

Viewpoint

Communities of practice: the missing link for knowledge management on implementation issues in low-income countries?

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Summary

The implementation of policies remains a huge challenge in many low-income countries. Several factors play a role in this, but improper management of existing knowledge is no doubt a major issue. In this article, we argue that new platforms should be created that gather all stakeholders who hold pieces of relevant knowledge for successful policies. To build our case, we capitalize on our experience in our domain of practice, health care financing in sub-Saharan Africa. We recently adopted a community of practice strategy in the region. More in general, we consider these platforms as the way forward for knowledge management of implementation issues.

keywords knowledge management, user fee, community of practice, implementation science

Introduction

The 2000 Millennium Summit and the MDGs have created a strong momentum for programs and strategies addressing major health problems in low-income countries, at global, regional and country level. At global level, massive efforts have been made by the scientific community to clarify what interventions should be prioritised. The evidence is often robust (Jones *et al.* 2003; Campbell & Graham 2006). At country level, several heads of state of sub-Saharan Africa – where the health care battle is most tense – have taken bold action to accelerate progress towards the health MDGs. In many countries, this trend only seems to accelerate as 2015 approaches. This political dynamic in the south matches a parallel momentum in the north, sometimes accompanied by significant financial commitment (Sachs & McArthur 2005; Lancet 2007).

This scientific and political leadership is most welcome. Yet, it will not suffice. The countries lagging behind the most in terms of human development are often also those where operational constraints are most binding. Bold decision-making by governments may eventually lead to disappointing results if implementation of necessary

reforms lags behind. This article advocates better implementation of policies in low-income countries through better knowledge management. To make our point, we start from our own domain of practice, health care financing and zoom in on the recent decision by several governments to remove user fees for some key health interventions. We will show that implementation constraints are severe and that knowledge management (KM) – here understood as “the discipline of enabling individuals, teams and entire organizations to collectively and systematically capture, store, create, share and apply knowledge, to better achieve their objectives” (Young 2008) – has been far from satisfactory in many cases. We will then rapidly review what is problematic about the current practice of KM at national and international levels. Our assessment is based on our experience, but many issues we raise will probably sound all too familiar to many experts in the region. We then share with the readers the approach we are currently taking with a growing group of actors in sub-Saharan Africa. Our hypothesis is that the *community of practice strategy* could be a real breakthrough for managing knowledge on implementation challenges.

Removing financial barriers to accelerate progress towards MDGs 4 and 5

There is broad consensus among actors today that rapid progress towards the MDGs 4 and 5 requires addressing the financial barriers constraining households in their utilisation of high-impact interventions, including payment at the point of use (The Global Campaign for the Health Millennium Development Goals 2009). Direct payment at the point of use prevents millions from accessing services (WHO 2010). Some authors advocate free health services, if not for everybody, then at least for women and children (Yates 2010). This is consistent with the claim that elimination of user fees for basic health services would be a ‘quick win’ for the MDGs (Sachs & McArthur 2005), and with simulations forecasting the positive impact of such a policy on child mortality (James *et al.* 2005).

Over the last years, several governments of low-income countries (LICs), in sub-Saharan Africa in particular, have decided to ‘abolish’ user fees (Yates 2009). The free package varies; sometimes, it focuses on caesarean sections (as in Mali or Benin), but often it is broader and involves also normal deliveries or even curative care for children under 5 years old (as in Burundi or Sierra Leone). These experiences are too recent to allow impact assessment. Moreover, there will be several empirical challenges, including measuring the effect on all the relevant outcome variables (previous experiences have shown that abolishing user fees can have unintended negative effects on the health system) and attributing changes in these outcome variables to the policies (Ridde & Haddad 2009). There is, however, sufficient experience at country level to reflect on how these ‘free care’ national policies have been formulated and implemented in the recent past.

