

# Factors influencing the sustainability of community based programs: a mixed method study

L. Persoon  
I6017081  
Master Health Education and Promotion  
Faculty supervisor: Rik Crutzen  
Second examiner: Geert Rutten  
Faculty of Health Medicine and Life sciences  
Maastricht University  
08-02-2016

# Factors influencing the sustainability of community based programs: a mixed method study

---

## Abstract

**Introduction:** Program sustainability is a major issue for many community based organisations. When a program is not sustainable, the impact of the program is influenced, as it becomes difficult for the program to persist in the long-term. To develop sustainable programs, insight in the factors influencing sustainability is essential. **Method:** This study generates insight into the influencing factors of program sustainability by considering what is already known and investigating whether there are missing factors. For this purpose, a mixed method study, combining a systematic literature review and expert interviews, was conducted. **Results:** In the review, 14 studies were analysed of which 37 factors were abstracted. The factors were divided into 4 categories: human resources, organisational setting, social and political environment and financing. The systematic literature review was carried out prior to the interviews in order to serve as a basis for the interviews. Interviews took place with 6 experts from the field. From the interview results, it became clear that involvement of the local community was seen as the most important factor. **Conclusion:** This study shows that community based program sustainability is influenced by multiple factors; of which community involvement is identified as the most important. Community involvement is related to other important factors such as leadership, community capacity and financial sustainability.

Keywords; sustainability, community based programs, CBO, involvement

---

## Introduction

Program sustainability is a major issue for many community based organisations (CBO's), especially in low- and middle income countries (Gruen, 2008).

Evidence from different studies indicates that 40 per cent of all new programs do not continue beyond the first few years following the termination of initial funding (Savaya et al., 2008). Unsustainable programs have less impact on the local community for the long term, leave community needs unmet, are wasteful of human, monetary, and technical start-up investments, and can diminish community trust and support for future programmes (Shediac-Rizkallah & Bone, 1998). In order to achieve the intended impact on a community, programs must sustain once implemented. However, planning for sustainability is challenging and thus, is rarely incorporated in the planning process of an initiative (Sridharan, Zinzow, Gray & Barrett, 2007). Program evaluation traditionally focuses on the implementation and outcomes of social programs, often neglecting to focus on sustainability (CassidLeviton, & Hunter, 2006).

Frameworks and models, such as the RE-AIM model (Glasgow, Vogt & Boles, 1999), are established to create and support the process of sustainability in the implementation circle. This model conceptualizes the public health impact of an intervention as a function of five factors; reach, efficacy, adoption, implementation, and maintenance. Without focus on the final step of assessing the sustainability of a program, the intended impact will be affected (Sarriot et al., 2004, Scheirer, 2005, Savaya, Spiro & Elran-Barak, 2008). For sustainability to become a routine component of a program, there is a need for greater clarity about factors influencing sustainability.

## Definition

While the importance of sustainability is mostly understood, the concept remains ill-defined (DeMiglio & Williams, 2013). In a fall prevention study, interpretations of sustainability varied among stakeholders (Hanson & Salmoni, 2011). Some considered sustainability as referring to the continuance of the program in its entirety, while others related it to certain program components (DeMiglio et al, 2013).

Sustainability is also defined as ‘whether or not something continues to work over time’ (Abrams, Palmer & Hart, 1998). In a systematic review about definitions of sustainability, four different outcomes were defined. Sustainability was defined by the largest number of respondents as ‘Continuation of health programmes’, followed by ‘Community capacity’, then ‘Maintenance of health benefits’ and ‘Institutionalisation’ of programmes within organisational system followed (Gruen, 2008). These divergent definitions attest to the notion that, even though pointing in the same direction, definitional consensus has not been made, and different elements of sustainability can be emphasized.

#### *Karuna Foundation*

The unclear definition of sustainability makes its realization a difficult target for organisations. An example of an organisation that supports a local community and strives for sustainability is the Karuna Foundation in Nepal. This Foundation aims to decrease the number of birth defects and disabilities among children in Nepal by improving existing health systems and empowering communities. Although the program has proven to be effective (Mol, van Brakel & Schreurs, 2014) and cost-effective (Vaughan, 2015) after one year, program sustainability is not guaranteed. Challenges to their program sustainability include the difficulty of collecting financial contributions, and the lack of willingness of community members to participate in programming activities (Karuna Foundation, 2013). Consequently, the programme is likely to become one of the 40 per cent of all new programs which are not sustained beyond the first few years. Hence, the question arises, which factors are important to foster sustainability?

#### *Influencing Factors*

Different studies investigate in factors related to program sustainability. Sustainability can be influenced by socio-political factors such as: the existence of champions, financial resources, political will and the capacity of stakeholders (Sibthorpe, Glasgow & Wells, 2005). Sustainability can also be affected by the program layout and how it was implemented, the program setting and/or context and the program broader external environment (Shediak-Rizkallah et al., 1998). A study on the sustainability of community based maternal nutrition programmes found the following factors contributing to the sustainability of a program; community responsibility and ownership, compatibility with community norms and values, building on existing social units and roles, motivation, training and supervision of community actors, community

contribution of resources, support from key male and female community leaders, less complex interventions, and perception of benefits versus costs (Aubel & Samba-Ndure, K., 1995). A comparative case study of six projects that operated in Israel contributes to a better understanding of the factors and processes that differentiate between sustained and unsustained programs. The findings highlight the importance of the human factor; namely, the commitment of the leadership of the host organization, the type of host organization or public attitudes toward different target populations (Savaya et al., 2008). However, the study’s small sample may limit the generalizability of the results.

