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What is This?
Evaluation of a knowledge transfer strategy from a user fee exemption program for vulnerable populations in Burkina Faso

Christian Dagenais¹, Ludovic Queuille² and Valéry Ridde²

Abstract: As part of this special issue contributing to the development of knowledge on vulnerability and health in Africa, this article analyzes one example of a knowledge transfer strategy aimed at improving the use of research results that could help reduce the vulnerability of certain populations. In this case, since September 2008, the Non-Governmental Organization (NGO) Hilfe zur Selbshilfe e.V. (HELP) has conducted a trial of subsidizing 100% of the costs of health care for vulnerable populations in two health districts of Burkina Faso. A scientific partnership was created to produce evidence on the intervention, and a knowledge transfer strategy was developed to promote the use of that evidence by stakeholders (decision-makers, people working in the health system, funding partners, etc.). The results showed that considerable efforts were invested in knowledge transfer activities and that these led to all types of use (instrumental, conceptual, persuasive). However, considerable variation in use was observed from one setting to another. This article presents some lessons to be drawn from this experience. (Global Health Promotion, 2013; 20 Supp. 1: 70–79).

Keywords: evaluation, knowledge transfer, Burkina Faso, knowledge utilization

Introduction

The different articles in this supplement issue have contributed fundamentally to the development of knowledge on vulnerability as a research subject. However, it is also important to understand how this knowledge can be used to improve interventions. Therefore, to conclude this supplement issue, this article presents an evaluative case study of a strategy to improve the use of research results regarding vulnerable populations in Burkina Faso.

Since September 2008, the NGO HELP has conducted a trial of subsidizing 100% of healthcare costs for pregnant and nursing women and for children under the age of five years in two health districts of the Sahel region (Dori and Sebba) in Burkina Faso. This subsidy is entirely integrated into the healthcare system and operates as a third-party payer funded by the NGO. In addition to the reimbursement of healthcare costs, this intervention includes a series of support activities to strengthen the quality of care and the involvement of community-based management committees (COGES).

Given this intervention’s experimental nature and its scope, the NGO and the Sahel Regional Health Department (DRS) established a scientific partnership with the University of Montreal Hospital Research Centre (CRCHUM). The purpose of this partnership was to conduct research to produce evidence on the intervention (1). This research showed that the intervention was appreciated by the general public and allowed the quality of care to be maintained while greatly and sustainably improving equity of access to health services, protecting households financially, and strengthening the empowerment of women and of the management committees.¹

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(This article was submitted on 10 October 2011. Following blind peer review, it was accepted for publication on 28 June 2012)
To promote the use of these results by stakeholders – i.e. decision-makers at the local, regional and national levels, technical and financial partners (TFP), civil society organizations (CSO), and workers in the field – a knowledge transfer (KT) strategy was developed. Figure 1 presents the conceptual model for this strategy (2). The present evaluation has two objectives: a) to evaluate the strategy’s implementation processes; and b) to document the extent to which the targeted effects were achieved (see Figure 1).

What does the research tell us about … the use of research?

There has been a rapidly expanding trend toward using knowledge produced by research to influence practices and policies (3–5). Strategies to promote the use of research results are commonly referred to as knowledge transfer (KT) strategies (6,7). KT is a complex process that refers to both individual and organizational learning, to attitudes toward change, to decision-making, to interactions between researchers and potential users, and to the combined effects of factors related to the characteristics of actors and of the environments in which they operate. Graham and colleagues (6) have identified more than 60 models of KT.

Types of use

How knowledge is used will differ depending on the users’ needs. Three types of knowledge use have been described.

The first of these, instrumental use, occurs when users, based on scientific evidence, take a decision or make concrete changes to practices (8–10). For example, studies have shown that a preventive intervention such as distributing long-lasting insecticidal nets (LLIN) is effective in reducing the prevalence of malaria. A health worker (HW) who specifically and directly explains to the clientele of his health center the importance of LLIN use is making instrumental use of scientific knowledge.

