FACTORS AFFECTING SUSTAINABILITY OF DONOR FUNDED PROGRAMS: A CASE STUDY OF THE NEWBORN RESUSCITATION PROGRAM IN DAR ES SALAAM REGION

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PROJECT MANAGEMENT OF THE OPEN UNIVERSITY OF TANZANIA

2017

CERTIFICATION

The undersigned certifies that he has read and hereby recommends for acceptance by the Open University of Tanzania a Dissertation titled: "**Factors Affecting Sustainability of Donor Funded Programs: A Case Study of the Newborn Resuscitation Program in Dar es Salaam Region",** in partial fulfillment of the requirements for the Degree of Master of Project Management of the Open University of Tanzania.

……

Dr. Salvio Macha

(Supervisor)

……

Date

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DECLARATION

I, **Victor Mponzi,** do hereby declare that this Dissertation is my own original work and that it has not been presented and will not be presented to any other University for a similar or any other degree award.

…….

Signature

……..

Date

DEDICATION

I would like to dedicate this dissertation to my beloved my beloved family for giving me all the needed support. Their moral encouragement and spiritual presence inspired me to complete this difficult task successfully.

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ABSTRACT

The purpose of this study was to determine the factors affecting sustainability of projects that are funded by donors with a case study of Dar es Salaam region. The study was conducted in the three districts of Dar es salaam; Ilala, Kinondoni and Temeke where 195 health care providers were contacted as respondents by using a purposive sampling. The study used in-depth interviews, focused group discussion and standard questionnaires to collect data. Descriptive data analysis was found in SPSS (Statistical Package for social Sciences (SPSS) and Microsoft Access was used for data storage. The study findings have revealed that program design and management have a direct relationship with sustainability of donor funded projects. The study found that if the project was designed to accommodate sustainability component from the beginning there is a higher chance of the project to be able continue with implementation beyond the donor funding period. Management of the project was seemed to have an effect towards sustainability of the project. In this study the project was partly managed by the Ministry of health who are the key pillars to continuity of the program. Results are also showing that for a project to easily sustain, there is importance of the project to really fit to the existing settings. There is a high chance for a project to sustain its implementation if the activities are part of the national health care setting big picture for instance in clinical practices and national health reporting system. Failure of this may hinder sustainability of the donor funded project. In order for donor funded projects to sustain beyond funding discontinue, organizations running the projects should ensure that the local and central authorities are part and parcel of the project implementation. It is important for the project to advocate for the government to start budgeting for activities that have been funded by donors.

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LIST OF ABBREVIATIONS

AACN	American Association of Colleges of Nursing
BSN	Bachelor of Science in Nursing
CCHP	Comprehensive Council Health Planning
CHMT	Council Health Management Team
CIFF	Children Investment Fund Foundation
DMO	District Medical Officer
DRCHCO	District Reproductive and Child Health Coordinator
FBO	Faith Based Organization
FGD	Focusing Group Discussion
HBB	Helping Baby Breathing
HDI	Human Development Index
HDI	Human development Index
HMIS	Health Management Information System
MDG	Millennium Development Goals
NGO	Non-Government Organization
NRP	Newborn Resuscitation Program
PSE	Pre Service Education
RHMT	Regional Health Management Team
RMNCH	Reproductive Maternal Neonatal and Child Health
RRCHCO	Regional Reproductive and Child Health Coordinator
ToC	Theory of Change
USAID	United States Agency for International Development

CHAPTER ONE

INTRODUCTION

1.1 Introduction

Sustainability in public health has been defined as the capacity of the programs to maintain program services at a level that provides ongoing health intervention for a health problem after termination of major financial, managerial and technical assistance from an external donor(La Pelle, Zapka, and Ockene 2006). An entire or parts of the services may continue or may be transferred to local councils. According to the United Nations; developing country is a country characterized with relative low standard of living, underdeveloped industrial base, and moderate to low Human Development Index (HDI) – a comparative measure of poverty, literacy, education life expectancy and other factors. These countries economic activities are characterized by donor aids, which result into donor, funded projects coming from developed countries.

A lot is known on identifying areas that need donor support, project planning, project execution and evaluation but there generally a little knowledge on how to sustain those projects after donor support ceases which leaves many projects hanging. This study used a case study of the donor funded newborn resuscitation program in Tanzania; the researcher learned the processes employed to ensure program sustainability after donor funding is discontinued.

1.2 Background

The Newborn Resuscitation Program was implemented by an NGO named Jhpiego in collaboration with Tanzania Ministry of Health and Social Welfare through financial assistance from Children Investment Fund Foundation (CIFF) supports the nationwide

scale up of Helping Babies Breath (HBB) training programs in 16 regions. Its goal was to contribute to reduction of neonatal deaths in the country through building the capacity of health care providers in management of birth asphyxia, provision of equipment for helping babies breathe (HBB) to health facilities with labor and delivery services. Birth asphyxia is among the top three causes of neonatal death. It contributes to about 27% of neonatal death. The funding was for the period of three years. The program also aims to support the ministry to develop a long term guideline for clinical mentorship of reproductive, maternal, neonatal and child health (RMNCH).

