivariate analysis, and 6) the barriers to the use of research evidence for policy formulation or decision-making. As noted in the Methods section, the survey instrument used KT, which was the terminology most familiar to Guinean stakeholders; the results presented below report participants' responses using that framing while the study's analytical lens remains that of the broader knowledge system.

3.1. Sociodemographic characteristics of participants (knowledge producers, brokers and users)

In total, 173 stakeholders took part in the study. The median age was 40 years (IQR: 35–46). The most represented age group was 35–44 years (45.1%), followed by 20–34 years and 45–54 years (22% each). The majority of participants were male (79.2%). In professional terms, physicians made up the large majority (74.0%), followed by pharmacists (8.7%) and other health or related professions. The level of education was high, with a substantial proportion holding a Master's degree (40.5%), although only a minority held a PhD (9.2%) or a post-doctorate (7.5%). Residence was heavily concentrated in Conakry (92.5%). The main roles were diverse: academics (34.1%), research assistants (27.2%), and decision-makers (20.8%), while knowledge brokers remained marginal (1.2%). Finally, the majority of participants (58.4%) had less than five years of experience in their current position. The detailed sociodemographic characteristics of the participants are presented in **Supplementary file 1**.

3.2. Knowledge of participants regarding the translation of research evidence into health policy and practice

The results show that 69.9% of participants report being familiar with the concept of translating research evidence into policies and practices, but only 22.5% state that they have a "very good" command of it. Fewer than half (33.5%) of respondents were aware of the correct definition of the concept (*"a dynamic and iterative process that includes the synthesis, dissemination, exchange, and ethically sound application of knowledge, through sustainable partnerships, in order to improve the health of citizens, provide more effective health services and products, and strengthen the health system"*) [13], while 20.8% had insufficient knowledge of it (incomplete definition) and 15.6% did not know its definition (incorrect definition).

The best-known and most frequently cited channels for disseminating research findings were scientific publications (93%), workshops/seminars (80.9%), and technical reports (64.2%). The least mentioned channels were social media (49.7%), the media (45.7%), and policy briefs (40.5%).

Regarding initiatives, programmes, or institutions that promote the translation of research evidence, 45.7% of participants identified some; these were mainly the programmes to combat malaria (19.0%) and HIV/AIDS/Hepatitis (15.2%), as well as the Africa Centre of Excellence for the Prevention and Control of Communicable Diseases (10.1%) and the World Health Organization (8.9%).

Finally, the majority of participants (59.5%) were familiar with the main stages of translating research evidence into policy and practice, with frequent mention of the synthesis of findings (87.4%), effective communication (83.5%), monitoring and evaluation (72.8%), identification of practical implications (70.9%), and implementation (67%). Policy dialogue (32%) and media communication (television or radio) (26.2%) emerged as less well-known stages. The detailed results are depicted in **Supplementary file 2**.

1. Attitudes of knowledge producers and decision-makers regarding the translation of research evidence into health policy and practice

3.3.1. Knowledge Producers' Attitudes

Knowledge producers' attitudes reflect a willingness to collaborate: 95.4% believe that the role of knowledge producers is to work with decision-makers to facilitate the application of findings. However, the majority of knowledge producers (69.7%) remain sceptical about the integration of research evidence into policy decision-making. A very large majority (93.6%) express a desire to be more involved in research translation initiatives. The detailed knowledge producers' attitudes are presented in **Supplementary file 3**.

3.3.2. Decision-makers' attitudes

Decision-makers likewise demonstrate a willingness to collaborate: 94.4% believe that the role of decision-makers is to work with knowledge producers to facilitate the application of findings. The majority of decision-makers (66.7%) hold a favourable attitude towards the integration of research findings into policy decision-making. Moreover, all decision-makers (100%) wish to be more involved in research translation initiatives, revealing considerable potential for strengthening synergies between research and policy. The detailed decision-makers' attitudes are presented in **Supplementary file 3**.

1. Practices of knowledge producers and decision-makers regarding the translation of research evidence into health policy and practice

3.4.1. Knowledge producers' practices

Actual practices appear limited among knowledge producers. A substantial proportion of knowledge producers (22.5%) have never contacted decision-makers to identify their research needs, and 27.2% do so rarely. The main reason is the absence of contact and of a communication bridge between knowledge producers and decision-makers, which makes it difficult, if not impossible, to approach decision-makers in order to identify their needs. One knowledge producer stated: *"In my opinion, the main barrier there is*

that there is no contact between these two parties. A collaborative link must first be established between decision-makers and knowledge producers. As long as that link does not exist, I don't think it can work." (P4_A_52yrs_male). The mechanisms used by some knowledge producers to gather decision-makers' research needs are mainly official email (46.2%) and exchange platforms (e.g. communities of practice, round tables, etc.) (40%), reflecting formal but infrequent interaction. Scientific output is heterogeneous: while the median is six publications, 14.7% have never published, whereas 20% have produced more than 30 articles. With regard to translation activities, 47.7% have never taken part in them, but 25.7% do so very often. The preferred formats and channels for making research findings accessible to policymakers and practitioners are PowerPoint presentations (75.2%) and dissemination workshops (50.5%), while social media (29.4%), policy briefs (13.8%) and innovative channels such as infographics (11%), short videos (11%) and podcasts (9.2%) remain less frequently or rarely used. The detailed knowledge producers' practices are presented in **Supplementary file 4**.

3.4.1.1. Low use of social media by knowledge producers

Regarding the low use of social media such as LinkedIn and Facebook as channels for communicating research findings by knowledge producers, participants in the key-informant interviews revealed several reasons:

Distrust and rejection of social media

several participants consider that social media such as Facebook and LinkedIn are not suited to disseminating scientific findings, but are instead seen as spaces of distraction, unscientific, unreliable, and even dangerous to knowledge producers' credibility.

"I'm not a fan of Facebook because it's all nonsense in there." (P19_A_63yrs_male)

"In my view, social media are not made for communicating research findings [...] Facebook is just a social network, and social networks are not scientific." (P14_A_59yrs_male)

Preference for scientific journals and institutional channels

participants emphasise the legitimacy of specialised journals, reflecting a traditional academic culture in which recognition comes through scholarly journals, not through social media.

"I think that [...] the real target in research is journals. That is why, within the Guinean Association of Surgery, we set up a national scientific journal." (P14_A_59yrs_male)

"I am convinced that it is not social media that will add value to research findings [...] no, it has to be done in scientific journals..." (P13_A_75yrs_male)

Lack of skills or time

some knowledge producers acknowledge that they do not know how to use social media to disseminate their findings. Others admit that they do not have enough time to do so.

