Improving knowledge translation in Uganda: more needs to be done

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Introduction: Meeting the health-related Millennium Development Goals in Africa calls for better access to and higher utilisation of quality evidence. The mechanisms through which research evidence can effectively guide public health policy and implementation of health programmes are not fully understood. Challenges to the use of evidence to inform policy and practice include the lack of a common understanding of what constitutes evidence and limited insight on the effectiveness of different research uptake activities. Available Knowledge Translation (KT) models have mainly been developed in high income countries and may not be directly applicable in resource-limited settings. In this study we examine the uptake of evidence in public health policy making in Uganda.

Methods: We conducted a cross-sectional qualitative study consisting of in-depth interviews with 17 purposively-selected health policy makers and researchers. The study explored respondents’ perceptions of the role of evidence in public health policy development, their understanding of KT and their views on the appropriateness of different KT activities that are currently implemented in Uganda.

Results: Although all respondents stated that evidence should inform health policies and programmes, they noted that this occurred infrequently. We noted a lack of conceptual clarity about KT and what precisely constitutes evidence. Respondents reported having been involved in different KT activities, including partnerships and platforms created for knowledge sharing between researchers and end users, but with very mixed results.

Conclusion: There is need for conceptual clarity on the notion of KT and an understanding of the most appropriate KT strategies in low-income settings.

Cite this article: Juliet Nabyonga Orem, David Kaawa Mafigiri, Harriet Nabudere, Bart Criel. Improving knowledge translation in Uganda: more needs to be done. Pan Afr Med J. 2014;17(Supp 1):14

Key words: Knowledge translation, public health policy, low income countries, Uganda

Permanent link: http://www.panafrican-med-journal.com/content/article/17/1/14/full

DOI: 10.11694/pamj.supp.2014.17.1.3482

Supplement article

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Introduction

Most African countries are unlikely to meet the health-related Millennium Development Goals’ (MDGs) targets by 2015 [1,2]. Accelerated progress can only be realised if the coverage of effective health interventions is scaled up. However, this remains a challenge partly as a result of weak health systems [3]. Existing evidence on validated interventions to strengthen the health system rarely informs health policy development and programming. Uptake of evidence in public health policy development and programme implementation has been a subject of research, mainly in high income countries. Several facilitating factors for knowledge translation (KT) have been documented including timely availability of good quality evidence, credibility of researchers, effective interactions between researchers and policy makers’, availability of funding to implement research recommendations, and effective dissemination of evidence, among others [4,5].

Efforts to improve research uptake have involved the development of models that can explain interactions between stakeholders and the evidence generated, and relationships between evidence and policy processes. Armstrong and colleagues [6] defined several models among which is the linear model which postulates that evidence will lead to action. They argued that evidence that responds to identified knowledge gaps will guide policy [6]. The linearity model, however, does not take into consideration other factors that influence policy development, such as the political context and external influence. Enlightenment models highlight the importance of gradual sedimentation of ideas which over time may lead to change [7, 8]. Enlightenment models assume that policymakers stay in office for a fairly long time to allow for sedimentation; however, frequent turn-over of staff in policy making positions limits this model. Political and tactical models, where research is used by policy makers to justify government positions or to reduce the pressure to respond to a given problem, have been criticised for putting emphasis on research processes as opposed to getting evidence into policy [9]. Other KT models have focused on linkages between stakeholders, dissemination modalities of evidence and structures for decision making without adequate attention to the peculiar context of LIC [10,11]. These
almost all respondents noted that evidence is the informants' perception of the role of evidence in health policy.

Methods

Study design: We conducted a cross-sectional qualitative study comprising in-depth interviews with key informants (KI) to explore their perceptions on the importance of evidence in public health policy development and programming, their understanding of KT, and their involvement in different KT activities.

Participants: Respondents included 15 health policy makers and two researchers who were purposively-selected on the basis of their day-to-day involvement in policymaking or research in health systems. All policy makers were members of the Health Policy Advisory Committee (HPAC), the policy advisory body for the health sector. The HPAC comprises of senior government officials from the central and district levels, and representatives of donor agencies, civil society organisation (CSOs), private not for profit (PNFP) organizations and the private-for profit sector (PPP). Details of selected respondents are shown in Table 1.

