

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/309754263>

Stakeholder’s perspective: Sustainability of a community health worker program in Afghanistan

Article in Evaluation and program planning · February 2017

DOI: 10.1016/j.evalprogplan.2016.11.004

CITATIONS

0

READS

30

3 authors:



Said Ahmad Maisam Najafizada

Memorial University of Newfoundland

6 PUBLICATIONS 7 CITATIONS

SEE PROFILE



Ronald Labonté

University of Ottawa

322 PUBLICATIONS 4,253 CITATIONS

SEE PROFILE



Ivy Lynn Bourgeault

University of Ottawa

134 PUBLICATIONS 1,201 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



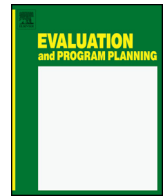
Health Impact Assessment of the Trans-Pacific Partnership Agreement [View project](#)



A health systems analysis of the Afghan Community Health Workers program [View project](#)

All content following this page was uploaded by [Said Ahmad Maisam Najafizada](#) on 11 November 2016.

The user has requested enhancement of the downloaded file. All in-text references [underlined in blue](#) are added to the original document and are linked to publications on ResearchGate, letting you access and read them immediately.



Stakeholder's perspective: Sustainability of a community health worker program in Afghanistan



Said Ahmad Maisam Najafizada^{a,*}, Ronald Labonté^b, Ivy Lynn Bourgeault^c

^a Division of Community Health and Humanities, Faculty of Medicine, Memorial University of Newfoundland, Canada

^b School of Epidemiology, Public Health and Preventive Medicine, University of Ottawa, Ottawa, Canada

^c Telfer School of Management, University of Ottawa, Ottawa, Canada

ARTICLE INFO

Article history:

Received 1 August 2016

Received in revised form 27 October 2016

Accepted 6 November 2016

Available online 8 November 2016

Keywords:

Sustainability
Community health workers
Primary health care
Afghanistan

ABSTRACT

Objectives: The objectives of this study were two-fold: 1) to examine how different stakeholders define sustainability, and 2) to identify barriers to and facilitators of the sustainability of the Afghan CHW program.

Method: We interviewed 63 individual key informants, and conducted 11 focus groups [35 people] with policymakers, health managers, community health workers, and community members across Afghanistan. The participants were purposefully selected to provide a wide range of perspectives.

Finding: Different stakeholders define sustainability differently. Policymakers emphasize financial resources; health managers, organizational operations; and community-level stakeholders, routine frontline activities. The facilitators they identify include integration into the health system, community support, and capable human resources. Barriers they noted include lack of financial resources, poor program design and implementation, and poor quality of services. Measures to ensure sustainability could be national revenue allocation, health-specific taxation, and community financing.

Conclusion: Sustainability is complicated and has multiple facets. The plurality of understanding of sustainability among stakeholders should be addressed explicitly in the program design. To ensure sustainability, there is a need for a coordinated effort amongst all stakeholders.

© 2016 Elsevier Ltd. All rights reserved.

1. Introduction

Sustainability of health projects funded by international agencies is a major challenge both for donors and recipients in developing countries (Edwards & Roelofs, 2006; Sarriot et al., 2004). Sustainability could mean continuation of the project, sustaining the outputs, or maintaining the desired outcomes (Pluye, Potvin, & Denis, 2004). Scheirer and Dearing (2011) define sustainability as “continued use of program components and activities for the continued achievement of the desirable program and population outcomes” (p. 2060). Factors that contribute to sustainability of health projects include community involvement, organizational capacity building, and institutional integration (Sarriot et al., 2004).

Empirical studies on sustainability of health projects are growing. Studying Primary Health Care projects implemented by non-governmental organizations (NGOs), Sarriot et al. (2004)

found that sustainability occurs through a strategic partnership between local institutions and implementing organizations, capacity building of local institutions, and ensuring financial stability. Studying a health project in China funded by Canadian International Development Agency (CIDA), Edwards and Roelofs (2006) found that strong and transparent partnership with local institutions, adequate organizational support, and preparation of a handover plan at the beginning were necessary elements to sustain the health project.