"Many of us also do not know how to disseminate these findings through social media."

(P11_A_50yrs_male)

"Whenever I find the data and I have free time, I write, I post. [...] today you can't get rid of social media... but it takes time." (P12_A_39yrs_male)

"First, it's lack of awareness and ignorance [...], because it's an innovation [...]. Many are not yet informed about it." (P24_RA_40yrs_male)

Fear of misuse or theft of findings

several knowledge producers mention the fear that findings published on social media may be misappropriated or stolen, reflecting a perceived insecurity on social media.

"On social media, one shall hope that it doesn't fall into the hands of malicious people who might use those findings in another way. I think that is also what stops some knowledge producers from publishing findings on social media. Because [...] people sometimes misuse them." (P6_RA_40yrs_female)

Selective and differentiated use of social media

some distinguish between "serious" and "non-serious" networks.

"I [...] work in geo-epidemiology and I publish on LinkedIn. When I produce maps of Côte d'Ivoire or of real cases, [or] I measure rainfall, precipitation, the future of malaria, I produce them and publish them. [...] but Facebook, no, I don't publish on Facebook. [...] given everything that circulates on Facebook, there can be no serious readers there, but on LinkedIn [...] there are even scientists." (P1_A_38yrs_male)

Lack of awareness of the visibility offered by social media

a few knowledge producers acknowledge that social media could give greater visibility to research findings.

"Most knowledge producers think social media are not for research findings. It is only now, especially on LinkedIn, that findings are being shared. But on Facebook, [...] they will tell you 'Facebook is for photos'. Perhaps it is a lack of knowledge that Facebook, Twitter and LinkedIn can serve to showcase our research, give it greater visibility and also allow us to reach a wider audience." (P22_RA_38yrs_female)

3.4.1.2. Low production of policy briefs by knowledge producers

With regard to the low level of policy brief writing (40.5%) by knowledge producers as a means of translating their research findings, the qualitative analysis highlights several explanatory factors,

grouped into five main themes:

Material and financial constraints

a first obstacle lies in the lack of the financial and technical means required to translate research findings into policy briefs. Knowledge producers point out that some studies remain "on the table" for lack of resources to conduct them and translate them into formats suited to policymakers.

"I have a study on the table that has still not started; it concerns the prevention of healthcare-associated infections. It takes considerable means to clarify the bacteriological profile, to take samples and transport them to the laboratory. There you go, that's a concrete example: we have no means." (P11_A_50yrs_male)

A weak culture of research communication

the culture of research communication remains limited, and knowledge producers prioritise academic publication for career advancement rather than dissemination to decision-makers.

"The reasons include the weak culture of research communication at national level, the lack of training models for these knowledge producers, and the belief that scientific articles matter above all for reaching higher grades and for their careers. They do not think about policy decisions; what interests them is publishing just to move up in grade." (P28_A_39yrs_female)

Lack of training and specific skills

insufficient training and limited experience with policy briefs constitute a major obstacle. Knowledge producers report difficulties in adapting their messages so as to appeal to decision-makers' sensibilities.

"A knowledge producer may be good at their research, but how do they turn their findings into health policy, so as to make the politicians swallow the pill? If they don't know [...] how to make their findings appeal to politicians' sensibilities, it becomes very difficult." (P16_RA_35yrs_male)

"Most academics do not know politics... It is rare for knowledge producers to be taught how to write a policy brief, how to disseminate a policy brief and the whole process that goes with it. If they don't know how to do that, it becomes a limiting factor." (P17_A_45yrs_male)

Institutional and cultural obstacles

the lack of institutional encouragement and the negative perception of policy brief writing also act as barriers. Some knowledge producers feel that this approach is little valued, or even viewed with suspicion. Moreover, the contract-based logic of projects limits the possibility of ensuring continuity, let alone sustaining the findings.

"There is no encouragement, and when you want to present these findings by crossing the academic boundary, you are told: 'you want to show off'. [...] the very fact of wanting to turn your findings into health

policy is perceived as a desire to put yourself forward [i.e. to be seen]." (P15_A_49yrs_female)

"When my contract is over, well, I stop there. I produce the findings, which I give to the commissioning parties, I hand the findings over to them and that's where it ends. There is no continuity, in fact. It does not sustain what I have done up to then." (P6_RA_40yrs_female)

Individual rationales and motivations

finally, individual motivations steer knowledge producers towards conventional scientific output, which is more widely recognised in academic careers, to the detriment of formats that are useful to decision-makers.

"[Knowledge producers] limit themselves to publishing in order to meet academic criteria, without seeking to turn their findings into tools for [policy] decision-makers." (P17_A_45yrs_male)

"What needs to be done is to organise regular training workshops on policy brief writing for these knowledge producers, to make them understand that research consists in developing knowledge and correcting problems. It is not only about publishing to move up in grade, but about publishing to contribute to improving the health system and policies." (P28_A_39yrs_female)

3.4.1.3. Failure to adapt recommendations for decision-makers

A high proportion (80.7%) of knowledge producers do not adapt their recommendations to make them more understandable and specific for decision-makers. This is reflected in the use of overly academic and technical language, as one participant points out: *"Often the findings or the recommendations are not adapted, or they are incomprehensible, or they are couched in language that decision-makers cannot understand, so this risks biasing their adoption..."* (P5_RA_32yrs_male). In addition, the mismatch between policy priorities and research topics makes recommendations of little relevance to decision-makers, thereby discouraging knowledge producers from adapting them. As one participant explained:

"Sometimes there is also a problem of relevance. That is to say, the topics that knowledge producers work on are not always the topics that concern decision-makers at that particular moment. So even if you adapt your recommendations, if the subject is not on the agenda, it will not be taken into account."

(P17_A_45yrs_male)

3.4.2. Decision-makers' practices

Decision-makers appear relatively more proactive than knowledge producers in communicating their needs: 38.9% do so regularly and 30.6% sometimes. The mechanisms used are similar to those of knowledge producers (official email, exchange platforms, telephone calls). The majority (83.3%) have already taken part in translation activities, mainly seminars (23.3%) and the writing of policy briefs (20%). However, the diversity of activities remains limited, with low involvement in dialogues with academics

and knowledge producers (10%) and in media communication (6.7%). The detailed decision-makers' practices are presented in **Supplementary file 5**.

3.5. Results of the bivariate analysis

The bivariate analysis focused on attitudes and practices conducive to the translation of research evidence.