#### *Aim of Study*

Although the above mentioned factors are an important first step, a clear overview of all known factors that foster sustainability is lacking (Mancini & Marek, 2004; Pluye, Potvin, & Denis, 2004; Sharir & Lerner, 2006) Before sustainability can be addressed, it is important to generate insight of the influencing factors by considering what is already known and investigate whether there are missing factors. Therefore, this study objective is to investigate and provide a better insight in factors associated with community based program sustainability.

#### **Method**

This study used a mixed-methods approach, combining a systematic literature review with expert interviews. The literature review was conducted to investigate which factors associated with sustainability have been identified thus far. To create an overview, the frequency of factors mentioned in studies were assessed as well. The systematic review served as a basis for the interviews. By interviewing experts of community based organisations, more in depth information about the factors associated with sustainability were gained. These related experts dealt with this phenomenon in reality and are aware of the factors and processes influencing sustainability.

##### *1. Systematic literature review*

###### *Search strategy*

To identify eligible studies, a systematic literature search was applied to the following electronic databases: ERIC, Pubmed and PsycINFO. The following keywords and subject headings were used in combination to identify relevant articles in electronic databases: (“Community based” OR “Community-based” OR “CBO” OR “Local” OR “Community-based Rehabilitation” OR “CBR”) AND (“Program” OR

“Intervention” OR “Practice” OR “Practices” OR “project” OR “Activity” OR “Development” OR “Plan” OR “Action”) AND (“Sustainability” OR “Sustainable” OR “Maintenance” OR “Institutionalization” OR “Institutionalized” OR “Capacity building” OR “Continuation” OR “Integration” OR “Long term”). Reference lists from retrieved articles and published reviews were manually examined to identify additional studies. Articles were first screened on title, followed by abstract, and finally on full text. The following eligibility criteria were used to select studies.

#### *Study Eligibility and Data abstraction*

Eligible publications were studies on community-based programs which included factors related to sustainability (IC1)<sup>1</sup>. Community-based can refer to different forms such as; community as the setting for interventions, community serving as the target of change, community as resource, and community as agent (McLeroy et al., 2003). All forms were eligible for inclusion. Community-based rehabilitation (CBR) programs, which focus on enhancing the quality of life for people with disabilities and their families (WHO, 2015), were also included. Studies were included if they were written in English or Dutch (IC2) and if a full text version was available (IC3).

Studies were excluded when the sustainability of a program was not directly related to 'health' but related to sustainability of environmental outcomes (EC1) such as air pollution, improving the rainforest, solar panels and damaging agricultural land. Publications published before 1995 were also excluded (EC2). A twenty year time limit was stated to keep the study achievable. For each article that met all inclusion criteria and none of the exclusion criteria, an abstraction form was used, which included the following characteristics; author, title, setting, population, intervention, definition of sustainability and factors associated with sustainability. Except for systematic reviews, no criteria were made on the study design or study method. Nevertheless, systematic reviews were used as a source for applicable studies.

#### *Analyses*

By using the abstraction form, factors influencing sustainability were clustered by similarities and ranked in frequency in order to make it clear which factors were used most frequent. By making a mind map, relations, similarities and differences between factors appeared. From this mind map, factors were clustered

together into core categories. When a lack of clarity arose about how a factor was related to the process, a second researcher served as second opinion. The outcome of the mind map, the frequency of factors and the core categories in which they were clustered, was used as a basis for the interviews guideline.

## *2. Interviews*

### *Search strategy*

Interviewees were collected through snowball sampling in the network of the researcher. The first participants were recruited by sending an email to friends, family and colleagues, asking whether they knew participants that met the eligibility criteria for this study. Possible participants were contacted by email. Interviews were conducted face to face or by Skype.

### *Interviewee Eligibility & Data collection*

The interviewee should have worked within, alongside, or supported a community-based program. It did not matter whether the program was set up by a governmental or non-governmental organisation. Academic experts with knowledge on sustainability of community based programs or with background in community-based health programs or public/social health and sustainability were also included. A minimum of 6 interviews was set to have sufficient data to compare, and a maximum of 10 interviews was set to keep the study achievable. For the data collection, an interview guide was made, in which factors derived from the systematic review were taken as a guidance.

Interviews began with the question: ‘which factors are related to sustainability of community based programs?’ before addressing the specific factors derived from the review. In this way, the opinion of the interviewees would not be influenced by the most frequent factors known by the interviewer. Interview questions were focussed on the following; occupation of the interviewee and his/her background, definition of sustainability, experience with sustainability, factors influencing sustainability, barriers and missing aspects of sustainability, the improvement of sustainability, and the factors most frequently mentioned by the literature review were discussed; leadership, community capacity, funding, partnering and planning. One question was directly related to the Karuna Foundation, which asked about the willingness to contribute. Interviews took between 30-40 minutes and were audio recorded (after permission was asked).