Several reviews of experiences and studies (Meessen *et al.* 2009; Richard *et al.* 2010; Ridde & Morestin 2010; Witter *et al.* 2010) have identified matters for concern (Table 1). At a recent regional workshop, 15 delegations of African countries shared their experiences and concurred with these findings (Harmonization for Health in Africa 2010). Among other things, it appears that the display of leadership by the highest national authorities can be a sword with two edges. Presidents sometimes announce user fee removal policies for the public health sector out of the blue, without leaving sufficient time to technicians to correctly design, prepare and implement the reform. In the list of identified problems, several are related to KM: lack of coordination, insufficient stocktaking of international evidence, incomplete formulation of the policy, inappropriate design, poor communication, insufficient involvement of different stakeholders and lack of monitoring and evaluation. Consequently, some national policies may fail to bring the expected results.

Limits of the current knowledge management model: silo mentality mindset

Obviously, this divide between advocacy and political action on the one hand and policy implementation on the other hand is matched by a knowledge divide. Among international health scientists, this knowledge problem is increasingly seen as an imbalance in terms of scientific knowledge: we know far more on the ‘what’ (the so-called quick wins or high-impact interventions) than on the ‘how’. The subsequent recommendation is to undertake ‘implementation science’ (Madon *et al.* 2007; Remme *et al.* 2010). We agree with this view, but our experience with user fee removal policies taught us that this is still an

Table 1 Some weaknesses in recent user fee removals in low-income countries

Formulation and design of the policy

Insufficient stocktaking of scientific evidence.

Lack of consultation of technicians by policy makers.

Limited involvement of frontline actors in the design stage.

Lack of attention to other barriers constraining delivery and utilisation of free services.

Rather basic estimation of the impact of the free health care policy on the utilisation by the population and its consequences in terms of extra burden on frontline health staff and on the public budget.

Implementation

Insufficient planning of the different steps to implement the reform, including of the accompanying measures to accommodate the increase in service utilisation.

Insufficient commitment, allocation or disbursement of resources to finance the increase in utilisation.

Insufficient communication towards main stakeholders, users and actors in charge of implementation in particular.

Monitoring and evaluation

Insufficient effort in monitoring, evaluation and enforcement, including lack of periodic review of the policy and limited attention to who benefits from the policy.

Lack of involvement of researchers to ensure proper evaluation of impact.

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incomplete diagnosis made from the perspective of the scientific community only. The problem is broader.

A recent article on the situation in high-income countries provides better keys to understand where problems lie. According to Jansen *et al.* (2010), public health includes three major fields: policy, practice and research. Today, each of them is organised as an ecological *niche* (Choi *et al.* 2005), and thus characterised by specific ideologies, norms, jargon, internal orientations, communication channels, internal codes of behaviour, self-directed learning processes, autonomy and the desire to protect their way of functioning against the outside world. The disconnection between scientists (in charge of producing evidence), top officials (who have the required knowledge for policy making) and practitioners (who have the operational experience) largely explains the research-to-policy and the policy-to-implementation gaps: each party ignores or even despises the knowledge held by the other.

This analysis also applies to LICs. In donor-dependent countries, one could even add a fourth field, aid, which, to a large extent, also has its own niche characteristics. Let us rapidly sketch the problems in each of these four 'niches' or 'knowledge silos' in regard to implementation knowledge.

Contribution by scientists to implementation knowledge

A lot has been written on the shortcomings of conventional research. These are all the more blatant once one recognises good policy implementation as a priority knowledge area.

First, scientists tend to be too much driven by the constraints and practices of their own niche when selecting research questions. For instance, tens of articles have been written over the last two decades on how user fees constituted a barrier to health service utilisation; this was indeed a question on which scientific peers agreed and furthermore a relatively easy one to address with household surveys or routine health information systems. How public budget resources were accessed and used by health facilities have been far less studied, despite the fact that this is an obvious and crucial question whether user fees are to be removed. Such a question requires both a good understanding of public finance and a good collaboration between scientists and the government; their neglect could be an indication of an observational bias or of an insufficient level of trust between them and the authorities.