The attitudes conducive to the translation of research evidence are widely shared among participants, but that they vary according to their profiles (**Supplementary file 6**). Pearson's Chi-square and Fisher's exact tests confirm statistically significant associations between:

- Academic level and the perception of the influence of research on policies ($p = 0.044$) and the willingness to become involved in research translation activities ($p = 0.008$).
- Knowledge of the concept of "knowledge translation" and the way in which the role of knowledge producers with regard to the translation of research evidence is expressed ($p = 0.021$).
- Knowledge of the definition of "knowledge translation" and the willingness to become involved in knowledge translation activities ($p = 0.013$).
- Knowledge of national initiatives, institutes or programmes that encourage the use of research evidence and the perception of the influence of research on policies ($p < 0.001$) and the willingness to become involved in knowledge translation activities ($p = 0.032$).

The practices conducive to the translation of research evidence do exist among knowledge producers, but that they vary according to their profiles (**Supplementary file 7**). Pearson's Chi-square and Fisher's exact tests confirm statistically significant associations between:

- Academic level and the frequency of exchanges with decision-makers ($p = 0.007$).
- The number of years of experience in the position and the formulation of understandable and specific recommendations for decision-makers ($p = 0.005$).
- Knowledge of the concept of "knowledge translation" and participation in knowledge translation activities ($p = 0.022$) and the frequency of exchanges (the level of collaboration) with decision-makers ($p = 0.006$).
- Knowledge of the definition of "knowledge translation" and the frequency of exchanges with decision-makers ($p = 0.003$).
- Knowledge of national initiatives, institutes or programmes that encourage the use of research evidence and the frequency of contacts made to gather decision-makers' research priorities ($p = 0.035$), participation in knowledge translation activities ($p = 0.022$) and the adaptation of findings/recommendations for decision-makers ($p = 0.012$).
- Knowledge of the main stages of knowledge translation and participation in knowledge translation activities ($p < 0.001$), the frequency of exchanges (the level of collaboration) with decision-makers ($p = 0.033$) and the adaptation of findings/recommendations for decision-makers ($p = 0.004$).

Likewise, the practices conducive to the translation of research evidence do exist among decision-makers, but that they vary according to their profiles (**Supplementary file 8**). Pearson's Chi-square and Fisher's exact tests confirm statistically significant associations:

- Between knowledge of the concept of "knowledge translation" and participation in knowledge activities ($p = 0.032$).
- Between knowledge of national initiatives, institutes or programmes that encourage the use of research findings and the frequency with which research priorities are communicated to knowledge producers ($p = 0.040$) and participation in knowledge translation activities ($p = 0.014$).

3.6. Barriers to the use of research evidence in decision-making

Figure 1 presents the main obstacles to the use of research evidence in decision-making: the lack of communication/collaboration between knowledge producers and decision-makers (84.4%), resistance on the part of decision-makers (56.1%) and budgetary/administrative constraints (54.9%). These results highlight structural and political barriers that hinder the use of scientific evidence, and they are explained in turn by the qualitative analysis that follows:

3.6.1. Lack of communication/collaboration between knowledge producers and decision-makers (84.4%)

Several interrelated factors explain the lack of communication and collaboration between knowledge producers and decision-makers. In order of importance and causal relationship, these are: (1) lack of funding and institutional recognition, (2) absence of formal platforms for dialogue, (3) non-involvement of decision-makers from the design stage of the research, (4) problems of access to and availability of decision-makers, (5) the gap between scientific language and policy language, and (6) mutual mistrust between decision-makers and knowledge producers. These barriers help to limit the impact of research on public policies and to reduce its potential for social transformation.

Lack of funding and institutional recognition of research

knowledge producers often fund their own work, without support from decision-makers. In such cases, findings are neither valorised nor disseminated on a large scale.

"There is no funding for research projects. Knowledge producers fund their own research and decision-makers show a complete lack of interest." (P11_A_50yrs_male)

"We make a great deal of effort to produce things, but effective communication causes enormous problems... Decision-makers do not have the courtesy to make available [to knowledge producers] what is needed to translate the findings." (P12_A_39yrs_male)

Absence of platforms and formal frameworks for dialogue

knowledge producers and decision-makers have no institutionalised spaces in which to meet and exchange. Research findings remain confined to academic journals or university vivas, with no relay towards policy bodies. Several knowledge producers stress

"There is no platform where they are supposed to meet... I have submitted memos, but I have never been called." (P13_A_75yrs_male)

"Our students' research work ends up in the library and is never addressed to the political authorities." (P14_A_59yrs_male)

"The absence of a platform and of funding remains a central problem... If there is no communication platform between knowledge producers and politicians, it will be difficult to use the data produced." (P28_A_39yrs_female)

Lack of involvement of decision-makers from the research design stage: studies are often designed by knowledge producers alone, without consultation with decision-makers. The latter, invited at the end of the process, do not take ownership of the findings.

"The main barrier is first of all that there is no co-design at the outset... When [decision-makers] are not involved from the start, the findings are left to gather dust." (P24_RA_40yrs_male)

Problems of access to and availability of decision-makers

knowledge producers struggle to identify the right interlocutors and to obtain hearings. Decision-makers are often difficult to identify, hard to reach, caught up in overloaded agendas, and sometimes represented by intermediaries with no decision-making power.

"For example, in our ministerial department, you cannot just go and knock on the Secretary-General's door like that. It's complicated." (P21_D_50yrs_male)

"If decision-makers are not involved from the very beginning of the study, you can hardly call on them to present the findings... Sometimes, even when they are invited, it is interns who come and they cannot make decisions." (P22_RA_38yrs_female)

"With busy schedules, there are problems in arranging appointments. But if the decision-maker has an interest in really listening to you — that is, if you have already prioritised and defined the problem together — they themselves will be waiting for the findings of [your research] in order to take a decision. I know they will not refuse to see you." (P37_D_38yrs_male)

Gap between scientific language and policy language

decision-makers struggle to understand findings formulated in overly technical language, while knowledge producers do not sufficiently translate their findings into accessible formats.

"There are barriers of scientific language, sometimes used by knowledge producers, that decision-makers are unable to unpack." (P28_A_39yrs_female)

"If you give me information that I have not been able to understand, I cannot use it... If this communication is not adapted, it risks biasing the final result." (P5_RA_32yrs_male)

Mutual mistrust between decision-makers and knowledge producers

some decision-makers sometimes perceive knowledge producers as critics or competitors, which fuels mistrust and limits collaboration. Likewise, the absence of political will and of shared leadership blocks collaboration.