<sup>1</sup> IC= Inclusion criteria EC= Exclusion criteria

*Analyses*

A Grounded theory with an inductive method was used for analysing the interviews. The analysis was done ‘by hand’ and made use of open-, axial-, and selective coding. First, open coding was applied which started immediately after the first data was collected. Initial codes identifying and describing phenomena found in the text, memos and adaptations to the interview format were made, which contributed to a better progress of the data collection. Second, after all data was collected, axial coding was applied, where codes were related to each other. Third, selective coding was applied in which core categories were identified. These core categories were compared to the core categories derived from the systematic review. After consensus between the categories from the review and the interviews were made, all transcripts were worked through and data that fit under a particular category was marked with the according colour. Factors not previously mentioned were coded ‘New’ and linked to an existing category. During this process, the researcher made notes of patterns, themes and relations between factors. Final, all of the sections of data, under each of the categories, were cut out of the individual transcripts and summarized together. This resulted in an organized dataset with summarized fragments of data, related to a certain category and interlinked with all other categories. From this folder, the report of the findings could be written.

**Results**

*1. Systematic literature review*

From the electronic databases, 418 articles were found when limits were set on full text and date. From additional sources, 13 articles were selected. Once 32 duplicates were removed, 399 publications remained for screening. After excluding 385 publications due to not corresponding to the eligibility criteria, 14 studies remained for analysis: Argaw et al.,(2007); Bennett et al., (2011); Downey et al., (2010); Estabrooks et al., (2011); Gatchell, et al., (2005); Hacker et al., (2012); Hanson et al., (2011); Mijnaerends et al., (2011); Montemurro et al., (2014); Paine-Andrews et al., (2000); Romani et al., (2007); Savaya, et al., (2008); Tomioka, et al., (2014); and Walsh et al., (2012).

In total, 37 factors were abstracted from the studies which were categorised into 4 groups: Human resources (5), including people and skills that are needed to keep the programmes running; organisational setting (16) focused on the host organisation and includes aspects like coordination, strategy approach, and programme management; social and political environment (10),

including factors in the broader context within which the program is integrated and financing (6), covering all the financial resources that are available and/or needed for the project. Factors which were most frequent mentioned within the studies are listed in Table 1.

**Table 1.** Most frequent factors from review

Category	Factors	Studies	N
<i>Human resources</i>			
	Community Capacity	Benett, Downey, Gatchell, Hanson, Mijnaerends, Montemurro, Toledo, Walsh	8
	Human Resources	Argaw, Downey, Hacker, Hanson, Mijnaerends, Toledo	6
	Leadership	Hanson, Downey, Montemurro, Savaya, Paine, Walsh	6
<i>Organisational</i>			
	Partnership/ Partnering	Argaw, Estabrooks, Hanson, Hacker, Mijnaerends, Montemurro, Toledo, Savaya, Walsh	9
	Work strategies (planning, implementing)	Argaw, Benett, Downey, Gatchell, Hacker, Montemurro, Toledo	7
<i>Financing</i>			
	Funding	Hacker, Hanson, Mijnaerends, Walsh, Montemurro, Tomioka, Savaya	7

*2. Interviews*

For the interviews, 21 people were contacted, of which 13 replied. Two were not able to take part in the interview due to lack of time, 4 stopped the contact after a few emails without a reason mentioned and 1 was not able to take part due to organisation rules. Finally, interviews were conducted with 6 participants, of whom characteristics are summarised in Table 2.

The factors influencing sustainability are divided into four categories from the literature search; human resources, organizational setting, social and political environment and financing. Within these four categories, the factors mentioned the most within the literature review were highlighted in the interviews; community capacity, leadership, partnering, and funding. These factors were only introduced by the interviewer when they were not given as answer to the open question: ‘Which factors are of influence on community based program sustainability?’

**Table 2.** Characteristics interviewees

<b>Nationalities</b>	Dutch, English, Nepalese, Colombian
<b>Profession</b>	Consultant, social entrepreneur, program director of CBO, retired (PHD) tutor/Researcher, medical doctor and CEO of a CBO.
<b>Experiences</b>	Asia (e.g. India, Nepal), Africa (e.g. Sierra Leone), Netherlands, South America (e.g. Colombia), United States.

### *Definition of the sustainability of community based programs*

Although sustainability of a community based program was defined in different ways by the interviewees, there was consensus between the outcomes. The core element was that a community based program was sustainable when the local community was able to continue the program by themselves, with their own resources, recruited within their reach and not dependent on external parties.

*“A system is not sustainable if the ones that pay are different from the ones that govern, as the conflicts of interests between payers and deciders make the system dependent on power games” (interviewee 5).*

However, it was also mentioned that not all projects can be sustainable. Some programs are entwined in a system, and rely on national structures and finances, for example, the Dutch healthcare and education system.

### *Factors influencing sustainability*

#### *1. Human resources*

Most frequently mentioned by the interviewees was the involvement and participation of the local community as a main factor for program sustainability. This process of involvement should start from an early phase, preferably the design phase of the program. To achieve this, the community should really feel the need for the program, see the value in the program’s output, and should be willing to contribute to the program with local resources. If these resources cannot be financial, it should be applied in an alternative form. The local people should feel responsible for the program from the beginning. To reach this goal, the implementers should listen to and understand the community, their needs, the context and they should be familiar with theory of change on the local level.