In a systematic literature review on sustainability of and scaling up CHW programs, Pallas et al. (2013) identified enablers and barriers at multiple levels. At the community level, selection of motivated people from and by the community was an enabler, while lack of community and family support was considered a barrier. At the management level, direct, consistent and standardized supervision was an enabler, while insufficient incentive (a major cause of attrition) and poor supervision were barriers to sustainability. Finally, integration of CHWs into the broader health system and being formally recognized as a human resource for health were enablers, while lack thereof was a barrier to program sustainability.

* Corresponding author.

E-mail addresses: snaja100@uottawa.ca (S.A.M. Najafizada), rlabonte@uottawa.ca (R. Labonté), Ivy.Bourgeault@uottawa.ca (I.L. Bourgeault).

Most studies of sustainability have focused on small projects implemented in isolation from the health system. There is little knowledge on sustainability of national health projects within health systems funded, especially when funded primarily by international organizations. In this paper we explore stakeholder perceptions of sustainability in Afghanistan's national CHW program, which is part of the Basic Package of Health Services (BPHS).

In 2014, Afghanistan had a population of approximately 29.8 million people, with 46% below 15 years of age, and 4% above 60 years (Campbell et al., 2013; WHO, 2015). Life expectancy at birth was estimated to be 60 years, an increase from 47 in 2002 (WHO, 2015). Almost 76% of the population lived in rural areas, and over 60% of the population had improved drinking-water sources, but improved sanitation facilities remained as low as 30% (WHO, 2015). Women and children in Afghanistan had one of the lowest health statuses in the world. Maternal mortality ratio was 400 per 100,000 live births, compared with 170 regionally and 210 globally (WHO, 2015). Out of 1000 live births, 36 newborns died before reaching their first month, 73 before reaching their first year, and 101 before reaching their fifth year –i.e., one out of ten dies before reaching their 5th birthday (Campbell et al., 2013). The fertility rate of 5.1 in Afghanistan was double the global average of 2.5 and contributes to both high maternal mortality and under-5 mortality (WHO, 2015). Human resources for health remained scarce in most regions of the country in 2013. Overall, there were 1.9 physicians and 7.5 nurses and midwives per 10,000 people in 2013, most of whom were based in cities and big towns, with as high as 7.2 physicians per 10,000 people in cities, and as low as 0.6 physicians per 10,000 people in rural areas (Campbell et al., 2013). Midwives were also typically based in health clinics where they have the necessary medical equipment for service provision (Bick, 2007). In villages, where 76% of the people lived, CHWs were the first and often the only point of contact of villagers with the formal health system (Najafizada, Labonté, & Bourgeault, 2014). Traditional Unani and Greek medical doctors, religious healers, traditional birth attendants and drug dispensers worked informally both in urban and rural areas (Wilson, 2011). To tackle the discouraging maternal, neonatal and child health concerns and a chronic shortage of human resources for health, the Afghan Ministry of Public Health started deploying volunteer Community Health Workers in rural areas of Afghanistan in 2003. The CHW program, a component of a Basic Package of Health Services, had trained around 26,000 CHWs (8.7 per 10,000 people) until 2014 (Najafizada et al., 2014). Though some studies have looked into the Basic Package of Health Services, in general (Ameli & Newbrander, 2008; Newbrander, Ickx, Feroz, & Stanekzai, 2014); there is a knowledge gap on the CHW program in Afghanistan and

especially on sustainability of the Afghan CHW program. As the CHW program is a core component of the Basic Package of Health Services, the two are sometimes discussed interchangeably.

The objectives of the study reported on in this paper were two-fold: 1) to examine how different stakeholders define program sustainability, and 2) to identify facilitators and challenges to the sustainability of the Afghan CHW program.

2. Method

An exploratory qualitative design was chosen, since this design can reveal contextual factors affecting the program that may not have been taken into account when the program was being designed or implemented (Sandelowski, 2010). Participants were selected purposefully using stratified sampling, a method that divides the population into separate subgroups, and then creates a sample by drawing subsamples from each of those subgroups (Morgan, 2008). Stratified sampling ensures that all subgroups within a population are represented in the sample, and purposive sampling ensures that stratified sampling is systematically implemented (Morgan, 2008). The lead researcher stratified the population for this research both hierarchically and horizontally (Table 1). Hierarchically, they were divided at policy level, management level, and community level. Horizontally, policymakers were stratified into government, international agencies and donor agencies; implementing organizations were stratified into international NGOs, national NGOs, and provincial health departments; and communities were stratified into less remote and high remote areas where the CHW program was implemented.