"Research in Guinea is clan-based and ethnicised... Those who make public policy believe that those at the university are coming to take them apart piece by piece... This hampers collaboration." (P1_A_38yrs_male)

"There is a mismatch between policy priorities and research topics... There is also a lack of trust, or the perception that knowledge producers are looking over their shoulder." (P28_A_39yrs_female)

"I will focus mainly on the barrier of hatred of the other, on the ethnic barrier, and on the lack of communication between decision-makers and knowledge producers." (P30_A_45yrs_female)

"It is a problem of leadership and of ego... If each side says that it is the boss and does not need the other, that will create problems." (P17_A_45yrs_male)

3.6.2. Resistance on the part of decision-makers (56.1%)

The qualitative results show that decision-makers' resistance to research findings is explained by factors identified both by knowledge producers and by decision-makers themselves. While some observations converge, others reflect divergences in perception and in the attribution of responsibility.

3.6.2.1. Convergences

The views of knowledge producers and decision-makers converged on four main issues, presented below in order of importance in the Guinean context: (1) insufficient research funding, (2) a mismatch between research and policy priorities, (3) limited interest in research findings, and (4) knowledge producers' fear of exposure, alongside mutual mistrust.

Lack of funding

Knowledge producers described the absence of follow-up and implementation mechanisms as a major obstacle to translating research recommendations into action:

"We produce recommendations, but without follow-up mechanisms they remain theoretical and are not translated into concrete action." (P11_A_50yrs_male)

Similarly, decision-makers reported that the lack of financial support and feedback discouraged research teams from pursuing their work:

"In the health districts, we send two protocols a year [to the Ministry], but we never get any feedback. This absence of funding is a major obstacle that discourages the teams." (P31_D_65yrs_male)

Mismatch between research and policy priorities

Participants also highlighted the disconnect between the subjects addressed by research and the priorities currently pursued by policymakers. Knowledge producers explained that publicly disseminating findings that expose weaknesses in the health system could be perceived as threatening by decision-makers:

"Wanting to put all of this into the public arena can lead our decision-makers to lynch us. [...] Because in a way, it exposes them. Do they go into dental practices to see what people are like, how the services are equipped and so on? No. If I put that online, I will be lynched." (P30_A_45yrs_female)

From the perspective of decision-makers, even methodologically sound research may remain unused when it does not correspond to current political or programme priorities:

"Even if the study is valid, if it is not among my current priorities, I am not going to use it. Policy priorities are different from scientific ones. There are programmes with solid studies behind them, but for the time being there is no funding. The priorities lie elsewhere, and that explains why certain research is not taken into account." (P3_D_67yrs_male)

Lack of interest in research findings

Knowledge producers perceived limited engagement from authorities, even when efforts were made to disseminate findings through conferences, publications, and the media:

"It is not that we fail to disseminate; it is that the authorities show little interest. Even when we organise conferences or propose publications in the media, it is difficult to secure their attention." (P12_A_39yrs_male)

Decision-makers similarly acknowledged that research findings were often presented but not subsequently used to inform decisions or programmes:

"Research findings lie sleeping in drawers. Workshops are organised, reports are presented, but afterwards the documents are never used. Many projects remain in abeyance for want of decisions and funding. Everyone is aware of this situation, but it persists in the absence of any real will to valorise the findings." (P44_D_51yrs_male)

Knowledge producers' fear of exposure and mutual mistrust

Finally, participants described a climate of mistrust and political sensitivity that could discourage knowledge producers from disseminating findings openly. One knowledge producer explained that research exposing institutional weaknesses might be interpreted as a personal criticism of those responsible:

"Wanting to put all of this into the public arena can lead our decision-makers to lynch us. If I publish on a topic that denounces a great many negative things, the head of the national programme may think that he is the one I am targeting. Because in a way, it exposes him. [...] And yet I do it for everyone's good. But in this country, if you put that online, you risk your life. It is complicated, because the spirit in which you [work] is not seen [in the same way] by others." (P30_A_45yrs_female)

Decision-makers also referred to mistrust and the potential political consequences of research findings. They explained that recommendations perceived as exposing institutional weaknesses or failing to account for political and professional sensitivities could encounter resistance:

"There is often mistrust. Some recommendations are awkward, which means that decision-makers do not grasp their importance. If they expose or compromise people, there will be resistance. When they fail to take account of political sensitivity or of the socio-professional context, they are not accepted. Knowledge producers bring out our weaknesses, and instead of remedying them, some prefer to block them so as not to be seen in a bad light." (P25_D_45yrs_male)

3.6.2.2. Divergences

The divergences between knowledge producers and decision-makers in Guinea concerned three main issues: (1) the purpose of scientific research, representing a fundamental divergence; (2) responsibility for decision-makers' resistance to using research findings, reflecting a conflictual divergence; and (3) communication and mutual understanding, constituting an operational divergence. These themes are presented below in order of importance and causal relationship.

The purpose of scientific research

Knowledge producers viewed scientific research primarily as a means of generating concrete improvements in the health system and in people's lives. One participant emphasized that research findings should ultimately be translated into action:

"The knowledge producer would very much like their findings to be translated into concrete action on the ground. [...] The main objective remains to change the health system and improve people's lives." (P22_RF_38yrs_female)

By contrast, decision-makers described the use of research findings as being influenced by political interests and the anticipated benefits for politicians, rather than by scientific evidence alone:

“Anything that can work to the politician's advantage will be supported. But whatever is not to his advantage will not be implemented. It is a game of interests, a matter of popularity ratings. Decisions are made according to what they yield politically, not necessarily according to scientific evidence.”
(P34_D_65yrs_male)

Attribution of responsibility for decision-makers' resistance

The participants also differed in their explanations of why research recommendations are not taken up. Knowledge producers attributed this resistance mainly to the limited political influence of researchers and the authorities' lack of interest or political commitment:

“Recommendations never end up being answered because the person carrying out the research does not hold a political or institutional position that gives them the right to influence those findings. The authorities show little interest and demonstrate no political will.” (P12_A_39yrs_male)

Decision-makers, however, placed greater emphasis on the limited involvement of decision-makers throughout the research process. From their perspective, failing to engage decision-makers from the outset can generate resistance when the findings are eventually presented:

“The knowledge producer must involve decision-makers in every compartment of the research. But often we are not informed, and we discover the findings only at the dissemination meeting. If we are not involved from the outset, there will be resistance.” (P31_D_65yrs_male)

Communication and mutual understanding

Finally, the two groups identified different communication-related obstacles. Knowledge producers pointed to the absence of institutional guidance and standardized tools for preparing and disseminating policy briefs, which limited the effective communication and translation of research findings:

“We have had no guidelines or templates for drafting and disseminating policy briefs. This lack of an institutional framework for effective communication hampers the dissemination and translation of our findings.” (P4_A_52yrs_male)

Decision-makers, in contrast, focused on the failure of knowledge producers to adapt their communication to political and institutional contexts. They suggested that presenting findings without considering these contexts could create resistance and conflict:

“Knowledge producers do not manage to communicate well. If communication is not adapted, it generates resistance. Politicians want to be applauded, even when applause is not warranted. The knowledge producer, for his part, communicates the findings as they are, which creates overlap and conflict.”
(P32_D_42yrs_male)

3.6.3. Budgetary/administrative constraints (54.9%)

Budgetary and administrative constraints were identified by the majority of participants (54.9%) as major obstacles to the translation of research findings. A qualitative comparison of the accounts provided by knowledge producers and decision-makers revealed strong convergences, as well as marked divergences, in how these constraints were perceived and explained.

