

# Knowledge Translation in Africa: Are The Structures in Place?

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## Commentary

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# Abstract

**Background:** Contextualised evidence to generate local solutions on the progressive path to universal health coverage is important. However, this evidence must be translated into action. Knowledge translation (KT) experts have highlighted plausible mechanisms to foster the uptake of evidence. The objective of this study was to assess the extent to which structures are in place to foster uptake of evidence, in countries of the WHO African Region.

**Methods:** Employing a cross sectional survey we collected data on the availability of structures to foster uptake of evidence into policy in the 35 member states of WHO African region. Data were analysed using a simple counting of the presence or absence of such structures.

**Results:** Less than 50% of countries had evidence collation and synthesis mechanisms. The lack of such mechanisms presents a missed opportunity to identify comprehensive solutions that can respond to health sector challenges. Close to 50% of countries had KT platforms in place. However, the availability of these was in several forms, as an institution-based platform, as an annual event to disseminate evidence and as a series of conferences at the national. In some countries, KTs were mainstreamed into routine health sector performance review processes. Several challenges impacted the functionality of the KT platforms including inadequate funding and lack of dedicated personnel. Regarding dissemination of evidence, sharing reports, scientific publications and one-off presentations in meetings were the main approaches employed.

**Conclusion:** The availability of KT platforms in the WHO African countries can be described as suboptimal at best and non-existent at the worst. The current structures, where these exist, cannot adequately foster KT. Knowledge translation platforms need to be viewed as sector wide platforms and mainstreamed in routing health sector performance review and policy making processes. Funds for their functionality must be planned for as part of the health sector budget. Dissemination of evidence needs to be viewed differently to embrace the concept of “disseminate for impact”. Further, funding for dissemination activities needs to be planned for as part of the evidence generation plan.

## Introduction

A case has been made for contextualised evidence in search for local solutions and innovation on the progressive path to universal health coverage (UHC). More pertinent to this aspiration is evidence being translated into action. Knowledge translation (KT) experts have been preoccupied with this topic for the last two decades and have highlighted plausible mechanisms to foster the use of evidence in decision making. Among the favourable factors is the availability of high quality, timely and contextualised evidence providing economically feasible recommendation; the ministry of health's capacity to lead the KT process; availability of institutionalized platforms for engagement between researchers and policymakers including civil society; mechanisms to coordinate evidence generation and synthesis

mainstreamed within the MoH) and; partnerships for KT (involvement of stakeholders throughout the process to improve trust and build interest including communities) [1], [2], [3].

The type and quality of evidence has been a subject of debate with preference for systematic reviews and peer reviewed research[4]. In as much as this has worked well for biomedical policies, health systems and public health decisions call for additional evidence regarding affordability, political and community acceptability as well as implementation feasibility[5],[1]. Such evidence can be generated from systematic research, routine information systems, observation and community perceptions[6]. Evidence generated from the different perspectives on a given policy area needs to be synthesised to generate conclusions that can inform decision making[7]. In ensuring this, evidence synthesis, evidence synthesis mechanisms must be institutionalised in countries bringing together multiple disciplines.

In some African countries, partnerships for KT were institutionalised (in 2005) through Evidence-informed policy-networks (EVIPNet) which were established as knowledge translation platforms (KTP) to promote the systematic use of health research evidence in policy-making. These bring together policy-makers, researchers and civil society to foster uptake of best scientific evidence in both policy development and policy implementation[8]. An evaluation conducted 7 years later showed promising results with reference to instrumental use of evidence in programme design and policy making, policy makers' recognition of the role of evidence and specifically asking researchers to generate evidence on topical issues[9]. However, weaknesses in dissemination were highlighted as a gap. Poor dissemination of evidence has also been highlighted by other scholars who emphasise the importance of diversified mechanisms of dissemination; mapping of target audience and tailoring messages; the media as an effective ally and use of simple language[10, 11].