In-depth interviews were conducted with policy makers in Kabul, health managers of NGOs implementing the program in provinces, and CHWs and community members in villages. The lead researcher (MN) selected policy makers based on their knowledge of the BPHS and its CHW component through consultation with Ministry of Public Health officials and researchers in Afghanistan National Public Health Institute. Once a number of potential participants were identified, the solicitation email was sent. Upon their agreement, a date and place were set with the participants and interviews were conducted. Most potential participants agreed to the interview. Lack of time was the main reason for policymakers not participating in the study. Health managers were selected based on the three types of implementing organizations (international NGOs, national NGOs, and provincial government health departments). First, the lead researcher contacted the implementing organizations and met with the director of the organizations to identify potential health managers who had good knowledge of the program. Then, the researchers sent a solicitation letter to the managers to ask them for their

Table 1
Hierarchical and horizontal classification in sampling.

Hierarchical	Horizontal		
Policy	Government	Donor agencies	UN agencies
• Policymakers			
Management	Public Health Departments	International NGOs	National NGOs
• Managers, • CHW supervisors, • CHW trainers,			
Community	Less remote communities		Highly remote communities
• CHWs • Community members			

participation. All managers agreed to participate except one who expressed his lack of in-depth knowledge on the subject. The lead researcher traveled to each province to interview health managers in their offices at their own availability. To recruit CHWs, the lead researcher gathered telephone numbers of all active CHWs from implementing organization and tried to contact them ahead of time, explain to them the research, and request their participation. Most agreed. The major reason for not participating was lack of interest. In some cases when enough CHWs could not be contacted through their cellphones, the researcher, accompanied by a female research assistant, travelled to villages where the program was active, recruited participants, and conducted interviews. In such cases, unavailability of CHWs at the time of the researcher's visit was the major reason for lack of participation. In total, 25 CHWs were interviewed from 16 villages served by the three types of organizations. Focus groups were also conducted with CHWs and community members at the villages. (Tables 2 and 3) Interviews and focus groups probed for a number of facets of the CHW program, and included specific questions about its sustainability in the context of its design, financing and donor-reliance. Some of the question regarding sustainability were 'how do you define sustainability', 'how do you think the program could be sustained', 'what are the barriers and facilitators for sustainability', 'do you think the program will continue, if yes, how, and if not why?', and 'what could the community do to keep the program going?'

The interviews, conducted by the lead researcher (MN) and his assistant, were audio-taped. Extensive field notes documenting their observations were also made. The field notes were used to crosscheck or complement the interview data and to assist in data analysis. A preliminary data analysis was conducted before the lead researcher traveled back to the field for member checking. In a second round of fieldwork, during which we shared the preliminary findings with some previous and new participants for comment and further data-gathering. The audio-recorded interviews and focus groups were translated and transcribed by the researcher. Initial analysis began during the fieldwork. Final thematic analysis was carried out by manually coding the transcripts into nodes, which were then put into sub-themes and then broader themes using constant comparison technique (Sandelowski, 2010). Representative quotes were selected based

on the way they resonated with most respondents. The context in which each quote was expressed and what participant group made the statements are explained to enrich the analysis. All quotes in this paper have been anonymized. A description of the CHW program including the demographic characteristics of the participants has already been reported (Najafizada et al., 2014) and so is not included in this paper.

Ethical procedures of consent, safety, confidentiality, and privacy were considered during data collection. The ethics review board of the University of Ottawa and Afghanistan's National Public Health Institute approved the study.

3. Results

Stakeholders at different levels of involvement with the program defined sustainability differently, reflecting their varying needs and concerns. At the community level, stakeholders are concerned primarily with the continuation of services; health managers defined sustainability as organizational operations to maintain routine service delivery; while policymakers were concerned with continued international funding for the program.