Convergences

The two groups expressed convergent views regarding inadequate funding and administrative red tape.

Inadequate funding

Both groups emphasized the lack of financial resources as a central obstacle to conducting research and implementing research recommendations. Knowledge producers described how insufficient funding can delay or prevent studies requiring costly data collection and laboratory analyses:

"We struggle to carry out our studies for want of resources. For example, a study on healthcare-associated infections has been left on the table for years, because it would require funding for specimen collection, bacteriological analyses and costly single-organism cultures. Our patients cannot bear these costs and, without funding, we cannot move forward." (P11_A_50yrs_male)

Decision-makers similarly highlighted the inadequate public financing of health programmes and the resulting dependence on external partners:

"The budget allocated to the Ministry of Health is negligible. In my programme, we have no national subsidy at all and 99% of activities depend on external funding. You cannot ask for results without providing the means. Normally it is the State's duty to care for its population, but for want of a budget we are forced to hold out our hand to partners." (P10_D_53yrs_male)

Administrative red tape

The two groups also recognized administrative barriers as an obstacle to the uptake and implementation of research findings. Knowledge producers emphasized institutional blockages and the limited influence of researchers within decision-making structures:

"Decision-makers say they will pass the information up to the appropriate authority, but these are recommendations that never end up being answered... the knowledge producer does not hold a political or institutional position that allows them to influence decision-making." (P16_RA_35yrs_male)

Decision-makers confirmed that administrative procedures can delay or obstruct the mobilization of funding, even when knowledge producers identify external funding opportunities:

"Even when the knowledge producer identifies funding opportunities abroad and submits an application, once the State has to play its part it often becomes a problem... administrative red tape is an obstacle." (P38_D_53yrs_male)

Divergences

The divergence between the two groups concerned the relevance, contextual appropriateness, and feasibility of recommendations developed by knowledge producers. Knowledge producers considered their findings relevant but insufficiently supported or acted upon, whereas decision-makers felt that some recommendations were not sufficiently adapted to the local context or required resources that were not available. This divergence reflects a structural misunderstanding: both groups acknowledged the existence of implementation challenges but attributed their causes to different factors.

Knowledge producers described the difficulties they experienced in communicating their findings and obtaining the institutional support required to translate them into action:

"We make considerable efforts to produce things, but effective communication remains a problem. Decision-makers do not have the courtesy to make available [to knowledge producers] what is needed to translate the findings." (P12_A_39yrs_male)

Decision-makers, by contrast, emphasized that recommendations may generate resistance when they require substantial resources or fail to account for political and socio-professional realities. Nevertheless, they indicated that recommendations adapted to the local context could be implemented:

"When implementation requires substantial resources, or when recommendations fail to take account of political sensitivity or of the socio-professional context, this generates resistance. But if they are adapted to the real context, policymakers can apply them." (P35_D_55yrs_male)

4. Discussion

To our knowledge, this study represents the first empirical exploration of how Guinea's knowledge system connects producers and decision-makers, and it is among the few such investigations in francophone West Africa. While evidence-informed decision-making has been increasingly studied in other LMICs, empirical data from Guinea remain scarce. By documenting both attitudes and practices, this study fills a critical gap in the African literature – it not only reveals the paradox of favorable dispositions coexisting with weak implementation but also situates Guinea within broader continental debates on knowledge systems strengthening. The findings thus provide a novel empirical basis for designing context-sensitive strategies that address the structural architecture of knowledge systems in francophone Africa, where institutionalised mechanisms of dialogue and co-production remain underdeveloped [31, 32].

The paradox is that, while both knowledge producers and decision-makers in Guinea express strong attitudes in favour of collaboration and evidence use (nine out of ten in each group), actual practices remain limited and fragmented. This disconnection underscores a core insight from the knowledge systems literature: individual willingness, however genuine, does not automatically translate into effective evidence use when the broader institutional environment – its incentive structures,

communication channels, and governance norms – fails to support it [31, 32]. The findings thus point less to a deficit of motivation and more to a knowledge system whose architecture has not yet been configured to convert favourable dispositions into routine practice.

One major structural gap identified by knowledge producers is the absence of contact and communication bridges between the two communities, which makes it difficult, if not impossible, to approach decision-makers in order to identify their research priorities. This finding reveals a critical weakness in the system's linkage and exchange infrastructure: without structured channels of communication, researchers struggle to engage decision-makers and align their work with policy priorities. The absence of institutionalised contact mechanisms not only limits the relevance of research outputs but also weakens evidence uptake and erodes trust between the two communities. Addressing this systemic gap requires interventions at the level of institutional design – such as formal dialogue platforms, liaison structures, and co-production processes – that embed researcher–decision-maker interaction into the routine functioning of the knowledge system rather than leaving it to ad hoc initiative [33].

The limited use of social media as a dissemination channel constitutes another feature of the current knowledge system that warrants attention. Although channels such as LinkedIn and Facebook could enhance visibility and broaden audiences, many knowledge producers perceive them as non-scientific or professionally risky. This reflects entrenched academic norms – a component of the system's cultural-institutional fabric – that privilege peer-reviewed publications over public engagement. Similar patterns have been documented across African health systems, where researchers often resist non-traditional dissemination methods due to concerns about credibility and intellectual property [6]. Addressing this barrier requires not only capacity-building initiatives that train researchers in digital communication but also a shift in the normative environment so that public-facing scholarship is recognised as a legitimate and valued dimension of academic work.