On the other hand, conceptual use of knowledge produced by research refers to changing users’ frame of reference (11,12). In concrete terms, knowledge leads practitioners to interpret the subject in a new light, without necessarily modifying their actions or decisions. Take, for example, a local decision-maker who is convinced that making products (such as oral rehydration salts, ORS) free will result in a loss of credibility for that product, since people will believe that if it is free, it must be worthless. Upon attending a dissemination workshop on the results of a study, he learns that informing the public of the product’s use and effects will improve its appropriate use. In changing his preconceptions about the effects of making products free, the decision-maker is making conceptual use of scientific knowledge.

Finally, persuasive use of knowledge, sometimes called strategic or symbolic use, occurs when decision-makers and professionals use knowledge to legitimize their decisions or actions (6,8,10,13,14). For example, a practitioner will make persuasive use of knowledge if he uses research results to confirm his practice rather than to change it. Another example would be that of a health worker who, in a team meeting, uses the results of a study to convince a colleague that free care does not take away people’s responsibility for their own health.

Conditions of use

Studies on KT have identified a myriad of conditions related to research use, as summarized in Table 1.

Methodology

We used mixed methods to respond to our research questions. A quantitative questionnaire was used to draw a baseline portrait of users’ potential attitude towards research and of their access to evaluative research products. This baseline portrait was examined in greater detail through face-to-face interviews with 38 key informants (eight NGO members; seven local and regional decision-makers; four TFP representatives; five CSO representatives; 11 field workers; and three managers at the central level). The results presented in this article are drawn from the analysis of documents (reports of meetings, terms of reference, research notes and reports, etc.) and from a thematic analysis of the qualitative interviews. At these interviews, notes were taken systematically and then content analysis was carried out. The preliminary results were presented in November 2011 in Burkina Faso. A detailed report of the evaluation, of which this article is a summary, was produced and widely distributed (18). The quantitative results are presented in that report.
Figure 1. Logic model of the knowledge transfer strategy.

RHD: Regional Health Director; DMO: District Medical officer; MoH: Ministry of Health; CSO: Civil Society Organization; INGO: International Non-Governmental Organization; NHDP: National Health Development Plan; TFP: Technical and Financial Partner
Table 1. Categories of conditions that encourage research use

<table>
<thead>
<tr>
<th>Characteristics of the users</th>
<th>Characteristics of the knowledge</th>
<th>Strategies for knowledge transfer and support</th>
<th>Characteristics of the researchers and of their settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptivity and positive attitude toward research</td>
<td>Good fit with the users’ values and needs</td>
<td>Should take into account the characteristics of the target groups and their needs</td>
<td>Researchers’ attitude toward collaboration</td>
</tr>
<tr>
<td>Perceived utility of the research</td>
<td>Applicability</td>
<td>Should be based on a relationship of trust with users</td>
<td>Researchers’ skill in adapting knowledge (or ability to surround themselves with people to do this)</td>
</tr>
<tr>
<td>Expertise with respect to the knowledge produced by the research</td>
<td>Users’ level of involvement in producing the knowledge</td>
<td>Exchange mechanisms (formal and informal)</td>
<td>Researchers’ credibility in the eyes of the users</td>
</tr>
<tr>
<td>Organizational context</td>
<td>Accessibility of the information</td>
<td>Common language</td>
<td>Researchers’ ability to relate to other people</td>
</tr>
<tr>
<td>Organizational culture that values research</td>
<td>Appropriate production schedule</td>
<td>Activities conducted at the right time</td>
<td>Funding dedicated to KT activities</td>
</tr>
<tr>
<td>Organization’s level of involvement in the transfer process</td>
<td>Adaptation of the format in which the knowledge is presented</td>
<td>Support and regular follow-up (systematic measurement of progress)</td>
<td>Recognition of the value of KT activities by the university establishment</td>
</tr>
<tr>
<td>Strong leadership from management</td>
<td></td>
<td></td>
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<tr>
<td>Consensus on the nature of the needs for knowledge</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Common and shared vision of the results to be achieved</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources dedicated to Knowledge Transfer (KT) activities</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Sources: 15–17)

Results

The results are presented below in two sections corresponding to the objectives of the evaluation.

Processes for implementing the KT strategy

Activities carried out.