Community-level perspectives includes those of both villagers and CHWs. For villagers a common theme in community members' understanding of sustainability was maintaining health services. As one community elder, a member of the Village Health Council who had supported CHWs for more than a decade in rural Bamyan, expressed:

To continue to have a CHW [who] have drugs [to dispense], refer patients to clinic, dress [minor] injuries . . . is sustainability.
(Community member)

Community participants believed that the CHW services would be sustainable if the support of the community and the health system continued. Community support entailed CHWs' commitment to their communities and the support of their families for female CHWs. For CHWs, in turn, the sustainability of their services was a function of their commitment, as one CHW remarked: "This is my job, and if I stop doing it, it will be cheating because we have committed ourselves to serve the community, although we don't get paid." (CHW)

Table 2
First Round of Data Collection.

	Participants	Participants' Criteria	Number		
Policy Makers	Ministry of Public Health	Involvement in CHWs program design and implementation (Health Officers, Health Advisors, Community-based Health Care Department officers, Health Economics and Finance Department Consultants, Deputy Minister of Policy and Human Resources)	4		
	USAID ^a		1		
	World Bank		1		
	European Commission		2		
	DFATD ^b – Canada		1		
	WHO ^c		1		
	UNFPA ^d		1		
	Sub-total		11		
	Implementing organizations		Health Managers	International NGO	6
			CHSs ^e	National NGO	9
CHW Trainers		Provincial Health Department	4		
Sub-total		19			
Community	CHWs		25		
	Community members	8 Focus Groups	25		
	Sub-total		50		
	Total		80		

^a United States Agency for International Development.

^b Department of Foreign Affairs, Trade and Development.

^c World Health Organization.

^d United Nations Population Fund.

^e Community Health Worker Supervisors.

Table 3
Additional information on data collection.

First Round of data collection	Second round of data collection	
	Member Checking	Interviewing/member checking with new participants
55 Individual Interviews 8 Focus groups (25 people)	18 Member checking	8 Interviews/member checking 3 Focus groups (10 people)

A female CHW who had thought of quitting several times added more nuance to how that sustainable commitment is maintained, including the support needed from her family:

So many times, my husband tells me to stop it, but when a patient comes home and I give them medication, and they get better and thank and pray for us, then my family likes it too and allows me to continue doing it. (CHW)

Community-level support, in turn, was seen as requiring health system support to CHWs. Identified forms such support included refresher and capacity building trainings, a sufficient drug supply, regular supervision, and existence of a functional health clinic in close geographic proximity: *“If we don’t have a good clinic to where we refer patients, people will stop trusting us”* (CHW), the implication being that with little community trust, the voluntarism of the CHW would not be sustained.

Health program managers perceived a sustainable CHW program as the continuation of routine organizational activities and adequate service delivery at the health posts and health facilities. Examples given included receiving budgets on time, delivering refresher trainings, and supplying health facilities and health posts with drugs and equipment during winter. These administrative features were seen as major enablers for program sustainability, with participants at the organizational level critical that many times they had not received their quarterly budget on time, and had to delay refresher training, drug supply, and CHW supervision. Winterization was a routine challenge for organizations that delivered services in central and northern Afghanistan, where winter lasts between four and six months. Participants said that roads would be blocked during winter, affecting supply and supervision at both the facility village level. As one health manager summarized: *“If we cannot keep our routine activities going, that’s unsustainability for us.”* (Health manager)

Most policymakers were concerned about the financial aspect of the CHW program. Speaking about sustainability, one policymaker in Kabul noted that: *“The main question is what happens when donor funding decrease or end.”* (Policymaker)

Among all the national and international policymakers, the Ministry of Public Health was the main entity considered responsible to ensure sustainability. Since the CHW program is a component of the public primary health care package, the government’s main concern was ensuring financial resources for the program. In the past ten years the Afghan Ministry of Public Health had functioned only as coordinator, monitor and evaluator of the externally-financed services, and had yet to design policies for domestic revenue generation for the BPHS.

3.1. Barriers to sustainability

Major barriers to sustainability identified across all levels of participants related directly or indirectly to securing for the continuation of the program, rigidity of the implementation strategy, politicization of the health system, and flaws in the program design (Table 4). The most important challenge was achieving financial sustainability. The BPHS was entirely funded by international donors (the United States Agency for International Development [USAID], the World Bank, and the European Union) until 2013, when the World Bank committed to fund the Afghan health system through a new project called System Enhancement for Health Action in Transition (June 2013 until June 30, 2018). The European Union and the USAID also joined the project in 2014 and 2015 respectively. It is a USD 408 million project, of which around 8 per cent (USD 30 million) is expected to come from the national revenue. Of the USD 408 million, USD 245 million is allocated to the BPHS (World Bank, 2013). A number of policymakers concurred that this 2013 transition in funding was an initial step to involve the Afghan Ministry of Public Health in generating revenue for its national health programs.