The limited use of policy briefs and innovative channels such as infographics, recorded short videos, and podcasts further illustrates a misalignment within the knowledge system between how evidence is produced and how it could be used. Knowledge producers often lack training in adapting findings into concise, actionable formats for policymakers. Institutional incentives compound this problem: academic promotion systems reward publications, not policy briefs or the above-mentioned innovative channels. This structural misalignment – between what the system rewards and what evidence-informed decision-making requires – discourages knowledge producers from investing time in policy-oriented outputs. Evidence from other LMICs suggests that both structured training programs and institutional reforms, such as recognising policy-oriented outputs in academic evaluations, can significantly reconfigure these incentive structures and enhance evidence mobilisation practices [5].

Decision-makers, in contrast, appear more proactive in expressing research needs and participating in mobilisation activities. However, they remain weakly engaged in sustained dialogues with knowledge producers and in media communication (television and radio). This asymmetry highlights the need for

structured platforms that make interaction a continuous, institutionalised feature of the knowledge system rather than a series of isolated events. Regional initiatives, such as communities of practice, have shown promise in fostering sustained dialogue and should be adapted to the Guinean context [12]. The Health System Experts Community of Practice and Think Tank (ESyS Community) could play a critical role in achieving that imperative [34].

The bivariate analysis provides further insight into how individual positioning within the knowledge system shapes mobilisation practices. Associations between academic level, knowledge of the definition of the KT concept, and willingness to engage in evidence mobilisation suggest that senior knowledge producers and those familiar with the KT concept may be better positioned to adapt recommendations for policymakers. Conversely, junior knowledge producers and those unfamiliar with the KT concept often remain confined to academic outputs. These patterns are not merely individual attributes; they reflect a knowledge system in which seniority and conceptual literacy act as informal gateways to policy engagement. Tailored training and mentorship programs could help bridge these generational gaps, ensuring that younger knowledge producers acquire the skills and confidence needed to navigate the knowledge – policy interface [31, 35].

Ultimately, the study's findings resonate with broader debates on knowledge systems strengthening in LMICs. Favourable attitudes alone are insufficient; the architecture of the knowledge system – its incentive structures, communication infrastructure, and governance arrangements – must be deliberately configured to translate willingness into practice. Strengthening Guinea's knowledge system will require a multi-pronged approach: capacity-building (training researchers in policy brief writing, digital communication, and stakeholder engagement) [36]; institutional reforms within academia (aligning academic incentives with policy engagement, recognising knowledge mobilisation outputs in career progression) [31]; structured platforms for dialogue (establishing communities of practice and forums that sustain researcher–decision-maker collaboration as a routine function of the system) [12, 34]; and resource mobilisation (ensuring adequate funding and logistical support for evidence mobilisation activities) [37].

By addressing these systemic barriers, Guinea can move closer to realising the vision of evidence-informed decision-making and to laying the foundation of a learning health system [38, 39]. The study contributes to a growing body of literature emphasising that knowledge systems strengthening is not merely a technical undertaking but a socio-political endeavour requiring trust, collaboration, and institutional commitment.

Limitations

This study has several limitations that should be acknowledged. First, data collection was concentrated in Conakry, which may limit the generalizability of findings to rural regions where health system dynamics and research-policy interactions could differ. Second, reliance on self-reported measures of knowledge, attitudes, and practices introduces the possibility of social desirability bias, potentially inflating favourable responses. Third, the participation of knowledge brokers was minimal, with only one

included in qualitative interviews, restricting deeper exploration of their mediating role within the knowledge system. Finally, the cross-sectional design captures perspectives at a single point in time and does not account for changes in attitudes or practices over time.

Conclusion

This study highlights the paradox of favourable attitudes toward evidence use coexisting with weak mobilisation practices in Guinea. The findings reveal that this gap is not primarily a deficit of individual motivation but a property of a knowledge system whose structural architecture – its communication channels, incentive structures, and institutional norms – has yet to be configured to support routine evidence-informed decision-making. Yet, the strong willingness expressed by both communities signals a foundation upon which reform can be built. Strengthening Guinea's knowledge system will require systemic solutions: building researcher capacity in policy-oriented communication, reforming academic promotion criteria to value knowledge mobilisation outputs, establishing communities of practice to sustain dialogue, and mobilising resources for evidence mobilisation activities. By addressing these structural barriers, Guinea can move closer to institutionalising evidence-informed policymaking and serving as a reference point for francophone West Africa. Ultimately, knowledge systems strengthening is not merely a technical exercise but a socio-political process requiring trust, collaboration, and institutional commitment.

Abbreviations

AIDS

Acquired Immunodeficiency Syndrome

ESyS

Health System Experts

GRAMMS

Good Reporting of A Mixed Methods Study

HIV

Human Immunodeficiency Virus

IQR

Interquartile Range

KAP

Knowledge, Attitudes, and Practices

KT

Knowledge Translation

LMICs

Low- and middle-income countries

M&E

Monitoring and Evaluation

NGOs

Non-governmental organizations
PASCOR
Partnership for Stronger Knowledge Systems in Guinea
PCR
Polymerase Chain Reaction
PhD
Doctor of Philosophy
RF
Research Fellow
RA
Research Assistant
KB
Knowledge Broker
SPSS
Statistical Package for the Social Sciences
UGANC
Gamal Abdel Nasser University of Conakry
WHO
World Health Organization

Declarations

Use of artificial intelligence

The authors used DeepSeek (V4 Pro, accessed August 2026) to support manuscript translation from French to English and editing during preparation of this article. All intellectual content, data interpretation and conclusions are the sole responsibility of the authors. All AI-generated text was reviewed, edited and verified by the authors prior to submission.

Declarations

Ethics approval and consent to participate

The research protocol was approved by the National Ethics Committee for Health Research of Guinea (No.: 124/CNERS/25). Informed written consent was obtained from all key informants prior to their inclusion in the study (qualitative component).

Consent for publication

Not applicable. This study does not contain individual data in any form (images, videos, case reports or details).

Competing interests

The authors declare they have no competing interests.

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Author Contribution

TMM conceived and designed the study, developed the study protocol, trained data collectors, supervised online questionnaire self-administration and field data collection, performed quantitative and qualitative data analysis, drafted the original manuscript and coordinated the revisions. AP critically reviewed and edited all manuscript versions. PN provided the research assistants with training in qualitative data coding using NVivo and critically reviewed the manuscript. MS, AK and TL collected additional quantitative and qualitative data. MS, AK, TL, PN and TMM performed qualitative data coding. MMS, AM, MBB, ND, MB, SD, SS, AHB, AD and GMK critically reviewed the manuscript. All the authors read and approved the final manuscript.

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Availability of data and materials

The datasets supporting the conclusions of this article are included within the article.