The Newborn Resuscitation program was implemented in 16 regions in Tanzania namely Pwani, Lindi, Dar es Salaam, Morogoro, Iringa, Njombe, Ruvuma, Mbeya, Manyara, Arusha, Kilimanjaro, Tanga, Singida, Kigoma, Mara and Kagera. The program covered all government and faith based owned organizations with labor and delivery services. The program required each hospital to have 20 health care providers trained, 8 from Health centers and 3 from dispensary from every district of the 16 regions. A total of 516 health care providers were trained from Dar es Salaam. The program was able to train a total of 13,207 from the 16 regions and 134 supervisors from councils were oriented on HBB skills for effective supportive supervision.

The program started in 2013 by conducting refresher trainings to district based trainers who went on to train health care providers. HBB equipment including Ambu bags, penguin suction devices and practical models neonatalie were distributed to every trained health facility. The neonatalie model was aimed to help health care

providers to practice at sites in order to retain their skills. Also the neonatalie were used for doing the on job training after trained providers reached to health facility.

The newborn resuscitation program was implemented following the highly unchanged rates of neonatal mortality in Tanzania as it in resource limited countries for many years (Msemo et al, 2013). Objectives of the NR program were to increase the capacity of health workers to manage birth asphyxia through provision of HBB trainings, to build capacity of regional and district health officials to improve newborn care and to improve facility readiness (in terms of supplies and equipment) to manage birth asphyxia.

Despite the fact that babies with difficulty in breathing were helped to breathe before the introduction of the program, it was not as effective as the Ministry would prefer. Over one third of neonatal mortality in Tanzania is caused by birth asphyxia. Other major neonatal deaths causes are prematurity and sepsis. In Tanzania, the neonatal mortality rate is approximately 32 in 1,000 live births, that is 40,000 deaths annually with approximately 13,000 attributed by birth asphyxia (Msemo et al. 2013).

Studies have shown that if newborn resuscitation interventions are properly implemented with skilled health care providers and availability of newborn resuscitation equipment , neonatal mortality can be reduced by approximately 47% or early neonatal mortality within 24 hours and a 24% reduction of fresh stillbirth within two years(Msemo et al. 2013). If this goal is achieved, Tanzania would be in a better position to attain the millennium development goal number 4 (WHO, Millenium Challenge Goals: MDG4 2013).

1.3 Problem Statement

Despite of having satisfactory knowledge on program knowledge on program planning, execution, monitoring and evaluation; Program Managers and researchers have different views on knowledge of program sustainability. Some authors say a program is sustained if it is prolonged beyond program life (Thompson et al 2000), others say sustainability is determined by the critical examination of what has been achieved during the implementation (Pluye et al 2013). The knowledge is said to be so contradictory because some studies have reported on different program levels such as organizational and community levels. According to Pluye et al 2013; no studies have provided a holistic approach when addressing sustainability. The researcher expects to study the whole process that may contribute to program sustainability.

Program managers and other program implementers always consider sustainability of programs or projects to be one of the key areas in their success. As they wish to learn how to sustain the programs activities, they encountered contradicting opinions to sustainability since different influencing factors for sustainability have been studied in pieces. This has limited the knowledge to project sustainability process. Components which sustain programs have been studied in discrete but these components need to be studied together since longevity factors for one program may not be important in the story of another sites implementation of the same program (Scheirer et al 2005). Pallas et al. 2013 provided a framework with these influencing factors as follows. Program design and management:

First, the design has to be acceptable to the targeted population. Strategies should be put in place to motivate and maintain the morale of program implementers in this

case; health care providers in the labor wards. Community fit: It includes well defined roles and responsibilities of health care providers in newborn resuscitation and introducing the topic in the health systems including training curriculum. Integration with broader environment: This refers to integration with formal health systems and interaction with facility based health care systems such as equipment procurement systems.

Secondly; in order for the program to attain sustainability there should be constant supply of the resources such as human, equipment and finance. Trained and skilled human resources who understand the program implementation. This enhances availability of the quality services which automatically would be accepted by the community.

Third, Supportive leadership is one of the key factor to the sustainability of the program. CHMTs should devote their time conducting supervision by embedding some components of the program in the supervision checklists. Also they should provide clinical mentorship programs which constantly would provoke continued skills.

Fourth, Pre Service Education (PSE) is one key area which should be incorporated for the program sustainability. Revising curriculum and performing workshops in Health training collages which embark knowledges to the students which later would help the implementation of the program.