Procedures: Interviews followed a guide that included probes on the informants' perception of the role of evidence in health policy development and programme design, their conceptualization of KT, and their involvement in various KT activities. The interview guide was pilot tested and revised accordingly. KI were initially contacted by email or telephone and invited to participate in the study. All interviews were conducted face-to-face by the first author. All interviews were audio-recorded and transcribed verbatim. The interviewer also took notes during the interviews.

Analysis: Data were manually analysed following the precepts of content analysis. Key stages in analysis included all authors independently identifying codes from which emergent views were developed and refined. Efforts were made to determine adequacy, credibility, usefulness and consistency of data in relation to the general objective of the study. Where interpretation differed, consensus was achieved through revisiting the raw data and discussions.

Results

Role of evidence: Almost all respondents noted that evidence is important in guiding health policy and programming decisions because it shows what can and cannot work. However, several respondents stated that the use of evidence in policy development was limited and that politics and previous experience played a greater role in policy making. A Ministry of Health (MoH) official noted, "Currently there is little or no use of evidence, we are relying more on previous experience, politics and previous views on issues. We are developing so many policies that are not evidence-based." A donor similarly remarked that "...policy in Uganda is guided by political influence not research evidence".

Some respondents raised a concern of a limited understanding of what evidence is as one of the hindrances to its uptake as elaborated in the following quotes:

"The challenge is the narrow view of what evidence is. People think that evidence is what has been published in peer reviewed journals and this in a way limits the evidence that goes into our policy process. Evidence could be in a report that was done following a systematic approach" Donor respondent

"Evidence is very important for practice but also we need to define what is called evidence. Sometimes evidence to one is not evidence to another. Is it empirical or scientific? We need to know that policy development is sometimes driven by people who even do not sit to formulate the policy so what evidence do you give them?" CSO respondent.

Definition of KT

We noted significant variations in respondents' conceptualization of KT. The study identified 14 definitions of KT from our respondents (Figure 1). Some respondents defined KT as a relationship between stakeholders, between an idea documented in available evidence and action. Others referred to KT as taking action based on research while others defined it as having policies supported by evidence.

Involvement in KT activities

Respondents reported having been involved in several KT activities as shown in Table 2. Majority of respondents reported involvement
in partnerships at several stages including, research priority setting, undertaking research and policy development where they advocate for the adoption of evidence-based decisions. Partnerships in KT were described by some as difficult to define and implement. A donor respondent remarked that “What is the best way to involve all stakeholders through the whole process? Should it be through regular updates, should it be in the implementation process or should it be by involving stakeholders in the decision-making process?”

Some respondents reported having put in place platforms for stakeholder engagement; however, the participation in and life span of these platforms varied considerably. Many platforms were implemented as a one-off to follow a certain research process through, while one had been in place for a longer duration (up to four years). Platforms for KT were in most cases between two categories of stakeholders for example, civil society and policy makers, civil society and researchers, researchers and policy makers, or donors and policy makers. No respondent reported a platform purposely for KT involving more than two categories of stakeholders. A MoH focal person explained that interactions between researchers and policy makers were often limited to presentations by stakeholders. A MoH focal person explained that interactions between policy makers, or donors and policy makers. No respondent reported that none of these methods worked consistently.

KIs from the CSOs mentioned sharing of evidence from their implementation research where they have demonstrated that a given intervention works. A CSO KI stated that “In the case of TB/HIV integration, we noted a multiplicity of definitions [17]. Previous exercises of bringing policy evidence into practice and in most cases, when results were available [13]. Cordero et al, in linear models are not effective [2]. Most definitions were shown that linear models are not effective [2]. Most definitions were application. Some respondents defined KT as a link between evidence and practice. Using evidence to influence the way things are done. Making that leap from research to policy. Bridging the gap between evidence, policy making and implementation.

Figure 1: Definitions of getting evidence into policy and practice by policy actors in Uganda

| Evidence | Policy and Health Strategies |
|---|---|
| Using evidence for change | Using evidence to guide policy |
| Application of research | Taking action based on research |
| Policies supported by evidence | Using evidence to influence the way things are done |
| Interface between researchers, practitioners and policy makers | Making that leap from research to policy |
| Evidence backing up policy | Bridging the gap between evidence, policy making and implementation |

Definitions of getting evidence into policy and practice

Using evidence for change
- Application of research
- Policies supported by evidence
- Interface between researchers, practitioners and policy makers
- Evidence backing up policy
- Link between evidence and policy
- Using evidence to guide policy
- Taking action based on research
- Using evidence to influence the way things are done
- Making that leap from research to policy
- Bridging the gap between evidence, policy making and implementation