Some participants, however, complained that if the program could not serve its purpose (which was to reach all rural populations) there was no point in its sustainability. Health managers of international and national NGOs considered some elements of the structure of the program to be defective, not allowing expansion to geographically inaccessible areas. One flaw mentioned was in the geography of the health post, which is designed to cover a population of between 75 and 150 households. As one health manager remarked:

The CHW program sets up a health post for a community of 150 households, where 50 of the households are behind a mountain . . . the distance might be 3 kilometers, and a donkey path may link the two sides of the mountain, but patients, pregnant women, and sick children will never be able to cross it . . . And winter can block the tiny pathway for months. (Health manager)

Participants in the community and managerial levels agreed that the location and the range of the catchment area for some health facilities contributed to inaccessibility of the program. The catchment area for a Basic Health Center is between 15,000 and 30,000 people, and for a Comprehensive Health Center between 30,000 and 60,000 (Ministry of Public Health, 2010). The resources allocated for a comprehensive center is twice as much as the resources for a basic center. In some provinces, there are basic centers for 30,000 people in one area, and there are comprehensive

Table 4
Summary of facilitators of and barriers to sustainability of the CHW program.

Facilitators of Sustainability	Barriers to Sustainability
Policy-level integration into the health system	Lack of financial resources
Community-orientation	Poor program design and implementation strategy
Local human resource capacity	Politicization of the health system

centers for the same number of people in another area, creating an obvious inequity in resource allocation.

Some policymakers outside the Ministry of Public Health believed that local powerbrokers and politicians take advantage of the structural fluidity of the program to put pressure on the Ministry of Public Health and implementing organizations to set up health posts and health facilities for smaller populations. The Minister of Public Health in Afghanistan requires the vote of confidence of Members of Parliament to become the minister and remain in his position. In turn, Members of Parliament need the support of local power brokers to get re-elected. As a policymakers in a technical organization summarized:

The system has been politicized, and huge health facilities are established for political reasons rather than the needs of the population . . . For example, they have established CHC for 20,000 population. (Policymaker)

Political favoritism combined with structural flaw has left 40 per cent of the rural population without primary health care services, unserved places which the World Health Organization describes as white areas. It is the persistence of these unserved areas that had some study participants question whether the BHPS and CHW programs were worth sustaining.

Another barrier to the CHW program's sustainability was the contracting-out mechanism. In 2003, the Ministry of Public Health with its international donors designed a package of basic health services and contracted it out to non-government organizations (NGOs). Most participants, however, agreed that contracting-out such a national public program in Afghanistan would not be sustainable, for a number of reasons. First, NGOs were a reminder of the times of civil war, when they left whenever the security worsened, their funding ended, or their priorities changed. A community member in central Afghanistan where the services were provided by NGOs noted:

You cannot hold them [NGOs] accountable, they are like charity organization, and you should gratefully take whatever you give you . . . but state departments are yours, it is their responsibility to provide services, you can question them through your representatives. (Community member)

Policymakers and managers believed that NGOs did not, and perhaps could not, create a community-level sense of sustainability because their contracts ended every three to five years. NGO providers in any given province could change as a result of the tendering process. As one health manager said:

We have moved to three provinces in the past 10 years, and if we lose the contract, we could move to another province. It is difficult to create a sense of sustainability when you know your future's existence [in the province] is unclear. (Health manager)

3.2. Facilitators of sustainability

Despite these barriers, participants thought that the Afghan CHW program had developed strengths that could facilitate its longer-term sustainability. Policy-level integration into the health system, community-orientedness, and local human resource capacity were among the reasons given for this.

The BHPS, in which the CHW program is embedded, started as a donor-funded project that soon became a national program and continued for more than a decade. The reason for its longevity, most participants stated, were its policy-level integration in the health system of the country.