Scientists tend to overlook implementation questions. Yet, they could contribute to better implementation in at

least three ways: (i) through policy impact evaluation (what works in the 'real' world?); (ii) qualitative studies on why an intervention succeeded or failed; and (iii) assistance to policy makers and practitioners to increase rigor in their decision-making process. For all three, opportunities are being missed today, as there happen to be solutions: appropriate research designs (Madon *et al.* 2007; Gertler *et al.* 2010; Parkhurst *et al.* 2010), new methodological approaches (e.g. Realist Evaluation) (Pawson 2006) and good collaboration on the field (e.g. through operational research and action research) (Grodos & Mercenier 2000; Zachariah *et al.* 2009; Remme *et al.* 2010). The reasons why these three things are somewhat lacking are various. Policy impact evaluation requires excellent collaboration between scientists and policy makers, whilst for the two others, there are maybe problems of legitimacy within the scientific community, but also a lack of capacity (scientists do not know much on the 'how' and rarely manage to tap the knowledge of policy makers and implementers).

Scientists are also often underinvesting in terms of knowledge transfer (Lavis *et al.* 2010). Many are aware of the limited leverage of peer-reviewed publications (usually the end product in their 'niche') over policy makers. Nevertheless, most of them seem to confine themselves to interaction models where they are the main knowledge holders and their ultimate ambition is to make research into policy and 'practice' through 'push' (e.g. policy briefs) or 'pull approaches' (e.g. knowledge depository on which knowledge users can draw). Obviously, this is not enough. Policy makers overwhelmingly call for long-term interpersonal relationships, mutual trust and easy access to advice (Innvaer *et al.* 2002; Hyder *et al.* 2010). Other scientific practices which are dubious from an implementation perspective are the following: the short format of articles (not the most appropriate way to convey knowledge on the 'how' and the influence of the context); the bias of scientific literature towards successful interventions, whereas from an implementation perspective, failures are equally interesting (Peters *et al.* 2009); the general orientation of incentives in the academic world ('publish or perish') (Ridde 2009); and the dominance of English in science.

Even capacity building activities that academics are in charge of are often falling short. Too many Masters in Public Health programs focus on knowledge domains far removed from policy formulation and implementation (e.g. quantitative techniques, epidemiology). They also do not allow to acquire 'tacit knowledge' (Polanyi 1962): the 'how to' of things cannot easily be conveyed through books or ex cathedra teaching; operational knowledge requires close human interaction in the field with other professionals and even career movement.

Knowledge management by policy makers

The knowledge practices by policy makers also display weaknesses. Their main 'knowledge to action' management model is the planning cycle: (i) identification of the problems; (ii) priority setting; (iii) objective formulation; (iv) identification of strategies and actions to be taken; (v) budgeting of resources; (vi) implementation; (vii) monitoring and evaluation.

In too many LICs, senior cadres of the Ministry of Health are reluctant to involve some key stakeholders to carry out this exercise. This may lead to a gap between their vision and demands by the population, which could ultimately bring disappointing responses by the target groups. Similarly, dissatisfied frontline actors, so-called street level bureaucrats, have actual power to obstruct the implementation of policies (Lipsky 1980). There is evidence of similar phenomena in user fee exemption policies (Walker & Gilson 2004; Agyepong & Nagai 2011).

Long-established routines may also lead to rigidity in the decision-making process. This is particularly the case for budget allocation. Cost-effectiveness evidence (just like evidence in general!) is not used enough when setting the priorities. Also, in too many ministries of health, there is a lack of coordination between those in charge of producing the plan and those preparing the budget.

A key prerequisite for the success of the planning cycle model is ... to comply with it. Several problems with user fee removal reforms in LICs are because of a lack of respect for these basic rules. This is true in the 'preparatory stage' (because of the impatience of the highest authorities), but also for other stages such as monitoring and evaluation (too often ignored or not inspiring revision of the policy) (Meessen *et al.* 2009).