#### *1.1 Community capacity*

Community capacity was mentioned as an important factor. Mainly since the community is a big part of the program, they should have the capacity to organize themselves in relation to the program in a sustainable way. The organisation should invest in people, and keep them informed. The terms for this investment should not set by the organisation but by the community, and should be in line with the work already taking place within the community. This requires more effort and time than a few trainings.

*“So what we are doing lately is going into the community. Spend some time in the community, getting to know the community, train the community and from that, know what they want and from that create the program” (interviewee 6).*

People who are not high educated but familiar with the community, the group dynamics and technical skills are also important for program sustainability. It can be difficult to know when a community reaches sufficient capacity to deal with program independently. One interviewee mentioned that community capacity will be reached when you have good management and good leadership while another mentioned the money the community was able to generate by themselves as an indicator, because this might indicate that the management and leadership were well developed. Other indicators mentioned by the interviewees were: increased amount of people visiting the health post, increased amount of people using the facilities, or attitude changes within the community.

#### *1.2 Leadership*

A community leader was seen as an important and crucial factor for program sustainability who should be involved from the design phase. It was stressed that finding the right leader can take time. Sometimes, there is a formal leader in the community, but sometimes it is just a person who feels responsible and stands up for the program. It was often mentioned that it is most effective when the leader is a community insider.

*“In communities you have mostly already a natural leader, who has more influence and power. To succeed in the program it is important to have the leaders at your side as they are also in the position to raise/turn the community/ village against you. That is how they are, the nature of leaders” (interviewee 5).*

It was also mentioned that a program should not be orchestrated in a leader’s personal interest. It could be helpful to introduce the program bottom up instead of top down. This could evoke excitement about the program in the community and the leaders only remain leaders if they support the initiative of the program. A top down approach from the implementing organisations, who tell the community what is best, can raise feelings of defending and protection from the leaders towards the community. Tasks of the leader that were mentioned were to acknowledge people’s efforts within the program, stimulate and raise support, invite others to participate and join the program, plan meetings, and help people to come to the program. Some interviewees mentioned clearly that a leader

should not be one authoritarian leader on which the whole program is relied. Everybody should feel as if he or she is a leader.

*“Leadership is not only the one who leads the organization but also the one who takes responsibility for themselves and for the society at large. You take this responsibility and not walking endless with the bagging boll” (interviewee 3).*

A leader who does not take responsibility and is not fulfilling requirement on their side, is not only a big disappointment for the community, who had certain expectations of the program but this will also highly influence the sustainability of the program.

## 2. Organisational setting

Factors mentioned were mainly focussed on the organisation of the (external) host organisation. The organisations, their content and capacity, their ability to carry out the program and focus on becoming future proof, were seen as important factors for sustainability. It was stressed that when the organisation begins planning a program, they should begin with an assessment of the needs of the community. The available resources of the community should be mobilized from the beginning and a systematic structural plan should be made in which sustainability is a core element, and in which goals, targets, desired impact and future plans are described. Taking into account that these plans have to be in accordance with the needs of the community rather than the needs of the organisation. Other factors mentioned were the quality of the services, proper accountability, good management, and the need for a proper work- and planning team including professionals from the organization and individuals from the community. The organisations should create program responsibility and independency in the community but should also consider that some moral framing from outside can be needed in some context. For all these processes, the organisation should pay a sufficient amount of attention and time.

### 2.1 Partnering

Partnering was seen as an important and crucial aspect even when it was not always mentioned as one of the first factors influencing sustainability. It was mainly concluded that it is difficult to succeed on a complex topic such as sustainability when working alone.

*“Together you can do more than two persons separately” (interviewee 3).*

Some referred to a value chain in which you have horizontal and vertical relations. Others referred to a cobweb, in which you know exactly who you can refer to within the network. One of the interviewees mentioned that in these days partnering is often related to the market and the public good. Regarding the sustainability, it is important that partners are linked to each other on all levels and are in line with each other. Partnering can be beneficial for multiple aspects of a project, including funding and diversity of disciplines and perspectives which makes the program stronger. Partnering can also be used to exchange information like a partnership with the University or by helping implementing the program on local level, by partnership with a local NGO.

### 3. Social and political environment

Regarding the sustainability of a project, it was perceived important to connect with the local community in terms of type of work and their needs, but also to take the broader environment into account. The program should not be a barrier to other programs of the area. The remark was given that there must be an understanding that not every individual project can be sustainable on their own, so cooperation with other parties, such as other organisations, local political parties and governmental parties, is beneficial for sustainability. However, for these relationships, it is essential that the partners have the same ideas and values about certain topics and that the relationship is also sustainable. Relations with governmental parties were seen as important. Instability of governments should be considered as a potential barrier for effective partnering.

### 4. Financing

Financial stability and the efficient use of resources and finances were mentioned as essential factors. Even though financial resources were often mentioned, they were not cited as the most important factor, for sustainability.