References

1. Haby MM, Ludovic Reveiz , Thomas R, Jordan H. An integrated framework to guide evidence-informed public health policymaking. *J Public Health Policy*. 123AD;46:193–210.
2. World Health Organization. Developing national institutional capacity for evidence-informed policy-making for health. *Eastern Mediterranean Health Journal*. 2021;27(3):314–5.
3. World Health Organization. Evidence-informed decision-making for health policy and programmes: insights and best practices from successful country initiatives. WHO [Internet]. 2021 [cited 2026 Mar 1]; Available from: <https://www.who.int/publications/i/item/9789240036000>
4. World Health Organization. Evidence, policy, impact: WHO guide for evidence-informed decision-making [Internet]. WHO. 2022 [cited 2026 Mar 1]. Available from: <https://www.who.int/publications/i/item/9789240039872>
5. Semahegn A, Manyazewal T, Hanlon C, Getachew E, Fekadu B, Assefa E, et al. Challenges for research uptake for health policymaking and practice in low- and middle-income countries: a scoping review. *Health Res Policy Syst*. 2023;21(1).
6. Edwards A, Zweigenthal V, Olivier J. Evidence map of knowledge translation strategies, outcomes, facilitators and barriers in African health systems. *Health Res Policy Syst*. 2019;17(1):16.
7. Mwendera CA, Mzilahowa T, Njiokou F, N'falé S, Quach JA, Thomsen E, et al. Knowledge translation and evidence generation to increase the impact of vector control in Burkina Faso, Cameroon and Malawi. *BMJ Glob Health*. 2022;7(5):e008378.
8. Asamani JA, Bediakon KSB, Boniol M, Munga'tu JK, Akugri FA, Muvango LL, et al. Projected health workforce requirements and shortage for addressing the disease burden in the WHO Africa Region, 2022–2030: a needs-based modelling study. *BMJ Glob Health*. 2024;7(Suppl 1):e015972.
9. World Health Organization. Health workforce [Internet]. [cited 2026 Jul 14]. Available from: https://www.who.int/health-topics/health-workforce#tab=tab_1
10. Alliance for Health Policy and Systems Research. Strengthening knowledge systems in Africa [Internet]. The Alliance. 2024 [cited 2026 Mar 1]. Available from: <https://ahpsr.who.int/newsroom/news/item/14-10-2024-strengthening-knowledge-systems-in-africa>
11. Alliance for Health Policy and Systems Research. Health knowledge system strengthening effort expands to West Africa [Internet]. The Alliance. 2025 [cited 2026 Mar 1]. Available from: <https://ahpsr.who.int/newsroom/news/item/12-06-2025-health-knowledge-system-strengthening-efforts-expands-to-west-africa>
12. Jessani NS, Delobelle P, Balugaba BE, Mpando TL, Ayele FM, Ntawuyirushintege S, et al. Integrated Knowledge Translation for Non-Communicable Diseases: Stories from Sub-Saharan Africa. *Ann Glob*

- Health. 2023;89(1).
13. Graham ID, Logan J, Harrison MB, Straus SE, Tetroe J, Caswell W, et al. Lost in knowledge translation: Time for a map? *Journal of Continuing Education in the Health Professions*. 2006;26(1):13–24.
 14. Greenhalgh T, Sietsewieringa S. Is it time to drop the “knowledge translation” metaphor? A critical literature review. *J R Soc Med*. 2011;104(12):501–9.
 15. Haynes A, Rychetnik L, Finegood D, Irving M, Freebairn L, Hawe P. Applying systems thinking to knowledge mobilisation in public health. *Health Res Policy Syst*. 2020;18(1).
 16. Georgalakis J, Siregar F. *Knowledge Translation in the Global South: Bridging Different Ways of Knowing for Equitable Development*. Brighton: Institute of Development Studies. 2023;
 17. Holmes BJ, Best A, Davies H, Hunter D, Kelly MP, Marshall M, et al. Mobilising knowledge in complex health systems: a call to action. *Evidence & Policy* [Internet]. 2017 Aug 1 [cited 2026 Sep 13];13(3):539–60. Available from: <https://bristoluniversitypressdigital.com/view/journals/evp/13/3/article-p539.xml>
 18. Durrant H, Havers R, Downe J, Martin S. Improving evidence use: a systematic scoping review of local models of knowledge mobilisation. *Evidence and Policy*. 2024;20(3):370–92.
 19. Jessani NS, Valmeekanathan A, Babcock CM, Ling B. Academic incentives for enhancing faculty engagement with decision-makers—considerations and recommendations from one School of Public Health. *Humanities and Social Sciences Communications* 2020 7:1 [Internet]. 2020 Nov 11 [cited 2026 Sep 13];7(1):148-. Available from: <https://www.nature.com/articles/s41599-020-00629-1>
 20. Millimouno TM, Meessen B, Put W Van De, Garcia M, Camara BS, Christou A, et al. How has Guinea learnt from the response to outbreaks? A learning health system analysis. *BMJ Glob Health*. 2023;8(2):e010996.
 21. Diallo M, Camara A, Soumah I, Sylla FB. Policy Implications of Medical Research in Guinea: A Brief Report for the African Context. *African Journal of Obstetrics and Gynecology* [Internet]. 2005 [cited 2026 Jul 14]; Available from: <https://zenodo.org/records/18528004>
 22. Institut National de la Statistique. *Population Guinée (projections 2025)* [Internet]. 2025 [cited 2026 Jan 18]. Available from: <https://www.stat-guinee.org/>
 23. ESyS. *Projet “Partenariat pour des Systèmes de Connaissances Renforcés en Guinée (PASCOR Guinée)” | ESyS AFRIQUE* [Internet]. 2025 [cited 2026 Aug 30]. Available from: <https://esysafrique.org/projet-partenariat-pour-des-systemes-de-connaissances-renforces-en-guinee-pascor-guinee/>
 24. Alliance for Health Policy and Systems Research. *Partnerships for stronger knowledge systems in Africa (KNOSA)* [Internet]. 2026 [cited 2026 Aug 30]. Available from: [https://ahpsr.who.int/what-we-do/projects/item/partnerships-for-stronger-knowledge-systems-in-africa-\(knosa\)](https://ahpsr.who.int/what-we-do/projects/item/partnerships-for-stronger-knowledge-systems-in-africa-(knosa))
 25. O’Cathain A, Murphy E, Nicholl J. The quality of mixed methods studies in health services research. *J Health Serv Res Policy*. 2008;13(2):92–8.