These factors may interact over time depending on the history of each program or innovation. A factor that is crucially important to one program may not be as

important to another program or on the other site of the same program. The interaction of these factors to be studied together to understand the sustainability process of their corresponding programs to allow decision makers to know when and how to evaluate them and researchers to study them (Pluye et al. 2004).

In Tanzania, the newborn resuscitation program intervention was introduced by the Ministry of health and social welfare (MOHSW) which was later changed to Ministry of Health Community Development, Gender, Elderly and Children (MOHCDGEC) in 2009 with a pilot in 8 hospitals. It was then rolled put to Dodoma and Mwanza regions to cover all health facilities which provides labour and delivery services. In 2013, the Ministry of Health in collaboration with a non-governmental organization Jhpiego started to rollout newborn interventions across 16 regions where all government and faith based owned health facilities conducting deliveries were supported. The main challenge remained to be on the sustenance of newborn resuscitation interventions after the program ends (Ramsey et al. 2013).

Therefore, due to the existence of the problems the study intended to assess the factors affecting the sustainability of the donor funded programs in Dar es salaam within the facilities which received newborn resuscitation training.

1.4 Research Objective

The general objective of this study was to determine the factors affecting sustainability of donor funded programs. A case study of newborn resuscitation program in Dar es Salaam region, Tanzania.

1.4.1 Specific Objective

(i) Assessment of the supply of quality resources in promoting sustainability of the program.

(ii) To determine collaborative support in enhancing the sustainability of the program.

(iii) Assessing health care setting of the ministry of health enriching program sustainability.

1.5 Research Questions

(i) To what extent do the supply of quality resources promote sustainability of the program?

(ii) To what extent do collaborative support enhance the sustainability of the program?

(iii) Does the health care setting of Ministry of Health support program sustainability?

1.6 Scope of the Study

Sustaining delivery of services to beneficiaries after program ends has been a challenge in most project funded projects in Tanzania (Ramsey et al. 2013). This may be attributed by many factors including human resource strategies. Researcher was motivated to conduct this study with expectation that the process and results would inform project stakeholder including the project managers who were involved from the project design, planning, execution, monitoring evaluation and closing of projects to take into consideration factors that may improve sustainability aspects of their projects. Projects without a well-structured sustainability plan are more likely to yield

limited continuity of services after funding discontinuation. Other researchers have done studies on sustainability of projects in other countries rather. Less on sustainability has been researched in Tanzania.

1.7 Significance of the Study

Results of this study were expected to inform countries and organizations planning to conduct a large scale up of newborn resuscitation implementation of any public health to have a well-structured sustainability plan that would help the community to continue benefiting with the services of the project after funding has been ceased.

The study was meant to address the gap to be connected and help all stakeholders to play their roles in order for the project of this nature to have sustained services beyond the program implementation period. Results of this study is expected to contribute to the knowledge to the decision makers, program managers and implementers and other stakeholders to understand the process needed to ensure sustainability of donor funded programs.

1.8 Limitations of the Study

Scope of the research to only one programme might not reflect sustainability in other projects. However, the Newborn Resuscitation program has clearly demonstrated desired program design and management including development of a national learning resource package and training materials for clinical mentorship for reproductive, maternal, newborn and child health that has been adopted by the ministry of health, strong and consistent supervision and monitoring, clearly defined description of providers roles at the labour wards including action plan hanged in the labour room as

well as the provision of leaners book for reference and on the job training. The program has demonstrated involvement of health care providers and other stakeholders in the councils in and participation the course of implementation through selection of health care workers to be trained for newborn resuscitation, which was largely done by the CHMTs through the DRCHCO. On the other hand, newborn resuscitation reports were incorporated into the regular Ministry reporting system through the Health Management Information System (HMIS).

The study relied on opinion from the participants since the project had just ended by the time data collection was taking place which limited the opportunity to observe some of the sustainability components and interviewing some key program staff. The study also missed out a chance to review key policy documents and other relevant national documents related to newborn resuscitation and the study relied only on program documents. Nevertheless, the reported of lack of evidence for lack of sustainability could be a results of type of participants in the health system who were mainly health care providers.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter consists of the four parts, which explain about key concepts on factors affecting sustainability of donors funding programs. The first part explains about definition of key concepts, theoretical and empirical reviews. Additionally, the chapter explains about policy reviews, establishment of the research gap and the conceptual model of the study.

2.2 Definition of the Key Concepts

In this part the definition of the key concept provided in this subpart are sustainability process and the donor funded programs. Other terminologies used in this study are defined i.e. Program management and design, capacity building to beneficiaries, Organizational integration with broader stakeholders, Health care provider's supervision, Health care provider's recognition and motivation, Selection of health care providers and Integration with broader public health stakeholders.