Using evidence to guide policy

Policy and Health Strategies

Table 2: Number of respondents who reported trying the different KT activities in Uganda

| Activity | MoH | Donors | CSO(PNFP) | PFP | Researchers |
|---|---|---|---|---|---|
| Building partnerships/participation in partnerships | 2 | 2 | 4 | 0 | 1 |
| Putting platforms in place including researchers, policy makers, CSOs | 4 | 1 | 2 | 0 | 0 |
| Ensuring that priority/lack of commission research undertaken/supported | 4 | 1 | 2 | 0 | 1 |
| Dissemination | 0 | 3 | 3 | 1 | 2 |
| Ensuring grant leadership in the KT process | 1 | 0 | 0 | 0 | 0 |
| Building capacity of implementers to implement research results | 1 | 1 | 0 | 0 | 0 |
| Demonstrating that a given intervention works | 0 | 1 | 4 | 0 | 0 |
| Involving communities in research processes | 0 | 1 | 0 | 0 | 0 |
| Hiring independent credible researchers | 0 | 1 | 0 | 0 | 0 |
| Building basic research skills among stakeholders | 0 | 0 | 0 | 0 | 0 |

MoH: Ministry of Health; CSO: civil society organization; PNFP: private not for profit; PFP: private-for profit sector

We demonstrated that it works through implementation research. “We piloted injectable depo-provera at the community level, finalised the implementation research process and it is now policy”.

However, in some instances, despite demonstration that a certain intervention works through implementation research, KT has not been successful. For example, a respondent from a CSO stated that although there was evidence demonstrating the feasibility of task shifting to address the human resources for health challenges in Uganda, there has been little success in developing a task shifting policy. Additional efforts to influence the development of a task shifting policy were also unsuccessful as highlighted in the quote below by a researcher: “We produced policy briefs on task shifting, we went ahead and disseminated them to policy makers and parliamentarians and they were discussed in these fora. This may not have been used as expected at country level (Uganda), but has been taken up by WHO and the global guidelines are being developed on task shifting”.

Discussion

Our study aim was to increase our understanding of the utilization of evidence in health policy making and programming in Uganda, and to assess stakeholders’ conceptualization of KT and involvement in different KT activities. Majority of respondents agreed that although policies should be informed by evidence, this was not always the case in Uganda.

We noted that respondents had multiple, often limited, definitions of KT. The multiplicity and limited nature of definitions of KT may be a hindrance to KT in Uganda. None of the definitions provided showed an appreciation of understanding of KT as a prolonged process starting with the generation of evidence, synthesis, interpretation and subsequently application. Some respondents defined KT as a link between evidence and policy which infers a notion of a linear model. Previous studies have shown that linear models are not effective [2]. Most definitions were limited to one step in the research generation and application process and in most cases, when results were available [13]. Cordero et al, in their survey of funding agencies supporting KT in low-income settings, also noted a multiplicity of definitions [17].

Although respondents had been involved in several KT activities, the activity that facilitated KT because this ensured that research undertaken was addressing information gaps highlighted by policy makers. For example, the MoH had commissioned research on priority areas that had resulted in changes in the logistics systems as highlighted in the quote below from a MoH official:

“Efforts undertaken include commissioning research. We as policy makers perceived the need for evidence and commissioned studies. We discussed results in technical fora that bring together researchers and policy makers specifically in the technical working groups (TWG). Here I have several examples where actually research has influenced policy. For example, the study on tracking medicines, we commissioned the research, good quality research was undertaken which was then discussed in the technical working group. This informed development of the medicines logistics system and quantification of medicines requirements”
outcomes of these activities varied. Partnerships between stakeholders were frequently mentioned. However, majority of partnerships were short lived and largely involved researchers and policy makers. In contrast to Armstrong et al [6] who emphasised the importance of a two way participation involving translation and exchange amongst stakeholders, we noted that knowledge sharing in these partnerships was mostly unidirectional with researchers sharing their results to an audience of policy makers.