#### 4.1 Funding

Factors mentioned, touch upon internal and external funding. All interviewees mentioned that the community should try to contribute financially to increase the internal funding.

*“A lot of programs are looking at external donors and not at themselves. They do not see how much they can contribute with alternative resources” (interviewee 2).*

When local contribution is not the case, a community or project will be too dependent on external resources.

This makes sustainability difficult to achieve, because the program will be forced to end when the external parties terminate their financial support.

*“Sustainability is not that one external funding ends, the next one is already waiting to contribute” (interviewee 4).*

Another consequence of external financing is the risk of misusing power. It is unreasonable that the party with the biggest investment has a more powerful voice or final say in decision making processes. The community should realise that achievements are not for free. Besides, if the community is interested in the program, they should also work for it. Disappointingly, the market can be a bit damaged in developing countries as external donors offer all kind of free stuff. In some areas there is much competition on this market which can demotivate the community to bring in their own resources.

*“Poor people or communities can almost go shopping between those external donors. If you as an organization says that they have to contribute to the funding but they can get the same for free around the corner, they will go for that” (interviewee 3).*

Funding can also be provided by partnerships. Some things are so costly, they should not be funded by a small project but by the national government. Sometimes government's states money available for health topics. If this money is not enough to realize the project, the rest of the money should come from the local community resources or from the district board. A program should not start when it is already clear at the beginning that there are not enough resources available or when the community is not willing to contribute.

##### 5. How to improve sustainability

The most frequent answer to the question 'how should the sustainability of community based programs be improved' was: involve local people.

*“Design your program with community involvement. Then community sees that, this is the program designed by them. They feel more responsible and they take ownership in every activity” (interviewee 2).*

It was mentioned that if the community is not willing to contribute, they may not be interested in the program, or it may not be relevant to their needs. In this case two things were stressed which could be done; 1. Do not start working with them because it will not work and will not become sustainable. 2. Spend time to listen to them, understand them and come to compromises. Also

mentioned was that programs are often designed from a western and external point of view. This is a symptom of the potential of organizations to work from the supply side rather than focusing on the demand side.

*“If you want to work in the development sector with poor people who really have complicated decision making on money, relations, on other things, on status. Than you must allow them to create their own demand. Unless they have demand there will not be any sustainable activity. Everything you do will stop very soon after you leave. And we all have to leave somewhere” (interviewee 5).*

Other ways to improve were: investing in both employees of the host organisation and individuals of the project such as community leaders and mobilizers; look further than only financial sustainability, plan well, document everything, make evaluations, and take time.

*“It takes time, long, long time. So do not get discouraged and impatient” (interviewee 6)*

## Discussion

This study aimed to highlight the factors associated with community based program sustainability. The interviews were supportive in clarifying and elaborating the factors resulting from the review. A factor which did not visibly came forward from the systematic review but arose clearly from the interviews was community involvement. The interviews did not only expose this factor but also highlighted the importance of the involvement of local people for sustainability of community based programs. This is discussed in the light of existing planning models and in relation to other factors.

### Planning models

This study showed that involving people can be seen as a main element for program sustainability and should be included from an early phase in the program development. This involvement is reflected in certain models established for program planning. These planning models are developed to serve as frameworks which provide structure and organisation to the planning process required to build a health promoting program (Crosby & Noar, 2011). Common steps taken within these models generally include the assessment of community needs and capacity, planning, implementation, and evaluation. According to the present study, community involvement should be present in all steps, but especially the first step is of importance to make the program fit the community. Models like the PRECEDE/PROCEED (Crosby &



Noar, 2011) and intervention mapping (Bartholomew et al., 2011) start with a diagnosis, in which the problems that have an impact on the quality of life of a population of interests are evaluated. Compared to the projects discussed in the present study, this 'needs assessments' is of a different level. In planning models mainly objective numbers (e.g. absolute numbers) are of interest. While to make a community project work, the subjective numbers, in forms of feeling and local perspective are important. Therefore the involvement of the community is essential. Problems that are seen by epidemiological researchers as subjects of needs can be experienced by local people as aspects of daily life. There is a difference in objective and subjective needs. It is up to the organisation to include a needs assessment into the planning structure to make a distinction between these two.

#### *Factors related to involvement*

Even though the needs assessment is a good start to involve the local people, community involvement has more aspects. The interviews revealed that the most frequent named factors derived from the review were often related to the involvement of the community.

The first example of an important influencing factor on sustainability, related to community involvement, is the approach of the host organisation. The host organisation needs the ability and the willingness to be open to inputs and remarks of the local people. The current study showed that this is often not the case. Host organisations too often come up with their own strategies and ideas without taking needs and opinions of the local people into account. The reason why organisations perform this way is not always clear and might be under investigated. The present study showed that including local people is not easy and takes a lot of time and effort. This is in line with sceptics who have doubts about the basic precepts of this approach and more practical concerns with the challenges of implementing such projects (World Bank, 2004). Crisp (2010) blames the mind-set of organisations who have a model in mind of what good treatment looks like. The present study shows that this mind-set often does not match the mind-set of the community and will result in incomprehensibility of the reasons why the program does not work optimal or sustainable. This, on his term, can result in blaming the victim, where organisations are blaming the local people for not contributing and continuing their program without looking at the underlying cause: their own approach. The reason why local people are not motivated might be because the

program does not suit the community or the community sees other needs and priorities in their environment.