The definition of KT indeed embodies these favourable parameters as “the dynamic iterative process including the synthesis (...emphasising the need for synthesis platforms..), dissemination, exchange (... the need for effective dissemination as a two way mechanism..)and ethically sound application of knowledge to improve health, strengthen the health care system and provide more effective health services and products(... the need for broad evidence beyond efficacy of interventions...)”[12]. In this article, we use KT and uptake of evidence interchangeably.

The objective of this study was to assess the extent to which structures are in place to foster uptake of evidence which is an essential element in the progressive realisation of UHC, in countries of the WHO African Region.

## Methods

We employed a cross-sectional survey design using a semi-structured mailed questionnaire. All the 47 member states of WHO AFR were included in the survey, and 35 responded (response rate of 74%). Prior to undertaking the survey, country teams (Ministries of Health - MoH research focal person/designate, head of the national health research institute and a researcher from one of the research institute that was selected by the MoH) were trained on filling in the questionnaire. The questionnaire was primarily

completed by the ministry of health focal point for research in the country or the head of the national health research coordination institute as the arrangements differed from one country to another. The completed questionnaire was validated by an in-country team comprised of representatives of institutions conducting health research, the head of the national research coordination institution, the focal point for research in the WHO Country Office and the focal point for research in the ministry of health. Data were collected on the structures that foster knowledge translation specifically the availability of: 1) an evidence collation mechanism; 2) platform for translating, synthesizing and communicating research to inform health policy and practice as well as performance of the platform and challenges faced and 3) ways in which evidence is disseminated. Data were collected between December 2017 – August 2018.

## **Data analysis**

Data were processed in a Microsoft Excel® spreadsheet and basic descriptive and comparative analysis conducted.

## **Ethical clearance**

This study was a standing request by the Ministers of Health of the WHO African Region and the ethical approval to undertake the survey was granted by the WHO African Regional Office's Ethics Review Committee.

# **Results**

## **Availability of an evidence collation and synthesis mechanism**

A lot of evidence is generated in countries through research, routine information systems and evaluation studies. Further, evidence is generated on different aspects ranging from health systems, biomedical science and service delivery. No single study can provide all required answers to inform policy decisions thus the need for synthesis and collation of all available evidence.

As shown in Table 1; evidence collation mechanisms were only available in 15 countries (43% of countries). In Kenya, such a mechanism was mainstreamed within the national health observatory. The lack of such mechanisms presents a missed opportunity to identify possible comprehensive solutions that can respond to health sector challenges.

## **Availability of platform for translating, synthesizing and communicating research**

Sixteen out of 35 countries (46%) had KT platforms in place. However, the availability of these was in several forms, as an institution-based platform organised and managed by the national research institute (Cameroon, Ethiopia, Tanzania). As an annual event to disseminate evidence (National health research forum – Lesotho The Gambia; National health conference - Liberia) and as a series of conferences at the national level (Eswatini, Zimbabwe, Tanzania). In some countries, knowledge translation was

mainstreamed into routine health sector performance review processes (Rwanda). In Kenya and Guinea Bissau, although reported as 'in place' the platform was actually still under development to be embedded in the national health observatory (Kenya) and as part of the committee to implement the national research agenda (Guinea Bissau).

Noteworthy is the innovative approach employed by Senegal that instituted a capacity building program on knowledge translation for policymakers and researchers. Niger on the other hand has an institutionalised mechanism for multi sectoral consultation and exchange in health research.

Several challenges impacting the functionality of the KT platforms were reported. Inadequate funding was a major issue and several annual dissemination forums had not been held in several countries for example The Gambia that had not held such forums for 4 years due to lack of funding. The poor synthesis and presentation of research results to guide policy dialogue was also noted as a hinderance (Tanzania).

Suboptimal functionality was reported due to lack of dedicated personnel.

### **Dissemination of results**

As shown in Table 2, countries employ several approaches to disseminate evidence the commonest being oral communication through meetings followed by scientific publications. Use of the media is minimal (only 5 countries) despite being influential. Use of virtual libraries in Sierra Leone and Mauritius is not a common occurrence in Africa and ease access to such by stakeholders needs to be explored.