26. Weber MS, Yanovitzky I. Networks, knowledge brokers, and the public policymaking process. *Networks, Knowledge Brokers, and the Public Policymaking Process*. 2021;1–396.
27. Ward V, House A, Hamer S. Knowledge Brokering: The missing link in the evidence to action chain? *Evid Policy*. 2009;5(3):267.
28. Bouncken RB, Czakon W, Schmitt F. Purposeful sampling and saturation in qualitative research methodologies: recommendations and review. *Review of Managerial Science*. 2025;1–37.
29. Lee S. The Ultimate Guide to Maximum Variation Sampling [Internet]. 2025 [cited 2026 Jan 14]. Available from: <https://www.numberanalytics.com/blog/ultimate-guide-maximum-variation-sampling?>
30. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol*. 2006;3(2):77–101.
31. Kalbarczyk A, Rodriguez DC, Mahendradhata Y, Sarker M, Seme A, Majumdar P, et al. Barriers and facilitators to knowledge translation activities within academic institutions in low- and middle-income countries. *Health Policy Plan*. 2021;36(5):728–39.
32. Sell K, Rehfuess E, Osuret J, Bayiga-Zziwa E, Geremew B, Pfadenhauer L. Outcomes of an integrated knowledge translation approach in five African countries: a mixed-methods comparative case study. *Health Res Policy Syst*. 2024;22:162.
33. Oliver K, Innvar S, Lorenc T, Woodman J, Thomas J. A systematic review of barriers to and facilitators of the use of evidence by policymakers. *BMC Health Serv Res*. 2014;14.
34. ESyS. Health System Experts Community of Practice and Think Tank (ESyS Community) [Internet]. 2026 [cited 2026 Mar 1]. Available from: <https://esysafrique.org/>
35. Oronje RN, Mukiira C, Kahurani E, Murunga V. Training and mentorship as a tool for building African researchers' capacity in knowledge translation. *PLoS One*. 2022;17(3):e0266106.
36. Wendo C. Writing an Effective Policy Brief from Your Research: A Practical Guide for Researchers in Africa. 2025 [cited 2026 Mar 1]; Available from: <https://sgciafrica.org/resource/writing-an-effective-policy-brief-a-practical-guide-for-researchers-in-africa/>
37. Penkunas MJ, Berdou E, Chong SY, Launois P, Rhule ELM, Allotey P. Increasing Knowledge Translation Capacity in Low- and Middle-Income Countries: A Model for Implementation Research Training. *Frontiers in Tropical Diseases*. 2021;2:762966.
38. Friedman CP, Rubin J, Brown J, Buntin M, Corn M, Etheredge L, et al. Toward a science of learning systems: a research agenda for the high-functioning Learning Health System. *J Am Med Inform Assoc*. 2015;22(1):43–50.
39. Millimouno TM, Bello KOA, Dossou JP, Delamou A, Meessen B. Transforming district health systems into learning health systems: An improved strategy from the District.Team experience in Benin and Guinea. *Learn Health Syst*. 2025;9(4).

Figures

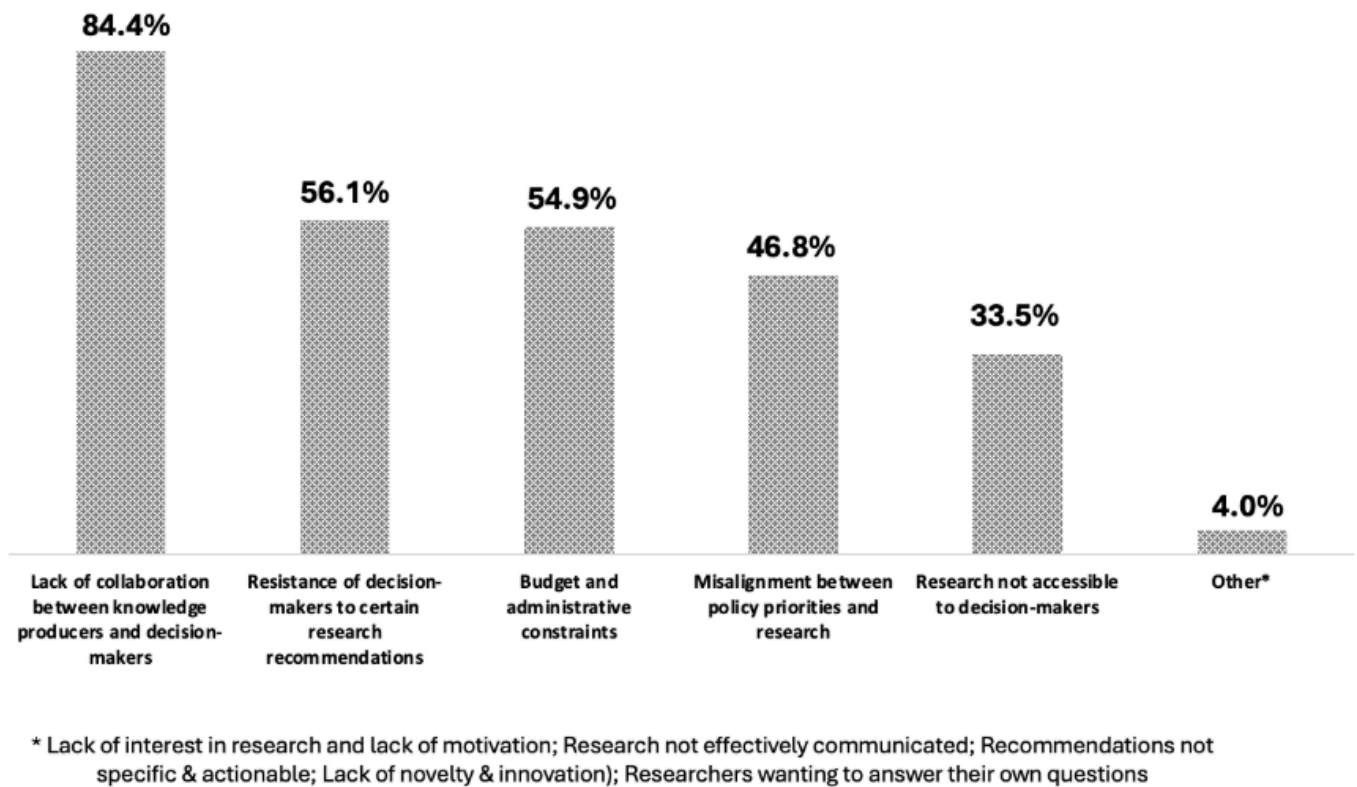


Figure 1

Main barriers to the use of research evidence in decision-making in Guinea, 2025 (n=173).

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