International organisations and aid agencies: failing as well

Much less has been written on the KM practices of aid agencies. Aid actors have various profiles; whilst most apprehend their assistance to countries in terms of both financial and expertise assistance, there is substantial variation in their approach to KM (McGrath & King 2004). The penchant of many is to be inward looking and to focus on the knowledge required for their own operations or even bureaucracy – incentives are not to connect and share with 'outsiders' on implementation challenges.

Some major players, like the World Bank, WHO or DFID, have acknowledged the public good dimension of knowledge and have actively supported or developed KM strategies (World Bank 1998; McGrath & King 2004;

Barrett *et al.* 2005). However, most of these efforts have gone to platforms dedicated to explicit and codified knowledge with universal pretention (e.g. website to share scientific evidence or guidelines); situated implementation knowledge receives much less attention. When one adopts KM as a collective responsibility, no one can avoid blame: even international NGOs, which have a lot of field experience to share, overlook their possible contribution to more global knowledge (Zachariah *et al.* 2010).

Frontline actors: too isolated

Most frontline actors are not taking part in knowledge exchanges taking place outside their own organisations. The compelling pressure of daily activities explains a lot, but there is also an issue of isolation and lack of connections with existing platforms and sources of knowledge. This is a source of missed opportunities, as 'good practices' are not shared enough.

A major strength of frontline actors is of course their aptitude to contribute to a bottom-up process in terms of generation and accumulation of implementation knowledge. This capacity is particularly valuable when it leads to giving voice to experienced actors with less power in the KM chain – too many actors today are not part of the KM process. However, if disconnected from field practice, advocacy may also become a domination attitude of 'telling what is right' much more than 'helping on how to do things' – it is an issue in the debate on financial access to health services (Agyepong *et al.* 2011).

What should be performed: co-production of knowledge on the 'how'

The growing interest in 'implementation science' is welcome. We can hope that recent well-funded initiatives such as the Implementation Research Platform hosted by the Alliance for Health System Research will change attitudes. Implementation science has been a field of work for at least 30 years in other sectors, and the health sector can definitely learn from them (Pressman & Wildavsky 1984; Saetren 2005). However, much more is needed.

As we have seen, scientists – who tend to universalism or at least identifying patterns – are not necessarily the best equipped for dealing with situated knowledge. One can even think that as for 'implementation knowledge', 'know-how' or 'knowing-in-practice' (Orlikowski 2002) – whatever one calls it, scientists will always fight a battle late (especially in fast changing environments).

Let us acknowledge that in LICs the policy knowledge domain involves at least seven types of knowledge holders: policy makers, frontline managers and practitioners (both

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from the public and the private sector), experts (including technical assistants working for aid agencies), scientists (from both south and north), training institutes, media and users. The challenge therefore is not so much to progress in a single niche or even to build bridges between researchers and policy makers, but to develop optimal collaboration on knowledge between all knowledge holders. We need a strategy covering all the levels of the knowledge-value chain (Landry *et al.* 2006).

How could the new models of KM needed for rapid progress towards the MDGs and better health in LICs look? What would be obvious steps to take? First, actors of each ‘niche’ need to recognise the limits of their current practice in terms of knowledge generation and management and assess whether they pay enough attention to issues related to implementation of policies. For instance, research sponsors, academic institutions, scientists and scientific journals would have to broaden their areas of interest to include implementation issues. Ministries of health should introduce a culture of knowledge in their administration; it has been performed with success in several countries (Frenk 2006). Aid agencies, but also major non-governmental organisations, would reconsider their role and internal functioning in this respect. Experience has shown for instance that NGOs have a comparative advantage to test innovative strategies for improving financial access by the poor to health services; they can also play a role in fostering transfer of the knowledge accumulated on the field (Ir *et al.* 2010). Even the division in pillars among United Nations agencies is not tenable anymore. Actors have multiplied, and all of them hold bits and pieces of the knowledge.