The limited success of partnership may stem from several factors. First, it may imply presence of a very bureaucratic policy making process where the issue of providing evidence and policy development is restricted to a few stakeholders. Indeed, in an earlier study on use of evidence in policy development in Uganda, CSO respondents highlighted the bureaucratic policy making process as a hindrance, citing government restrictions on who participates in certain processes [21]. Second, the limited nature of partnerships could reflect people's understanding of who qualifies to be a stakeholder in KT. For example, a study carried out in Uganda by the COHRED revealed the limited involvement of civil society in health research [22]. Donors, on the other hand, have been shown to have un-due influence [12] and have in some instances required the undertaking of research as a pre-requisite to providing funding [23]. Third, the limited success of partnerships may stem from the challenges of engaging some of the stakeholders. Partnerships are more complex than perceived by the respondents in this study. Successful partnerships take into account varied capacity of stakeholders and the need to invest both time and resources [7]. Bergstrom et al, in their study on the relevance of the Promoting Action on Research Implementation in Health Services (PARiHS) framework in Uganda, identified the importance of community involvement [24] but noted that modalities of engaging the community effectively were not in place [24, 25]. The need to map out all relevant stakeholders and tailored modalities of engaging them has been emphasised in literature [26]. Theobald et al elaborated the need to develop partnerships at multiple levels and with multiple layers within the health system [26].

Respondents identified instances where evidence has informed policy and strategy development, for example, in cases of commissioned research. In the case of demonstration through implementation research, we see a mixed picture. On one hand, evidence demonstrating that a given intervention works may fail to lead to change because of the implementation costs, for example in the case of task shifting [27]. On the other hand, where there is extensive support, successful evidence uptake may occur following implementation research as happened with the community HIV programme. Donor influence may have played a role here, although we did not assess this specifically.

Dissemination of research findings took several forms and was not always systematic and audience-tailored. This could be explained by the nature of partnerships reported in this study which may not allow mapping relevant stakeholders and developing tailored messages. The importance of using several different modalities for disseminating evidence that are audience-specific has been emphasised [17]. Ineffective dissemination may also stem from the lack of an institutional set up for dissemination of evidence. An earlier study in Uganda highlighted the need to establish a unit within the MoH that would be charged with the responsibility of disseminating evidence [21].

Overall, the effectiveness of KT strategies is highly variable and dependent on the setting. Success hinges on whether the strategies have been sufficiently tailored to target audiences. The effectiveness of the different KT strategies is not known and Cordero et al pointed the need for further research in this area specifically to evaluate KT activities to learn what works, who and in what context [17]. Working through government institutions has been emphasised as a way of ensuring that government takes ownership of the KT process [21]; but, relevant government institutions must be strengthened. In the case of Uganda, the Uganda National Health Research Organization is legally mandated to coordinate KT efforts. However, the institution is not sufficiently resourced to play that role effectively. A qualitative case study of the use of evidence in policies for the treatment of eclampsia and pre-eclampsia in South Africa. Health Res Policy Syst. 2008; 6(1) :12.

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Authors’ contributions

JNO participated in the conceptualisation of the study, data collection, data analysis and interpretation and led the drafting of the manuscript. DKM participated data analysis, interpretation and in the drafting of the manuscript. HN participated in data analysis and interpretation and in the drafting of the manuscript. BC participated in the conceptualisation of the study, data analysis and interpretation. All authors reviewed and approved the final manuscript.

Acknowledgements

The authors thank study respondents who willing gave their time to participate in the interviews. This research was funded by an African Doctoral Dissertation Research Fellowship award offered by the African Population and Health Research Centre (APHRC) in partnership with the International Development Research Centre (IDRC) and by the Belgian Technical Cooperation.

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paramount importance because meagre resources must be invested wisely to ensure maximum return. In light of this, investment in KT needs more emphasis.

Study findings should be interpreted in light of the following limitation. The study reported respondents’ perspectives about KT in general and not in reference to on-going specific policies or research project activities. Therefore, responses provided in this study did not refer to a specific research and policy. We note that different KT activities may work for different policies and the generalised responses may not clearly highlight this fact. In this regard, generalised application of our findings may be limited. We however provide a basis for further research on this subject.

Conclusion

Strategies to improve KT are context-specific. Although a lot of work has been done on KT in high income countries, LIC, where the use of evidence would help countries use limited resources in more effective ways, still face a dearth of context-specific literature on this subject. There is need for conceptual clarity on KT, adoption of a systematic KT framework and, further understanding of the effectiveness of the different KT strategies in low-income settings.

Competing interests

The authors declare no competing interests.

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