The scope of the efforts invested in KT was very broad. In addition to numerous scientific publications and communications, the team produced and distributed widely four policy briefs and an advocacy document that summarizes in 43 pages the key research results available as of the end of 2010. The team also organized a number of major activities for sharing research results at the local, regional and national levels: dissemination workshops; theater forums; press conferences; cultural evenings. In all, nearly 50 activities were carried out, reaching hundreds of people. Thus, the number of activities organized to share results was far greater than the average seen in many other KT projects.

Factors related to use

Expertise required to use the knowledge produced.

Few participants have the skills required to read and understand scientific publications, judge their...
quality and put them into practice. Several told us that, in general, few people read and that reading research documents is not something they normally do. This is why dissemination workshops continue to be the strategy that seems to have the greatest impact:

...If I had been given the document, like that, I probably never would have read it, but with the dissemination workshop, in two hours we experienced the project (TFP representative).

Scientific jargon continues to be an obstacle to understanding, and several respondents spoke about their problems identifying what they were supposed to retain:

The scientific nature … not easy to understand the graphs, the statistical data, I asked a lot of questions; there needs to be a way to make this accessible… (CSO representative).

Also mentioned was the fact that:

...there really isn't any competency to translate research results into action on the ground… (local decision-maker).

On the other hand, several respondents remarked that the accessibility of the content in the dissemination workshops had improved over time.

Open-minded attitude to research.

When the project began, openness to research was considerably less and several people expressed a certain mistrust or scepticism about its utility:

At the beginning, people thought they didn't have time to devote to research; afterward, they understood that they needed it (local decision-maker).

It should be noted that, for some of them, their previous contact with researchers had often been limited to data collection. We can reasonably assume that all the KT activities allowed many people to become more familiar with research and to see some of its benefits:

Before, dissemination workshops were rarely held, but they are more frequent with this project...and this is the first time we see a research project that brings information all the way back to the community level (local decision-maker).

Difficulty reaching all target groups to the same extent.

The extent of KT activities coverage for the different target groups was uneven. The analysis highlighted the difficulty of reaching people at the highest levels in the system, as well as front-line workers. With regards to national decision-makers at the Ministry of Health (MoH) level, it appeared to be much more difficult to get them involved in knowledge sharing activities, or to know what information had made its way up to the highest authorities. We ourselves found it very difficult to obtain a few minutes' audience with high-ranking officials, and those encounters were not very informative. However, representatives from various MoH departments did attend some of these activities. The team also managed to arrange for a member of the National Assembly to attend a results-sharing day in 2010, to which the General Secretary of the MoH came, but only to make the opening address. It is also difficult to share knowledge with local health workers. Despite the large number of activities, only a small proportion of these workers were able to attend. Therefore, it was up to those few to bring the relevant information back to the front lines. However, it seemed this was not very often done, and we observed that few people in the health centers had seen the policy briefs or the advocacy document. Thus, it appears few health center representatives are able, or willing, to play this relay role.

With respect to the timing of knowledge sharing, some people considered that the time and resources required for a rigorous study represented an “obsession with perfection” (TFP representative). However, certain key periods were identified as being opportune for dissemination:

...we know the districts carry out planning activities: we need to think about what could be relevant to the districts and put a dissemination strategy in place at the right time (local decision-maker).

Presenting the information in an appropriate format.

It appears that investing resources in writing documents based on research is not the best strategy to influence change:
...some projects are less used than others, for example, big reports, but dissemination workshops are the best! (CSO representative)

One respondent, in fact, pointed to two very full four-inch binders that contained the documents produced by the project team. According to him:

...the key points have to be collected from this mass of documents, since even a very motivated person cannot read it all.

Dissemination workshops are considered the most effective strategy: “when we do one, we see the difference among those who attend” (HELP member). However, the success of this strategy depends on the presence of relayers who will bring the information back to their service or to the community:

...those who work with the community need to pass the information along, so it has to be easily digestible (health worker).

Degree to which the targeted effects are achieved

First, it is important to point out that everyone knew, in general, the effects of the user fee exemption program, which was a first indication that the essential information was being circulated. The following paragraphs describe the situation for each group of actors, with emphasis on the types of use employed.