This leads to the second requirement: we need platforms where different knowledge holders are able to interact on a regular basis. These platforms should have the same

attributes of the scientific model (co-production and open access), plus two attributes: (i) they should involve experts working at the different levels of the knowledge-value chain, i.e., destroy the walls between the four main niches; (ii) give centrality to the ‘know-how’.

Communities of practice: a way forward?

A growing group of experts think a *community of practice* is the way forward. A community of practice can be defined as a group of people who decide to deepen their knowledge and expertise in an area by interacting on an ongoing basis (Wenger *et al.* 2002). The concept was originally developed to acknowledge the fact that learning also takes place in social relationships rather than through books or ex cathedra teaching only. Whilst ‘communities of practice’ are *de facto* all around, the concept has gained instrumental significance when it was articulated as a KM strategy. Its strength is to fully recognise the importance of sharing both explicit and implicit knowledge (thus, the emphasis put on interaction with peers and practitioners in a climate of mutual trust). The community of practice is today a mainstream KM strategy in the business sector, but is also increasingly adopted in the public and health care sector (Li *et al.* 2009; Ranmuthugala *et al.* 2010).

Over the last years, several communities of practice have been launched in international health areas (Thomas *et al.* 2010). Some of them try to bring together all the actors who hold some of the knowledge necessary to let reforms and policy implementation succeed. A major effort is made especially under the Harmonisation for Health in Africa (HHA) umbrella, i.e., across the traditional ‘walls’ between major aid agencies (Table 2).

Table 2 Working together on implementation knowledge in sub-Saharan Africa

The AfDB, UNAIDS, UNFPA, UNICEF, WHO, DFID, USAID and the WB established a mechanism to support country-led efforts at health system strengthening leading to the accelerated attainment of health outcomes, particularly the MDGs. This mechanism—known as Harmonisation for Health in Africa (HHA)—is consolidating its position as the main operational and capacity building support modality to countries and development partners to support the agenda of Health Systems for Outcomes (HSO). HHA works in the context of the new global initiatives for strengthening health systems, such as the International Health Partnership (IHP+), the Catalytic Initiative and the Global Campaign for the Health MDGs.

HHA was conceived as a regional mechanism through which collaborating partners agreed to focus on providing support to governments in Africa, more in particular in the areas of Health Financing, Human Resources for Health, Pharmaceuticals and Supply chains, Governance, Service Delivery, Monitoring and Evaluation and Infrastructure and ICT.

HHA supports several Communities of Practice (CoPs), one for each of the WHO health systems pillars. Each CoP is supported full time by a partner agency of HHA; members are relevant experts and decision makers from governments, donors and academia.

These African CoPs are virtual institutions. They meet face-to-face but use also all the opportunities of ICT tools to bring expertise together and consolidate their position (<http://www.hha-online.org>). ICT help to create a structured environment where requests for technical assistance and documents and tools can be made and addressed, and where expert knowledge related to the specific CoP topics can be shared with relevant counterparts. These CoPs should ensure that government or donor requests for assistance never go unheard and efficiently reach the most relevant people.

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Several African communities of practice (CoPs) have taken off recently, like the ones on performance-based financing, evidence-based budgeting and human resources. HHA partners are rather dynamic: for instance, acknowledging problems experienced by user fee removal policies, they have recently agreed to broaden the focus of the health insurance CoP to all strategies that can improve financial access to health services (Harmonization for Health in Africa 2010).

Membership of the HHA CoPs is flexible. CoPs are expected to mainly target African experts, who accumulate daily expertise on a specific domain of knowledge, as they work for ministries of health, health facilities, NGOs, aid agencies or academic institutions. Together, they should identify knowledge gaps and develop activities accordingly (workshops, training sessions, a collective book, guidelines, an electronic discussion group, or dissemination of relevant literature and good practices).