2.2.1 Strategies for Project Sustainability

"Sustainability" refers to the continuation of a projects goals, principles, and efforts to achieve desired outcomes. Although many grantees think that guaranteeing the sustainability of a project means finding the resources to continue it "as is" beyond the grant period, ensuring sustainability really means making sure that the goals of the project continue to be met through activities that are consistent with the current

conditions and workforce development needs of the region, including the needs of both workers and industry. Grantees are reminded that the expenditure of any grant funds on activities related to sustainability and sustainability planning must be consistent with the grantees statement of work, and in accordance with all relevant rules and regulations that apply to their grants. When spending grants funding on activities related to sustainability and sustainability planning, grantees are reminded that they must adhere to Federal rules and regulations on outreach, fund raising, lobbying, and all other relevant and applicable rules and regulations.

A number of definitions have been used to describe what it means by sustainability but in this study it was referred to as the capacity of the project to maintain project services at a level that would provide ongoing health intervention for a health problem after termination of major financial, managerial and technical assistance from an external donor. In sustainability process three main components are considered including (i) program management and design (ii) capacity building and (iii) organizational integration (Pallas et al. 2013), Goodman and Stickler, 1989 and (Scheirer, 2015).

2.2.3 Sustainability of Projects

Sustaining important donor funded projects is a major public health challenge (Zapka,2009). In public health, projects have to maintain its services at the level that would provide continuous prevention and treatment for health challenges such as newborn resuscitation services to newborns with difficulties in breathing. Like in many public health programs, funds existed to support newborn resuscitation for a

period of three years. For the interventions to be sustainable, it is expected that funds from other sources should be available so the program activities can be continued.

According to Shediac Rizkallah and Bone, 1998 defined sustainability as measuring continued health benefits for individuals after the initial program funding ends, particularly continuing to achieve beneficial outcomes among intended recipient (in contrast to maintaining behavioral change among earlier beneficiaries) (Shediac-Rizkallah &Bone 1998). This definition was used an operational definition by this researcher to understand the process of program sustainability.

There are a number of enabling factors to for program sustainability. Pallas et at. 2013 provided factors that were largely the same as the framework provided in 1998 by Shediack – Rizkallah and Bone. The authors grouped these frameworks in the following categories.

Program design and management; the design has to be acceptable and specific to the community served. Most of the programs are designed in the outside the country and copying the methodology into our African environment as results it might not be very reflective and outcome might be insignificance.

Health care setting fit: This includes the organization of people, institution and resources that deliver health care services in order to meet the health needs of the target population. For a donor funded project to be successful, it is important that it fits well in these aspects of the country's health care system.

***Integration with the broader environment*:** This refers the interrelationship between the project with other programs in the whole health system in the country such as the supply chain management system, human resource management system which ensures availability of personnel to sustain project activities; the health management information system(HMIS) which monitors and evaluates project achievement. Donor funded programs are encouraged to use the existing system so as too unrestricted on the sustainability.

Since sustainability of project is one of the major challenges to public health sector(La Pelle, Zapka, and Ockene 2006), the researcher was aiming to learn the challenges facing the sustainability process of the newborn resuscitation program efforts after the funding is discontinued and what could be done better to mitigate the challenges. This study was conducted to determine the extent to which implementation process of the newborn resuscitation intervention continued operations to beneficiaries after the project schedule.

2.2.3 Program Management and Design

There are a number of factors that influence the sustainability that are considered during the designing phase and management of the program. These include the provision of trainings whether ongoing or interval, consistently management of stakeholders such as health care providers and the program having strategies (Scheirer 2005); (Pallas et al 2013).

2.2.4 Capacity Building to Beneficiaries

In India, a study was done in order to promote sustainability. The project developed refresher training programs through which potential sustainers were identified

(Sivaram & Celentano 2003). Community health workers were invited a month after training to discuss their plans and efforts. During these sessions, community based outreach workers were offered a nominal monthly stipend as an incentive to work in the project. They were also provided with a short training that focused on a particular intervention. This was also shown in a study conducted in rural Tanzania (Mubi et al. 2011) on Malaria intervention where community health workers were trained for one week on malaria symptoms, performance and interpretation of RDT, prescription of ACT (artemether-lumefantrine), identification of danger signs according to the guidelines. Beneficiaries are expected to continue using the skills acquired through these trainings after the project has ended. Another example was seen during the implementation of Focused antenatal care (FANC); health care providers were trained in health promotion, individual counseling, targeted assessment and evidence based interventions (Kearns et al 2014).

2.2.5 Organizational Integration with Broader Stakeholders

Some programs have shown established linkage with local authorities such as district councils and central level government. An example of this has been witnessed in India a study where among the initial steps of program startup was to establish a linkage between communities based officers and government to help motivate sustaining groups to implement programs for a bigger audience and update their skills and knowledge on continuous bases (Siravam &Celentano 2003). In Tanzania integration of project with stakeholders including the government has witnessed in public health programs such as focused antenatal care programs which was funded by United States Agency for International Development (USAID) between 2004 and

2008. The government was able to adopt as part of its strategy to improve antenatal care services to pregnant women in the country (Kearns et al 2014).