Second, the capacity of a community was, by the present study, identified as an important factor. Community capacity is of importance for the success of the program and may be regarded as a crucial variable mediating between the activities of health promotion interventions and population-level outcomes. In line with the present study, a number of dimensions of community capacity have been identified, among them skills, knowledge, leadership, trusting relationships, and a culture of openness and learning (McLeroy et al., 2003). The host organisation can facilitate the increase of these dimensions by providing training, information and meetings. Hence, the community should be involved to make sure activities organised to increase their capacity fit their needs and are in line with both organisation and community ideas. The chance that the community contributes to these activities is higher when there is an outcome perspective for them. In this way, an appreciation for community capacity shifts the paradigm underlying common intervention strategies to a focus on community building as a pathway to health (McLeroy et al., 2003). In addition, preliminary research shows local engagement may help build community capacity to address future problems (Fraser, Dougill, Mabee, Reed & McAlpine, 2006).

Third, leadership was derived as an essential factor. There are many different definitions and theories of leadership (Pierce & Newstrom, 2003), stressing that intercultural differences exist of how a leader can be experienced. In some countries the leader is seen as the hero as in other countries the leader is rather a peer than a manager. Therefore, it is important to know the culture one is in before starting implementing his or her own country's management theories and practices (Hofstede, 1993). Although differences in leadership exist, some aspects of the leadership appeared from the present study to be important in general. These aspects are both linked to the involvement of the program-leader as the community itself. Derived from the present study, an external leader in the form of one authoritarian person was seen as unfavourable. This is in line with evidence that shows that a democratic supervision, defined as "a sharing of power and by participative decision making" have more productive subordinates compared to those of autocratic supervisors (Fiedler, 1972). A democratic leader is a leader who takes the meaning and thoughts of the community into account. Leaders who have a good relation with the community members have more

influence and power (Fiedler, 1972). In order to ensure a good relation with the community it can be worthy when the leader is an insider from the community. Additional, for an individual to be perceived as a leader the individual must “be perceived as a member of the group” and secondly, the individual must “be seen as competent in the group’s central task”. Studies show that it is important to adhere to the expectations of the group in order for the leader to be accepted (Hollander, 1959). In summary, when subordinates are satisfied they are more productive (Sales, 1966).

#### *Extra effort, extra results*

As shown in the above mentioned outcomes, involving local members in the process of program development and implementation, requires investment of extra effort and time. Organisations may want to skip this task, thinking that they can work effectively within this community without gathering all this information. But being new or an outsider to the community, can be difficult. Not having the proper background information on a community may not seem like a big deal until you unintentionally find yourself off track, or get involved in an issue without knowing about its long and tangled history (Flint, 2012).

Project implementers may choose to ignore these more difficult aspects in favour of more easily deliverable and measurable outcomes. However, organisations that support projects by simply giving money show not only incompetence from their own side but also creates laziness from the community side. These communities will never feel the urge to contribute with their own resources. A lack of ownership result in the fact that a community program is less independent and has therefore a smaller potential for being sustainable. This is even more important for developing countries where the external funding is not always reliable and the availability of money and resources can be scarce.

Therefore, in a situation where the local community is not willing to contribute, the host organisation can either leave the community without starting the program, or invest in the community; spending time and talking about the needs and thoughts of the locals. Such a bottom-up approach matches the wider recognition of the need for active community participation in development projects capable of sustainable management (Fraser, Dougill, Mabee, Reed & McAlpine, 2006).

#### *Strengths and limitations of the study*

This study had two limitations. First, the chance is little that theoretical saturation is reached. Related definitions and terms (e.g. capacity building, maintenance, and

institutionalisation) are combined in this study to include all associated factors of sustainability. Even though terms are pointing at the same direction, differences between terms still exist. This could be a limitation for programs that solely focus on maintenance or institutionalisation, which are seen as an element of sustainability including more specific components for which we cannot guarantee that the influencing factors are exactly the same. On the other hand, by clustering these terms together in this study, and showing that the factors influencing them are in line with each other, could convince people of the fact that factors influencing sustainably related subjects are more general. Second, only six interviews were conducted, which is not generalizable for a large population. Additionally, the interviewees were from different sectors, countries and professions and therefore the group was not homogeneous. However, information gained from the interviews was homogeneous. Similar responses, could also imply that factors influencing community program sustainability are universal and not specific related to a certain program, subject or culture.

#### **Conclusion**

This study gives a clear overview of the factors influencing sustainability of a community based program. Using a mixed method study design was effective as the systematic literature review formed a valuable basis for the interviews, which in turn delivered depth to findings. From this study, we can conclude that the sustainability of a community based program is influenced by many factors. The most important factor is the involvement of the local community. Not only by addressing the project to community needs and conditions, but also by involving them in the planning and implementing processes. This involvement is linked to other important influencing factors such as community capacity, leadership, resource contribution, and the work strategy and vision of the host organisation. A work strategy in which community involvement is included will initially take extra effort and time but will benefit in the form of a more sustainable project of which the impact on the local community will be much larger. Further research should investigate how this strategy could be applied in practical applications.