NGO help

The respondents said that, in the beginning, the NGO members’ participation was more passive, but over time they began to read the documents and realized they could use the results. However, some acknowledged they could do much more: ‘... every time there’s a report, we need [to organize] a team activity around it.’ Some also admitted to us that, in the beginning, the research ‘was completely abstract’ and that they did not believe we could obtain results that would be so useful. The research was able to confirm certain ways of doing things and this could be ‘reassuring’ (persuasive). It could also ‘make it possible to convince decision-makers of the need to change; Sebba is now in first place in terms of coverage, whereas it used to be at the bottom. This is a source of pride and a good example’ (persuasive). The results were also useful for adjusting the program, for instance, by putting in place a mechanism to accelerate reimbursements (instrumental). In addition, they recognized there was room to optimize and better develop the ways in which this information is transmitted within the team:

...there would need to be [some meetings] to put this information on the table and see how it can be used (conceptual).

Civil society organizations

These organizations use research knowledge to substantiate their advocacy efforts with the authorities (persuasive). Thus, they were able to use the results, which showed that the NGO’s program produced better effects than the national subsidy for deliveries that requires women to pay 20% of the cost. Some of these participants thought the information should be disseminated everywhere:

...we need people who will go out and explain the results; once the public and the health workers are convinced, this will help decision-makers to make the right decisions.

Local health workers

Despite uneven exposure to the results, health workers use the knowledge disseminated to make many adjustments. The example most often reported had to do with the quality of medical prescriptions:

...we were able to use this in supervision – the workers understood that some prescriptions were not rational and this changed – and to set up training on rationalizing prescriptions (instrumental).

Some participated actively in dissemination workshops, and their discourse showed they had learnt a lot. For example, one participant, upon his return, printed out some key phrases from the research documents and affixed them to the walls of the health center (instrumental). The research helped them to understand that the problems they were
experiencing were the same as in other health centers, but also that the public was benefiting and was satisfied (conceptual).

**Local and regional decision-makers**

Even though some decision-makers did not seem to be very aware of the results, at the district level there were three types of use: a) to plan certain activities, “…we base our planning for the coming year on the results of the past year” (conceptual); b) to allocate resources, for example, to deal with the workload (instrumental); and c) to realign their perceptions based on evidence: “everyone could clearly see that the workload had increased, but that it was not excessive; [after this] no one complained about workload anymore” (persuasive).

**National decision-makers**

Only three respondents from the national level were able to engage in a short interview, from which we were unable to draw any conclusions regarding the effect of KT efforts. However, this difficulty only highlights the process issues raised above regarding the involvement of high-ranking officials.

**Technical and financial partners**

One respondent suggested that the project results should be presented at a round table that would include the minister responsible for the budget (persuasive). However, they are conscious of the need to ensure the State would have sufficient budget for the exemption (conceptual). In addition, they noted that there is, among certain TFPs, a growing “…concern for scientific validation … and that’s an added value” (instrumental).

Based on these data and the empirical details presented elsewhere (18), the key results of this evaluation are summarized in Table 2.

**Discussion**

The entire KT strategy (Figure 1) developed to promote the use of research results regarding vulnerable populations, the theme of this special issue, is coherent. The results clearly show that the outputs produced can lead to the desired effects. Indeed, a number of significant efforts were invested in KT activities, and they led to every type of use. However, some tools were more effective than others (for example, the dissemination workshops).

To better understand the strengths and limitations of this strategy, it is helpful to review the main conditions for research use (Table 1).

At the user level, our results show that users developed an increasingly positive attitude towards research and considered it useful (17,19). However, several respondents appeared not to have the skills required to understand the information when it was transmitted in scientific jargon (20).

With regards to organizational contexts that promote research (17), there was considerable variation from one setting to another. At the local and regional levels, some settings were very supportive and others were closed. As for the national level, because we encountered, as did others (21), difficulties in trying to involve high-ranking officials, we are unable to say anything in this regard. However, at the level of the NGO and some TFPs, there is a steadily increasing desire to use research to guide actions.

With regards to knowledge, additional effort is needed to make information more accessible, to explain how to put knowledge into practice, and to adapt to users’ work calendars (22,23).