Facilitators of the CoPs ensure that different activities consolidate the identity of the community; they seize the new opportunities provided by information and communication technology (e.g. virtual social networks), but also organise face-to-face events. A key concern is to increase expertise and career opportunities of members (e.g. through training, access to job offers and organisation of the expert market at regional level).

It is of course too early to assess the impact of these first CoPs. Interesting lessons are, however, emerging from the rapid roll-out of performance-based financing schemes in Africa, and the role played by the concerned CoP (Table 3) (Meessen *et al.* 2011a,b). These lessons are consistent with

those reported in the literature (Wenger *et al.* 2002). They indicate that working together with a common vision and knowledge basis, constantly exchanging views with peers on technical issues and favouring mobility of experts are powerful ways to transfer operational and tacit knowledge for better policy implementation. The regional level seems particularly conducive for such a positive dynamic.

What could be performed to make CoPs succeed?

Getting a CoP taking off and contributing in a significant way to knowledge production and dissemination is challenging. It is the accumulation of experience that will help the international health community to fine-tune the strategy. Success of these new platforms for sharing and building common operational knowledge will only be possible if they are recognised and supported by all the actors with a mandate or an activity in the domain of interest. This implies that ministries of health, academic organisations, aid agencies and NGOs, among others, allow their personnel to contribute as ‘experts’ to these CoPs, and cut red tape and institutional flag holding. Academic institutions need to value the participation of their researchers in these platforms appropriately. Ministries of health should allow their technicians to share their experience with their peers beyond their borders. Aid agencies must recognise that they have to align their operations to country’s needs, coordinate better, consolidate common platforms, ensure their funding and play a key role in their monitoring and evaluation. International NGOs must drop their far too common ‘we do best if we

Table 3 Performance-Based Financing CoP

Objectives: The current main objective of the PBF CoP is to build a critical mass of high-quality African experts in PBF. The assessment is that the best solution is to strengthen capacity of practitioners already involved in implementing PBF schemes and boost circulation of their expertise. The CoP also aims at consolidating the body of knowledge on PBF through the identification of good practices and their dissemination. The role of some pioneer countries (e.g. Rwanda, Burundi) is key in the production and promotion of approaches which have proved to work.

Process: The CoP was launched in Burundi in February 2010. The majority of the participants at the launching event were experts with already substantial experience in designing, implementing or assessing PBF schemes. Later an online discussion group was launched (<http://groups.google.com/group/performance-based-financing>). The group already gathers more than 300 experts, active on the different knobs of the knowledge chain. The CoP has a part-time facilitator and is governed by its members, through a steering group. Different knowledge activities are organised by the CoP: workshops, training courses, a collective book, a working paper series, a toolkit and e-discussion...

Achievements: PBF is expanding rapidly in sub-Saharan Africa. It creates a strong demand for knowledge; the CoP has established itself as the main platform for knowledge exchange and development.

Early lessons for the management of a CoP: (i) target individuals, but also obtain political buy-in from organisations playing a key role in the implementation of the specific strategy; (ii) ensure a good balance of face-to-face events (for members to get to know each other) and virtual interaction (to sustain the momentum between events); (iii) launch enough knowledge activities to mobilise members, keep a good rhythm and make sure events are exciting; (iv) acknowledge that knowledge holders join the CoP with different backgrounds and purposes; try to bring added value to members, through individual development and career opportunities (e.g. share information on courses and job vacancies); (v) appoint a facilitator, set up a steering group, delegate management of activities to members; (vi) seize social networking opportunities offered by ICT.

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go it alone' approach and dare to take responsibility for success beyond their own projects. Eventually, public and private donors concerned with global public goods could give a major push to the strategy by opening funding opportunities for CoPs at national, regional or even global level.

For many people living in LICs, good access to effective health services remains a distant dream. There are several bottlenecks, but a frustrating one is flawed implementation because of poor management of implementation knowledge. Together, we could be much more effective in sharing and building this knowledge.

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