## **Discussion**

Close to 50% of countries had evidence collation and synthesis mechanisms and knowledge translation platforms to foster uptake of evidence in policy development and implementation. No single source of evidence can provide comprehensive options to a policy question and as such evidence from routine systems, several research studies and surveys must be synthesised to provide timely and comprehensive answers. Knowledge translation platforms have been instrumental in improving uptake of evidence[13]. El-Jardali et al[13] emphasise that these must be integrated and institutionalised within the policy-making processes. This implies that they must be part of the health sector structures bringing together policy actors and researchers to facilitate synthesis, interpretation and uptake of evidence. Rwanda presents a best practice that can be emulated by other countries where knowledge translation was mainstreamed into routine health sector performance review.

Absence of such presents a missed opportunity to realising evidence-based dialogue and decision making on one hand and waste of resources on the other. Generation of evidence is not an end in itself and as such, its use in improving service delivery needs to be viewed as return on investment. El-Jardali et al[13] 2020 highlight the role of KT platforms in the Covid – 19 response as important platforms in

providing timely evidence to guard against misinformation and political interest and, bridge the science and policy and implementation gap.

Where KT platforms existed, there were inherent weakness that may impact negatively on their functionality. For example, being institution-based limits the extent to which stakeholders can be involved because of the limited convening power of national research institutes. Being annual events does not offer much benefit given the fact that decision making is an ongoing process. Worst still, several of these annual events had been missed due to lack of funding. The poor synthesis and presentation of research results as was reported in Tanzania negatively impacts uptake of evidence.

Among the barriers to uptake of evidence is the lack of appreciation of each other's world of operation between policy makers and researchers[14]. To this end we note the initiative undertaken by Senegal to address this gap through an institutionalised capacity building program on KT which could be an incentive for researchers and policy makers to work together.

Regarding dissemination of evidence, the approaches employed predominantly were sharing reports, scientific publications and presentation in meetings. Such approaches do not offer much reach for several reasons, access to scientific publications is a challenge because of limited access to internet and journal that are not open access. This is compounded by the poor reading culture which a documented barrier[15]. The limited use of the media presents a missed opportunity given their capacity to mobilise communities to demand for policy changes[11]. There was no mention of the use of knowledge brokers personal communication which have proven to be effective[16],[3]. Scholars emphasise the importance of effective dissemination of evidence making reference to simplified messages, tailored to different audiences and employing multiple approaches[2],[3]. Among noted effective strategies is. Demand driven approaches (where researchers respond to policy makers demand for evidence) have been employed in some settings with success.

## **Study Limitations**

Our assessment focused on the extent to which structures are in place to foster uptake of evidence in countries of the WHO African Region. We did not undertake an indepth assessment on the functionality of these structure and possible solutions to address identified challenges. We however believe our findings provide valuable information that can spur action in improving uptake of evidence. In as much as functionality of such structures is important, these must be in place in first place.

## **Conclusion**

The availability of KT platforms in the WHO African countries can be described as suboptimal at best and non-existent at the worst. The current structures, where these exist can not adequately foster KT. KT platforms need to be viewed as sector wide platforms and mainstreamed in routing health sector performance review and policy making processes. Funds for their functionality must be planned for as

part of the health sector budget. Regarding dissemination of evidence, sharing reports, scientific publications and one-off presentations in meeting approaches employed currently in majority of countries have already been shown to have minimal impact. Dissemination of evidence needs to be viewed differently to embrace the concept of “disseminate for impact”. Further, funding for dissemination activities needs to be planned for as part of the evidence generation plan.

## List Of Abbreviations

KT: knowledge translation; MoH: Ministry of Health; WHO: World Health Organisation

## Declarations

### Ethical clearance

This study was a standing request by the Ministers of Health of the WHO African Region and the ethical approval to undertake the survey was granted by the WHO African Regional Office’s Ethics Review Committee.