#### **References**

Abrams, L., Palmer, I., & Hart, T. (1998). Sustainability Management Guidelines. Pretoria: Department of Water Affairs and Forestry.

- Argaw, D., Fanthahun, M., & Berhane, Y. (2007). Sustainability and factors affecting the success of community-based reproductive health programs in rural Northwest Ethiopia: original research article. *African journal of reproductive health*, 11(2), 79-88.
- Aubel, J., & Samba-Ndure, K. (1995, December). Lessons on sustainability for community health projects. In *World health forum* (Vol. 17, No. 1, pp. 52-57).
- Bartholomew, L. K., Parcel, G. S., Kok, G., & Gottlieb, N. H. (2011). Planning health promotion programs: an intervention mapping approach. John Wiley & Sons.
- Bennett, S., Singh, S., Ozawa, S., Tran, N., & Kang, J. S. (2011). Sustainability of donor programs: evaluating and informing the transition of a large HIV prevention program in India to local ownership. *Global health action*, 4.
- Cassidy, E. F., Leviton, L. C., & Hunter, D. E. K. (2006). The relationship of program and organizational capacity to program sustainability. *Evaluation and Program Planning*, 29, 149-152
- Crisp, N. (2010). Turning the world upside down: the search for global health in the 21st century. CRC Press.
- Crosby, R., & Noar, S. M. (2011). What is a planning model? An introduction to PRECEDE-PROCEED. *Journal of public health dentistry*, 71(s1), S7-S15.
- DeMiglio, L., & Williams, A. M. (2013). A qualitative study examining the sustainability of shared care in the delivery of palliative care services in the community. *BMC palliative care*, 12(1), 32.
- Downey, L. H., Castellanos, D. C., Yadrick, K., Threadgill, P., Kennedy, B., Strickland, E., & Bogle, M. (2010). Capacity Building for Health through Community-Based Participatory Nutrition Intervention Research in Rural Communities. *Family & community health*, 33(3), 175-185.
- Estabrooks, P. A., Smith-Ray, R. L., Dziewaltowski, D. A., Dowdy, D., Lattimore, D., Rheume, C., & Wilcox, S. (2011). Sustainability of evidence-based community-based physical activity programs for older adults: lessons from Active for Life. *Translational behavioral medicine*, 1(2), 208-215.
- Feeney, S. (1997). Shifting the prism: Case explications of institutional analysis in nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly*, 26(4), 489-508.
- Fiedler, F. E. (1972). How do you make leaders more effective? New answers to an old puzzle. *Organizational Dynamics*, 1(2), 3-18.
- Flint, R. W. (2012). Practice of Sustainable Community Development (p 150). October: Springer.
- Fraser, E. D., Dougill, A. J., Mabee, W. E., Reed, M., & McAlpine, P. (2006). Bottom up and top down: Analysis of participatory processes for sustainability indicator identification as a pathway to community empowerment and sustainable environmental management. *Journal of environmental management*, 78(2), 114-127.
- Gatchell, V., Forsythe, V., Thomas, P., Gatchell-valerie, V., & Worldwide, C. (2005). The sustainability of community-based therapeutic care (CTC) in non-acute emergency contexts. *Food Nutr Bull*, 27, 90-98.
- Glasgow, R. E., Vogt, T. M., & Boles, S. M. (1999). Evaluating the public health impact of health promotion interventions: the RE-AIM framework. *American journal of public health*, 89(9), 1322-1327.
- Gruen, R. L., Elliott, J. H., Nolan, M. L., Lawton, P. D., Parkhill, A., McLaren, C. J., & Lavis, J. N. (2008). Sustainability science: an integrated approach for health-programme planning. *The Lancet*, 372(9649), 1579-1589.
- Hacker, K., Tendulkar, S. A., Rideout, C., Bhuiya, N., Trinh-Shevrin, C., Savage, C. P., & DiGirolamo, A. (2012). Community capacity building and sustainability: outcomes of community-based participatory research. *Progress in community health partnerships: research, education, and action*, 6(3), 349.
- Hanh, T. T. T., Hill, P. S., Kay, B. H., & Quy, T. M. (2009). Development of a framework for evaluating the sustainability of community-based dengue control projects. *The American journal of tropical medicine and hygiene*, 80(2), 312-318.
- Hanson, H. M., & Salmoni, A. W. (2011). Stakeholders' perceptions of programme sustainability: findings from a community-based fall prevention programme. *Public health*, 125(8), 525-532.
- Hofstede, G. (1993). Cultural constraints in management theories. *The Academy of Management Executive*, 7(1), 81-94.
- Hollander, E. P. (1959). Emergent leadership and social influence. WASHINGTON UNIV ST LOUIS MO.
- Holmes, J., & Celani, M. A. A. (2006). Sustainability and local knowledge: The case of the Brazilian ESP Project 1980-2005. *English for Specific Purposes*, 25(1), 109-122
- Karuna Foundation; saving children from disability one by one (2015). Found on 2015 from <http://www.karunafoundation.nl/index.html>
- Mancini, J. A., & Marek, L. I. (2004). Sustaining community-based programs for families. *Family Relations*, 53,339-347.
- McLeroy, K. R., Norton, B. L., Kegler, M. C., Burdine, J. N., & Sumaya, C. V. (2003). Community-based interventions. *American Journal of Public Health*, 93(4), 529-533.
- Mijnarends, D., Pham, D., Swaans, K., Van Brakel, W. H., & Wright, P. (2011). Sustainability criteria for CBR programmes—two case studies of provincial programmes in Vietnam. *Disability, CBR & Inclusive Development*, 22(2), 3-21.
- Montemurro, G. R., Raine, K. D., Nykiforuk, C. I., & Mayan, M. (2014). Exploring the process of