I think BHPS is a good package, and experienced in Afghanistan . . . We have policies, strategies, and guidelines, which are developed with the help of the World Bank, and the government of Afghanistan. (Policymaker)

The CHW program is the community-level component of the primary health care services provided across the country. Although the BHPS has many stakeholders outside the government, the Ministry of Public Health is the steward of the program. Over time the Ministry has developed the capacity to contract, monitor and evaluate the program; however, it has yet to put in place policies to mobilize financial resources, other than international aid, to ensure financial sustainability.

Another strength of the CHW program, according to policymakers, was its ties with the community and the volunteerism nature of the program. The program has trained over 26,000 volunteer CHWs and set up an estimated 13,000 village health councils involving approximately 62,500 members. Talking about the CHWs and health council members, a policymaker said: *"They are [the] strong human resources available [that] keep the program going."* (Policymaker) Council members nominate CHWs, support them to deliver health messages to communities, mobilize community resources for health purposes, and represent communities before the health system.

Other resources participants identified that could facilitate sustainability of the CHW program were the strength of managerial staff in the local and international NGOs and the Ministry of Public Health. A health manager emphasized this domestic human health resource capacity: *"It is not that Russians are doing our works or American . . . it is us, Afghans . . ."* (Health manager)

Furthermore, Afghan NGOs have increased dramatically in numbers. An Afghan Ministry of Public Health policymaker said: *If you look at 2003, most [BHPS] implementing organizations were international NGOs . . . Now, 70% of the implementers are Afghan NGOs . . . we focused on partnering national with international [NGOs] in order to build the capacity of implementers. (Policymaker)*

Participants argued that Afghan NGOs meant Afghan workers, and many mentioned that a majority of the employees of international NGOs were also Afghan citizens. A top policymaker said that within the Ministry of Public Health there were dozens of managers with master's degree in public health, and many have attended managerial workshops inside and outside the country. He added that: *"These managerial resources might be on the payroll of international donors, or working as advisors, but they are [human] assets to sustain the health system."* (Policymaker)

4. Discussion

This study highlights that an understanding of various aspects of sustainability is distributed differently amongst stakeholders at different implementation levels. Community members and managers give importance to the current status of the program and routine activities as measures of its sustainability, while policymakers identify potential for improvements and the future (generally financial) status of the program as features of its sustainability. A review of the literature also found that sustainability was defined differently across the reviewed studies (Scheirer, 2005). These differences mean that sustainability is complicated and has multiple facets, such as 'operational sustainability' and 'financial sustainability'. Another interpretation of these differences could be that sustaining a health program is primarily about implementing the program to its full capacity and highest quality, a point referenced by some participants questioning whether, given some of its failures, the BHPS was worth sustaining. Only when a program begins to fulfill (or demonstrate clear progress towards) its goals does the future state of the program become an important element of sustainability. Emphasizing the importance of operational sustainability in a seminal report on sustainability of Canadian health care system, Romanow

(2002) wrote, “the key ‘sustainability’ question for the average Canadian is ‘will Medicare be there for me when I need it?’” (p. xvii). These differences are also captured in Pluye, Potvin and Denis’ argument (Pluye et al., 2004) that sustainability in health programs has two faces: as an intrinsic component and as a stage. As an intrinsic component, the task is to embed sustainability in the structure of organizations and institutions, whereby program components and activities become routine in the operation of the organization. As a stage the intrinsic component is followed by more future oriented policies and regulations developed by institutions and governments to guide the program and its improvement over the longer-term.

Important elements of sustainability in donor-funded projects identified in this study are similar to findings from other studies: integration with the local institutions, good program design and implementation, and high levels of community support (Cassidy, Leviton, & Hunter, 2006; Pluye et al., 2004; Pluye, Potvin, Denis, Pelletier, & Mannoni, 2005; Scheirer & Dearing, 2011). At the community level, programs such as the Afghan CHW program rely upon their ability to mobilize community participation and engagement (Leviton, Herrera, Pepper, Fishman, & Racine, 2006). In the case of Afghanistan, this is reflected in the committed volunteer engagement of the communities. At the organizational level, capacity building must go beyond improving the technical and managerial skills of human resources to enhancing the capacity to mobilize financial resources. At the policy level, the project must become a part of the government’s national programs with commitments for greater financial sustainability.