### Consent for publication

Not applicable

### Availability of data materials

The data set generated and analysed during the current study is available with the WHO Africa Region office and the European and Developing clinical trials partnership.

### Funding

The assessment was funded by the WHO African Region and the European and Developing countries Clinical Trails partnership.

### Competing interest

The authors declare that they have no competing interests

### Authors contributions

JNO participated in conceiving and designing the study, data collection, analysis and led the drafting of the manuscript; JAA participate in data analysis and drafting of the manuscript. All authors read and approved the final manuscript.

### Acknowledgement

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## Tables

**Table 1: Availability of evidence collation mechanisms and KT platforms**

Availability of an evidence collation mechanism (N=35)		Availability of platform for translating, synthesizing and communicating research (N=35)	
Countries		Countries	
Yes (15 countries)	Tanzania, Cameroon, Ethiopia, Gabon, Kenya, Guinea Bissau, Liberia, Malawi, Mali, Senegal, Niger, Rwanda, Ghana, Zambia, Zimbabwe	Yes (19 countries)	Gambia, Tanzania, Cameroon, Ethiopia, Eswatini, Kenya, Guinea Bissau, Lesotho, Liberia, Malawi, Mali, Mozambique, Seychelles, Senegal, Niger, Rwanda, Ghana, Zambia, Uganda, Zimbabwe
No (20 countries)	Gambia, Lesotho, Seychelles, Nigeria, Eswatini, Botswana, Namibia, Congo, Cote D'Ivoire, Benin, Burundi, Mauritania, Mauritius, Democratic Republic of Congo, Carbo Verde, Mozambique, Eritrea, Sierra Leone, South Sudan, Uganda	No (16 countries)	Gabon, Nigeria, Botswana, Namibia, Congo, Cote D'Ivoire, Benin, Burundi, Mauritania, Mauritius, Democratic Republic of Congo, Carbo Verde, Eritrea, Sierra Leone, South Sudan

**Table 2: Dissemination mechanisms employed by countries**

<b>Mechanism</b>	<b>Country</b>
<p>Communication (Oral, displays); presentation in meetings; conferences, symposiums, seminars</p> <p>(National &amp; International) (24 countries)</p>	<p>Congo, Benin, The Gambia, Tanzania, Cameroon, Ethiopia, Kenya, Guinea Bissau, Liberia, Malawi, Mali, Nigeria, Benin, Mauritania, Senegal, Niger, Carbo Verde, Mozambique, Rwanda, Sierra Leone, Ghana, Zambia, Zimbabwe, Mauritius</p>
<p>Television broadcasts, Radio, Press releases</p> <p>(5 countries)</p>	<p>Congo, Guinea Bissau, Nigeria, Rwanda, Zimbabwe</p>
<p>Scientific publications (18 countries)</p>	<p>Congo, Benin, Tanzania, Cameroon, Ethiopia, Kenya, Guinea Bissau, Liberia, Nigeria, Benin, Mauritania, Senegal, Niger, Rwanda, Sierra Leone, Ghana, Zambia, Mauritius</p>
<p>Sensitization campaigns (1 country)</p>	<p>Cameroon</p>
<p>Posting on websites (8 countries)</p>	<p>Liberia, Nigeria, Niger, Carbo Verde, Sierra Leone, Ghana, Zambia, Mauritius</p>
<p>Sharing reports by email (16 country)</p>	<p>Tanzania, Cameroon, Ethiopia, Kenya, Guinea Bissau, Liberia, Nigeria, Benin, Mauritania, Senegal, Niger, Rwanda, Sierra Leone, Ghana, Zambia,</p>
<p>Annual reports, bulletins, Newsletters, posters, leaflets, flyers, magazines, policy briefs</p> <p>(7 countries)</p>	<p>Nigeria, Senegal, DRC, Carbo Verde, Ghana, Zambia, Zimbabwe</p>
<p>Virtual library (1 country)</p>	<p>Sierra Leone, Mauritius</p>