2.2.6 Health Care Providers' Supervision

Continuous and consistent supervision of health care workers is one of the strategies to sustainability of any health program looking at the quality of services and accountability. In the manual for comprehensive supportive supervision and mentoring on HIV and AIDS health services published in 2010; the Tanzania Ministry of Health and Social Welfare insists that supportive supervision and mentoring are necessary to build continuum of care. In a study in neonatal care trial in India intensive supervision was conducted once in 15 days and was considered vital for quality performance (Bang et al 2005). Another study in South Africa showed that supervision of community health workers was done in ad hoc fashion (vanGinneken et al 2010).

2.2.7 Health Care Providers' Recognition and Motivation

One strategy for sustaining service provision is through motivating a person working on the area by keeping the morale up by recognizing his/her efforts over time which includes both material and social support. Health workers are not of exception. Some programs have been using non-monetary rewards like in Nepal (Dawson et al 2008) where the government provided allowance for time spent in Training and review meetings. Non-monetary recognitions like certificates and shields and letters of congratulations for good performance from higher authorities are important motivators. Non-monetary motivation such as skills updates and new roles,

recognition, respect from supervisors and program Managers as well as emotional gratification are powerful motivators (Bang et al. 2005).

A neonatal study conducted in rural India Gadchiroli, health care workers were remunerated according to their scale of payment using the work output and the quality of work developed. It was found out to be very effective in providing good output with quality as motivation was high (Bang et al 2005). In the same country of India, a study conducted by Sivaram showed a wider community outreach during project implementation after the use of stipend offered to community health workers after the first refresher session. However, this approach did not help the project to sustain its efforts after its completion (Sivaram & Colentano 2003). However, about 90% of the community health workers who continue to offer outreach services are doing that in areas affiliated with institutions which provide financial support.

A study conducted in Dar es Salaam Tanzania to assess ways to motivate health care workers revealed that health care providers were dissatisfied by low rewards including salaries, lack of task description and feedback and most importantly poor facilities affecting provision of services. Together these factors undermine the output of the hospital and potential to significantly compromise the provision of clinical care (Leshabari et al 2008).

2.2.8 Selection of Health Care Providers

Selection of the health care providers can be one of the key factors that can influence continual existence of a health program. Selection of relevant cadres that are directly involved in the provision of relevant clinical care as well as those who are willing to

pass on the skills to others may prove beneficial to sustainability of the program. This was demonstrated in a study in India which stopped about ten years later after its inception. They applied strong recruitment approaches where an eligibility criterion was used to capture maximum number of eligible candidates. This was followed by a strong and objective evaluation and personality testing of the candidates and was concluded by a field test. According to Bang et al, this yielded a satisfactory result for high performance and a health workers dropout rate of 10% after 8 years (Bang et al. 2005).

Stakeholders involvement is one of the key strategies to sustain public health programs. In this study, stakeholders include the central government, local government authorities and end user beneficiaries – health facility clients. Taking an example of a program for onchocerciasis control where financial as well as non-financial contribution was made to ensure mectizan collection and distribution. Community involvement was seen where leaders offered their bicycles to be used in the same activities and less fortuned communities. Non cash mode of support appeared to be a very workable means of support (Amazigo et al 2007).

In an intervention in Tabora Tanzania, community members were involved and participated in discussing prevailing challenges from the communities from their own perspectives and suggested possible solutions and interventions. Community members participated in designing and implementing the intervention in the community, identifying resources within the community, plan the execution and management of the project. The community also selected a community member to provide services

and discuss monitoring results and implementation strategy accordingly (Mutalemwa et al. 2009).

2.2.9 Integration with Broader Public Health Stakeholders

Association with local government and health organization

Many programs have maintained the existing linkages between health workers and local government and other permanent authoritative organizations such as faith based organizations. In Tanzania, challenges have been identified in running public health owned health facilities due to logistical arrangements on how funds is distributed from local governments to central government and back local government; a decentralized fashion through funding from the central government (Nyamhanga et al. 2014).

In a study conducted in India where among the initial steps of the program startup were to establish liaison between community health workers and villager leaders and the government. This helped motivate sustaining groups to implement programs for a larger audience and to update their skills and knowledge on regular basis (Sivaram S & Celentano 2003). In many programs including the African program for Onchocerciasis poor program results were experienced where local government leaders were not strongly involved since the beginning of the program which lead to poor sustainability (Amazigo et al. 2007).

2.2.10 Clinical Mentorship

Clinical mentorship is a system of practical training and consultation that fosters ongoing professional development of mentees to deliver sustainable high quality clinical care. Clinical mentoring should be seen as part of continued professional

development required to create competent care providers. Driven by the learning needs of mentees, it occurs in face to face consultation, as well as through ongoing phone and email consultations

2.3 Theoretical Reviews

In this section the researcher demonstrated two theories; the theory of change which focus on the basis of the change or this to be consider whenever any changes in needed and the model for sustainability.