Ensuring financial sustainability, however, must also be a shared value among all stakeholders, since diversifying funding sources (especially in a resource-constrained LIC such as Afghanistan) is suggested as a useful strategy (Scheirer, 2005). Governments can allocate national revenue and generate health-specific revenues through hypothecated taxation. In the Afghan CHW case, the Afghan government plans to impose health taxes on tobacco, mining companies and airlines. All or portions of these taxes could be hypothecated for public health spending. Community financing through health insurance programs is another option. Currently, two thirds of the Afghan national health expenditures are already paid out of pocket (Ministry of Public Health, 2013), a large financial resource the pooling of which should be explored. With a proper community health insurance scheme in place, the BPHS could be self-sufficient and contribute to a significant reduction in out of pocket health care expenses. Finally, Afghan health organizations, mainly NGOs that implement the BPHS, can improve their own capacity to mobilize financial resources through fundraising rather than relying exclusively on international aid that is already allocated to the BPHS. International NGOs already have this capacity without requiring the involvement of the government of Afghanistan for their projects and daily operations.

5. Limitations

Our study had some limitations. The number and type of stakeholders were classified into three general categories of community, organization and policymaking, which could reduce the diversity of possible perspectives. The personal security of the researcher, assistant and key informants was a key concern, limiting the places to which site visits could be made and limiting the range of interviewees, notably at the community level. Finally, participants’ responses may have been subject to social desirability or biases. For example, being a male, ethnic Hazara, physician and foreign-trained may have influenced data collection from different genders, different ethnicities, and different social statuses.

6. Conclusion

Ensuring the sustainability of health projects has become a major concern for international donors and governments across the low- and middle-income country spectrum. It is particularly acute in low-income post-conflict countries such as Afghanistan. This paper has examined perspectives of various stakeholders at different levels on Afghan BPHS program sustainability. Community and health manager concerns focused on more on the current state of the program than on its continuation, while only recently have other stakeholders begun to plan for its longer-term financial sustainability. Our findings generally suggest that the sustainability of internationally-funded programs, such as the CHW component of the BPHS, might better be ensured if program stakeholders converge on a shared understanding of this might mean at the outset of program implementation.

Authors’ contributions

MN contributed to conception and design of the study, collection, analysis and interpretation of data, and was involved in drafting the manuscript. RL, contributed to conception and design of the study, analysis and interpretation of the data, and revision of the manuscript. ILB, contributed to conception and design of the study, analysis and interpretation of the data, and revision of the manuscript. All authors approved the final manuscript for publication.

Acknowledgements

First and foremost, we thank all participants in this study, who have shared their stories, experiences, and knowledge with us. We thank the Afghan Ministry of Public Health and all its national and international partners, and the implementing organizations for all their support for this research. We would like to thank the two research assistants Sadaf Fetrat and Elyas Najafizada who have helped with the data collection in rural and remote villages of Afghanistan. This work was carried out with the aid of a grant from International Development Research Centre, Ottawa, Canada. Information on IDRC is available on the web at www.idrc.ca.

References

- Ameli, O., & Newbrander, W. (2008). Contracting for health services: Effects of utilization and quality on the costs of the basic package of health services in Afghanistan. *Bulletin of the World Health Organization* 86(12), 920–928. <http://doi.org/10.2471/BLT.08.053108>.
- Bick, D. (2007). The importance of midwifery to maternal and infant health in Afghanistan: Midwives making a difference. *Midwifery* 23(3), 219–220. <http://doi.org/10.1016/j.midw.2007.07.002>.
- Campbell, J., Dussault, G., Buchan, J., Pozo-Martin, F., Guerra Arias, M., Leone, C., . . . Cometto, G. A. (2013). A universal truth: No health without a workforce. *Forum report, third global forum on human resources for health, Recife, Brazil*. [http://doi.org/ISBN 978 92 4 150676 2](http://doi.org/ISBN%20978%204%20150676%202).
- Cassidy, E. F., Leviton, L. C., & Hunter, D. E. K. (2006). The relationships of program and organizational capacity to program sustainability: What helps programs survive? *Evaluation and Program Planning* 29(2), 149–152. <http://doi.org/10.1016/j.evalprogplan.2005.12.002>.
- Edwards, N. C., & Roelofs, S. M. (2006). Sustainability: The elusive dimension of international health projects. *Canadian Journal of Public Health* 97(1), 45–49. <http://www.ncbi.nlm.nih.gov/pubmed/16512328>.
- Leviton, L. C., Herrera, C., Pepper, S. K., Fishman, N., & Racine, D. P. (2006). Faith in action: Capacity and sustainability of volunteer organizations. *Evaluation and Program Planning* 29(2), 201–207. <http://doi.org/10.1016/j.evalprogplan.2006.01.011>.
- Ministry of Public Health, 2010. A Basic Package of Health Services for Afghanistan 2010. Kabul. Retrieved from http://saluteinternazionale.info/wp-content/uploads/2011/01/Basic_Pack_Afghan_2010.pdf.
- Ministry of Public Health, 2013. Afghanistan National Health Accounts with Subaccounts for Reproductive Health 2011–2012. Kabul, Afghanistan. Retrieved from http://www.healthpolicyproject.com/pubs/262_AfghanistanNHAReportFINAL.pdf.