As for strategies to transfer knowledge and support its use, the needs of target groups were taken into account in terms of content, but written documents were not the best means of dissemination, since few people admitted to having read them. A relationship of trust was established, and mechanisms for discussion and exchange such as dissemination workshops were by far the most effective; however, these benefited mainly the people who attended and could become very expensive and destabilize the functioning of some institutions (24). Also, developing a common language, adapting the format in which the knowledge is presented, and transmitting the information to the right persons at the right time continue to present challenges (25).

Finally, the researchers’ very positive attitude towards collaboration, their ability to relate to people, and their credibility in the eyes of users all certainly helped to produce the measured effects, as did the significant funding provided for the KT activities. However, until such time as universities explicitly recognize these activities in researchers’
Table 2. Types and examples of knowledge use by different target groups

<table>
<thead>
<tr>
<th>Types of use</th>
<th>Instrumental</th>
<th>Conceptual</th>
<th>Persuasive</th>
</tr>
</thead>
<tbody>
<tr>
<td>NGO</td>
<td>• Putting in place a mechanism for more rapid reimbursement</td>
<td>• Reflecting on how they use knowledge</td>
<td>• Confirming how they do things</td>
</tr>
<tr>
<td>• Reflecting on how they use knowledge</td>
<td>• Convincing decision-makers</td>
<td>• Providing arguments for advocacy</td>
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</tr>
<tr>
<td>• Confirming how they do things</td>
<td>• Convincing decision-makers</td>
<td>• Providing arguments for advocacy</td>
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<tr>
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<td>• Providing arguments for advocacy</td>
<td>• Providing arguments for advocacy</td>
<td></td>
</tr>
<tr>
<td>CSO</td>
<td>• Changing practices (prescriptions, reception of women, etc.)</td>
<td>• Knowing the community and its needs better</td>
<td>• Using the program as an example</td>
</tr>
<tr>
<td>Local health workers</td>
<td>• Changing practices (prescriptions, reception of women, etc.)</td>
<td>• Knowing the community and its needs better</td>
<td>• Using the program as an example</td>
</tr>
<tr>
<td>• Redistributing the workload</td>
<td>• Planning certain activities (annual action plans)</td>
<td>• Understanding the effects of the intervention</td>
<td></td>
</tr>
<tr>
<td>• Changing the allocation of resources</td>
<td>• Using this as a source of inspiration for the health insurance program</td>
<td>• Using the program as an example</td>
<td></td>
</tr>
<tr>
<td>Local and regional decision-makers</td>
<td>• Using this as a source of inspiration for the health insurance program</td>
<td>• Using the program as an example</td>
<td></td>
</tr>
<tr>
<td>TFP</td>
<td>• Being concerned about obtaining scientific data</td>
<td>• Using this as a source of inspiration for the health insurance program</td>
<td>• Using the program as an example</td>
</tr>
</tbody>
</table>

Source: Interviews

academic promotion processes (26–28), such activities will be left to a few hard-core passionate researchers who greatly exceed the mandates given to them by their institutions.

Conclusion

This article describes the main results of the evaluation of knowledge transfer activities undertaken in conjunction with an intervention to improve the conditions of existence of vulnerable persons. Beyond the knowledge of the concept of vulnerability presented in the other articles of this special issue, this analysis shows that the entire intervention logic of KT is coherent and that the products of the activities envisioned within this component can lead to the desired effects on several levels, which is essential for taking action. However, at the same time, the results show that settings vary significantly and that certain tools are more effective than others. Several lessons can be drawn from the evaluation of this KT strategy (Box 1).

Box 1. Key lessons learnt

- Create homogeneous groups for the dissemination workshops to adapt the content to the audiences
- Focus the presentations on a few key messages
- Transform and synthesize information
- Use a specially trained person to present the information
- Adjust the knowledge dissemination strategy to suit users’ planning calendars
- Train and support ‘multiplying agents’ to retransmit information in the various settings

Acknowledgements

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Conflict of interest
None declared

Notes
ii. An exhaustive list of these activities is presented in Appendix 4 of the final report (18).

References