2.3.1 Theory of change

Community based change initiatives often have ambitious goals, and so planning specific on the ground strategies to those goals is difficult. Likewise, the task of planning and carrying out evaluation research that can inform practice and surface broader lessons for the field in general is a challenge. Theories of change (ToC) are vital to evaluation success for a number of reasons. Programs need to be grounded in good theory. By developing a theory of change based on good theory, managers can be better assured that their programs are delivering the right activities for the desired outcomes.

And by creating a theory of change programs are easier to sustain, bring to scale, and evaluate, since each step from the ideas behind it, to the outcomes it hopes to provide, to the resources needed – are clearly defined within the theory (Stein and Valters, 2012). The theory explains about assuring the program is delivering what expected by the community for instance the newborn resuscitation program was implemented in order to reduce the number of deaths resulted from difficulty in breathing in the first minute of life (Golden minute) mostly known as birth asphyxia.

2.3.2 A New Model for Sustainability

The current model yields sustainability planning efforts that focus primarily on finding a new revenue stream to replace the outgoing one. At best, this approach postpones the sustainability question for a few more years. The model shows that a program needs a strong, clear identity, a base of engaged constituents, and capacity that is aligned to deliver the results promised by its identity and meet the needs of its constituents in order to be sustainable.

Programs with these characteristics are able to attract and retain supporters and achieve significant mission-related outcomes. They have discarded the current model and have a new sustainability model in place one that defines their identity, constituents, and capacity and guides the development of the program towards a more sustainable future (Buck, 2015).

2.4 Empirical Reviews

Following the outcomes of the case studies in the South African process industry, it is recommended that checklists and guidelines be used during project and technology life cycle management practices. Similar to the environmental dimension, it is envisaged that such checklists and guidelines would improve the availability of quantitative data in time, and would therefore make the SII procedure more practical in the future (Brent et al 2006).

Program sustainability actually means different things depending on the developmental stage of your program. Newer programs may want to concentration on sustaining their activities or infrastructure once initial funding ends. Experienced

programs may want to enlarge their target population, transfer their best practices to other programs, build new relationships with other agencies, or promote broader policy initiatives. However, in either case new or experienced programs should work to better ensure sustainability by creating more efficient mechanisms for funding, such as the repurposing of existing resources through improved alignment, and coordination of complementary activities and resources.

Ali and Bailur revealed in their study in 2007 that sustainability can be affected by several factors including short period of project implementation, mismatching between projects interests and responsibilities of the project and those of the intended beneficiary. Another study suggested that lack of effective institution arrangement, appropriate monitoring mechanism, improved technology adoption, effective social and community organization and appropriate policy context (Harvey et al 2004), ownership in the community and lack of technological support (Mackintosh et al 2003) were among the contributing factors towards sustainability of project activities beyond the project tenure.

In his study to examine sustainability of activities in the post-project period in Matengo highlands; (Mahonge C, 2004) revealed that sustainability could be explained using beneficiary –based and project based attributes. Bracht and colleagues found in their study that program, had been discontinued because it did not attract enough client demand and had not located alternative funding.

Shediack- Rizkallah and with the Bone model found that some programs focused on one successful component from the original service component (selecting “acceptable

and affordable services" category) in order to sustain project activities. After sometime project was successfully sustaining since they were perceived as part of organization core values and mission. Financing was the greatest challenge to sustainability (Evashwick et al 2003).

2.5 Research Gap

Considering the above empirical literature review, it was evident that a number of studies focusing on the similar subject of sustainability projects but a little has been done to assess donor funded public health project sustainability in Dar es salaam. The researcher intended to look at the factors that have a direct and indirect influence into the sustainability of public health project in Tanzania especially in the largest city of Dar es es Salaam by looking at the design of the project the importance of having stakeholders' suggestion in the design and implementation of the programs so that they can necessitate the requirement during the design and focus the sustainability of the program. Also stakeholders' involvement required to identify risks associate with program after the donor funding is over and the suggesting program assurance.

Many programs in Tanzania initiated with huge financial support especially from developed countries but after funding discontinuation in most cases the programs fail to continue past the project tenure. Therefore, the researcher wanted to find out that, what should be considered during program designing so as to make sure that program implementation lasts longer after the donor funds ceases.

Quite a number of factors interplay to have sustained services in a public health program. The program team must work closely with its management in the initial

startup of the program with government authorities and health sectors to ensure common understanding and set up priorities (Amazingo et al. 2009).