- Morgan, D. L. (2008). *Stratified Sampling*. *The Sage Encyclopedia of qualitative research methods*, 835. <http://dx.doi.org/10.4135/9781412963909.n433>.
- Najafzada, S. A. M., Labonté, R., & Bourgeault, I. L. (2014). Community health workers of Afghanistan: A qualitative study of a national program. *Conflict and Health* 8(26), 1–26. <http://www.conflictandhealth.com/content/8/1/26>.
- Newbrander, W., Ickx, P., Feroz, F., & Stanekzai, H. (2014). Afghanistan's basic package of health services: its development and effects on rebuilding the health system. *Global Public Health*(June), 1–23. <http://dx.doi.org/10.1080/17441692.2014.916735>.
- Pallas, S. W., Minhas, D., Pérez-Escamilla, R., Taylor, L., Curry, L., & Bradley, E. H. (2013). Community health workers in low- and middle-income countries: What do we know about scaling up and sustainability? *American Journal of Public Health* 103(7), e74–82. <http://doi.org/10.2105/AJPH.2012.301102>.
- Pluye, P., Potvin, L., & Denis, J.-L. (2004). Making public health programs last: Conceptualizing sustainability. *Evaluation and Program Planning* 27(2), 121–133. <http://doi.org/10.1016/j.evalprogplan.2004.01.001>.
- Pluye, P., Potvin, L., Denis, J.-L., Pelletier, J., & Mannoni, C. (2005). Program sustainability begins with the first events. *Evaluation and Program Planning* 28(2), 123–137. <http://doi.org/10.1016/j.evalprogplan.2004.10.003>.
- Romanow R., 2002. Building on Values: The Future of Health Care in Canada. Saskatoon: National Library of Canada. Retrieved from <http://publications.gc.ca/collections/Collection/CP32-85-2002E.pdf>
- Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing and Health* 33, 77–84. <http://doi.org/10.1002/nur.20362>.
- Sarriot, E. G., Winch, P. J., Ryan, L. J., Edison, J., Bowie, J., Swedberg, E., et al. (2004). Qualitative research to make practical sense of sustainability in primary health care projects implemented by non-governmental organizations. *International Journal of Health Planning and Management* 19, 3–22. <http://doi.org/10.1002/hpm.743>.
- Scheirer, M. A., & Dearing, J. W. (2011). An agenda for research on the sustainability of public health programs. *American Journal of Public Health* 101(11), 2059–2067. <http://doi.org/10.2105/AJPH.2011.300193>.
- Scheirer, M. A. (2005). Is sustainability possible? a review and commentary on empirical studies of program sustainability. *American Journal of Evaluation* 26(3), 320–347. <http://doi.org/10.1177/1098214005278752>.
- WHO (2015). *Afghanistan: WHO statistical profile*. . <http://www.who.int/gho/countries/afg.pdf?ua=1>.
- Wilson, C. (2011). A “boots on the ground” perspective of caring for the women and children in Afghanistan. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN/NAACOG*, 40(3), 255–261. <http://dx.doi.org/10.1111/j.1552-6909.2011.01251.x>.
- World Bank, 2013. System Enhancement for Health Action in Transition Project. Kabul. Retrieved from <http://moph.gov.af/Content/Media/Documents/EPPofSEHAT672014214923148553325325.pdf>.