- capacity-building among community-based health promotion workers in Alberta, Canada. *Health promotion international*, 29(3), 463-473.
- Mol, T. I., Van Brakel, W., & Schreurs, M. (2014). Children with Disability in Nepal: New Hope through CBR? *Disability, CBR & Inclusive Development*, 25(1), 5-20.
- Mosse, D. (2001). People's knowledge, participation and patronage: Operations and representations in rural development. *Participation: The new tyranny*, 16-35.
- Nevill, D. S. (2014). *Positive Interventions: Developing a Theoretical Model to Guide Their Development and Use*.
- Paine-Andrews, A., Fisher, J. L., Campuzano, M. K., Fawcett, S. B., & Berkley-Patton, J. (2000). Promoting sustainability of community health initiatives: An empirical case study. *Health Promotion Practice*, 1(3), 248-258.
- Pierce, J. L., & Newstrom, J. W. (2003). *Leaders & the leadership process*. McGraw-Hill/Irwin.
- Pluye, P., Potvin, L., & Denis, J. (2004a). Making public health programs last: Conceptualizing sustainability. *Evaluation and Program Planning*, 27, 121-133.
- Quinn, V. J., Guyon, A. B., Schubert, J. W., Stone-Jiménez, M., Hainsworth, M. D., & Martin, L. H. (2005). Improving breastfeeding practices on a broad scale at the community level: success stories from Africa and Latin America. *Journal of human lactation*, 21(3), 345-354.
- Romani, M. E. T., Vanlerberghe, V., Perez, D., Lefevre, P., Ceballos, E., Bandera, D., & Van der Stuyft, P. (2007). Achieving sustainability of community-based dengue control in Santiago de Cuba. *Social science & medicine*, 64(4), 976-988.
- Sales, S. M. (1966). Supervisory Style and Productivity: Review and Theory. *Personnel Psychology*, 19(3), 275-286.
- Sarriot, E. G., Winch, P. J., Ryan, L. J., Edison, J., Bowie, J., Swedberg, E., & Welch, R. (2004). Qualitative research to make practical sense of sustainability in primary health care projects implemented by non-governmental organizations. *The International journal of health planning and management*, 19(1), 3-22.
- Savaya, R., Spiro, S., & Elran-Barak, R. (2008). Sustainability of social programs a comparative case study analysis. *American Journal of Evaluation*, 29(4), 478-493.
- Scheirer, M. A. (2005). Is sustainability possible? *American Journal of Evaluation*, 26, 320-347.
- Sharir, M., & Lerner, M. (2006). Gauging the success of social ventures initiated by individual social entrepreneurs. *Journal of World Business*, 41, 6-20.
- Shediak-Rizkallah, M. C., & Bone, L. R. (1998). Planning for the sustainability of community-based health programs: conceptual frameworks and future directions for research, practice and policy. *Health education research*, 13(1), 87-108.
- Sibthorpe, B. M., Glasgow, N. J., & Wells, R. W. (2005). Questioning the sustainability of primary health care innovation. *Medical Journal of Australia*, 183(10), S52.
- Sridharan, S., Go, S., Zinzow, H., Gray, A., & Barrett, M. G. (2007). Analysis of strategic plans to assess planning for sustainability of comprehensive community initiatives. *Evaluation and Program Planning*, 30(1), 105-113.
- Tabak, R. G., Duggan, K., Smith, C., Aisaka, K., Moreland-Russell, S., & Brownson, R. C. (2015). Assessing Capacity for Sustainability of Effective Programs and Policies in Local Health Departments. *Journal of public health management and practice: JPHMP*.
- Tomioka, M., & Braun, K. L. (2014). Examining sustainability factors for organizations that adopted Stanford's chronic disease self-management program. *Frontiers in public health*, 2.
- Vaughan, K. (2015). Cost-effectiveness and efficiency assessment of the Inspire2Care program, 2011-2013. KIT Royal Tropical Institute. Found on 2015 from file:///C:/Users/Gebruiker/Downloads/Cost-effectiveness%20Inspire2Care\_Final%20report%20KIT%20(1).pdf
- Walsh, A., Mulambia, C., Brugha, R., & Hanefeld, J. (2012). The problem is ours, it is not CRAIDS'. Evaluating sustainability of Community Based Organisations for HIV/AIDS in a rural district in Zambia. *Glob Heal*, 8, 40.
- WHO 2015. Community-based rehabilitation (CBR). Retrieved on 2015 from <http://www.who.int/disabilities/cbr>