2.6 Conceptual Framework

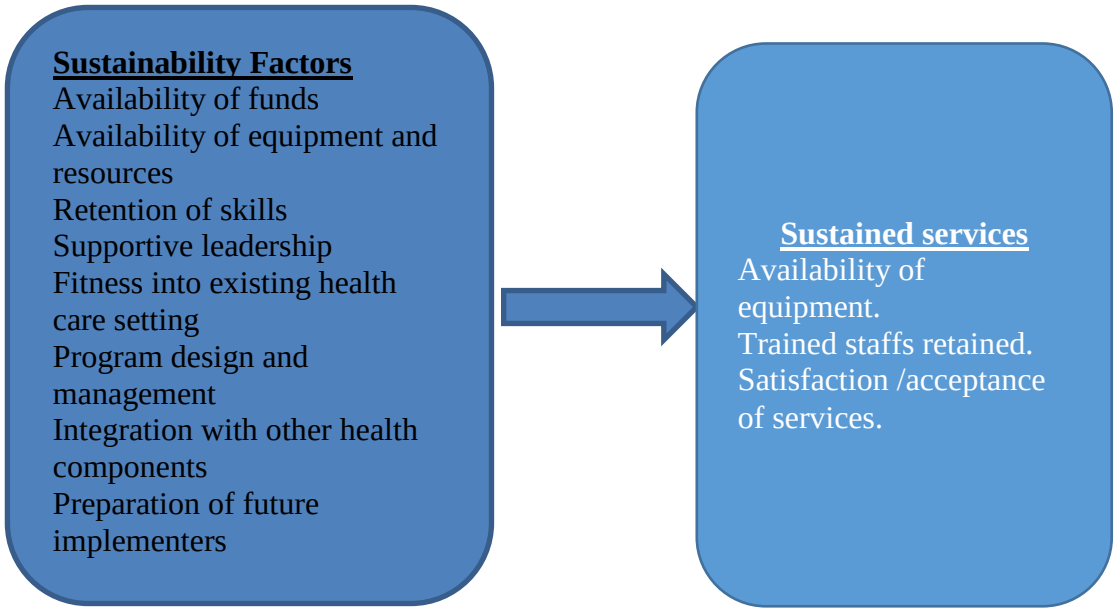

Figure 2.1: Conceptual Framework for Factors Affecting Sustainability of Donor Funded Programs

All program activities must be planned, implemented and managed jointly between the program team and the relevant government authorities in the district councils and regional levels (Mutalemwa et al. 2009). The above conceptual diagram shows involvement of different stakeholders to attain services to health care providers who are key beneficiaries.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

Research methodology reflects activities of determining the best practice, which methods or set methods can be applied in the specific cases. Therefore, by considering the problem identified in this study it helped the process of collection of the information from the intended audience and getting the answers of the questions. This included the data entry, data cleaning and tools for data analysis.

In this regard, this chapter presents methodologies used for data collection, time and type of the respondents to be included to the study, review, cleaning and analysis of the data. Key sections presented in this chapter include the description of the study area, research design, study population, sample size, sampling technique, data collection methods, data processing and analysis and ethical consideration for this study.

3.2 Research Design

Population in research is defined as a group of individuals, events or objects that have the common observable characteristics (Kothari, 2013). In this study the researcher targeted a population of health care providers who received training and participated in implementing newborn resuscitation activities in the region of Dar es Salaam. In this region, a total population of 516 health care providers were eligible for the study but only 195 health care providers from different health facilities were available for

selection to participate in the study. Table 3.1 explains the distribution of these participants according to their facility levels.

3.3 Population of the Study

Population of the study referred to the 516 health care providers who received training and were part of public health personnel who participated in the implementation of newborn resuscitation activities. A group on which a sample for the study can be selected and studied (Fraenkel et al 2000). In this study nurses midwife working at labor wards who previous had received the newborn resuscitation training, Three DRCHCO from each Municipal in Dar es region. Members of the CHMT in the district and RHMT in the region.

The nurses provided their experience on how did they involved in the designing and implementation of the newborn resuscitation program in related to sustainability process. The DRCHCO is the coopted member and CHMT provided their insight about the newborn resuscitation they were receiving the feedback after the training and facility readiness follow up were completed. Also at regional level the member of RHMT provided their experience on how the program was implemented in the region.

3.5 Sampling and Sampling Procedures

This section presented how the respondents in the study population were obtained in the study.

3.5.1 Sample

The sample size of 195 was obtained for this study were derived from the 516 providers attended the newborn resuscitation training in 2013 and their facility had

high delivery load in 2015. Providers were coming from government and Faith Based Organization (FBO). In order to be precise in the study only government providers were involved with the ration the same number with HBB training. There were about 3 health Centre and 8 dispensary attended the training which equal to 195 health providers.

Therefore 195 health providers were interviewed from dispensary and health centers to give to share their experience on sustainability of donor funded program especially the newborn resuscitation program.

Table 3.1: Distribution of Study Participants According to their Facility Level

Facility Type	Number of Providers Per Facility	Facility Received HBB Training	Total Provider
Health Centre	8	3	24
Dispensary	3	57	171
	Total		**195**

3.5.2 Sampling Technique

A purposive sampling was employed with simple random sampling to select study participants. Stage one: Dar es Salaam region was selected conveniently to conduct the study as there is a newborn resuscitation program being implemented. Despite having other regions implementing the same program, Dar es Salaam is the pioneer and was one of the three regions rolled out with the Newborn Resuscitation intervention in 2013 unlike other regions which have been in operation two years after Dar es Salaam.

Stage two: A purposeful sampling of 60 health facilities in Dar es Salaam where newborn resuscitation is implemented was done using the high delivery density as the

entry point to be involved in this study. The selection of these facilities also considered logistical factors to reach the participants given the complexity of the city of Dar es Salaam.

Stage three: Participants to this study were selected based on the program implementation structure that is from the program team members, trainers to the health care providers in Hospitals, Health centers and Dispensaries which provide delivery services and owned by the government and faith based organizations. This made a total of 60 health facilities whose health care providers were interviewed.

In depth interview to key informants

In-depth interviews were conducted by the data collectors to stakeholders who were identified to participate in the study. An appointment was informally set with the providers prior to the interview day. On the day of interview, verbal consent was taken from the participants before the interview begun. All interviews were recorded and notes taken to enrich the text of the interviews.

At district and facility kevel the participants included:

1. Reproductive and child health coordinators (DRCHCO) who oversees program activities at the district level and conducts field visits as planned.
2. DMO who is the district manager for health services and responsible to coordinate program implementation activities.
3. District Nursing Officer (DNO) who oversees all nursing and midwifery activities at the district level including overseeing nursing quality services of the district.

Program staff

1. The Program Manager who coordinates and oversees all program implementation activities.
2. The program office staff who has been involved in routine program implementation including conducting trainings, supervisions and monitoring.

3.6 Data Collection

A structured questionnaire was used for health care providers who received formal helping babies breathe training and those who received HBB skills through on the job training. This tool was used to capture demographic characteristics, information on newborn resuscitation services provided at labour and delivery wards in health facilities, HBB services support from councils, regional and ministry level. The tool also captured satisfaction of health care providers on the status of enabling environment for provision of newborn resuscitation services and their opinion on continuity of services once the program has phased out.

3.6.1 Data Collection Tools

Data collection tools which were used in questionnaires and in depth interviews. The tools were addressed to the above mention respondents.

3.6.2 Data Collectors

Enumerators were obtained based on their experiences on health research project interviewed and their resume were reviewed. That enabled to have data collectors competent for data collection.

3.6.2.1 Recruitment of Data Collectors

Six data collectors, two for each districts were identified from participating health facilities. Data collectors were required to have a minimum of form four qualification and to have experience on data collection activity and understands locally used language in the study area. They were responsible to conduct interviews for this study.

3.6.2.2 Training of Data Collectors

A two-day training of data collectors was conducted in Dar es Salaam. The training was focused on detailed study background, study ethics and training of sampling of health care providers and health facilities to be visited. The training also focused on who administer the questionnaire. Interpreter reliability was done by having by having a pair of volunteers' role-playing the interview session and the other completing the questionnaire, which the answers were compared to ensure validity and reliability.

3.6.2.3 Pilot Testing

Pilot testing was done following a training to data collectors. It was conducted in Mwananyamala and Sinza hospital premises after a two days training of data collectors.

3.6.2.4 Data Collection Procedure

According to Faculty Development and Instructional Design Center, Data collection is the process of gathering and measuring information on variables of interest in an established manner that enables one to answer stated research questions, test hypotheses and evaluate outcomes. In this study, the same was done following a two days training to data collectors who were trained on the data collection tools including

the structured interview guide. Data collectors were introduced and attached to the health facilities in charges. Data collectors were then directed to areas within the health facilities where eligible health providers could be reached for study. Data collectors conducted interviews to health care providers, program staff, CHMT staff who consented to participate in the study.

3.6.2.5 Routine Supervision

Data collectors were supervised on daily basis to see the progress of data collection activity. This was done by the researcher by visiting the sites at alternative days and reviewing completed tools. The researcher made necessary clarifications and made some reviews on the tool to ensure data quality. Also supervision was done through brief sessions between the researcher and data collectors ever evening during the data collection period.

3.6.2.6 Data Management

Data collectors submitted completed data collection tools to the researcher every evening during working days for review. On daily basis during the data collection activity, the researcher performed manual data cleaning and verification by checking if there were any errors committed by checking completeness, accuracy and inconsistency.

The researcher provided feedback to data collectors immediately so that they do continue doing a good job and not committing any possible mistakes as they start a new day of data collection. Cleaned filled questionnaires were filed into box files according to the district the providers work.

An access database was created to manage and store data electronically. A unique identifier was created in the database to ensure there is no duplication of records. Data entry into the database was performed after completion of data collection activity. Data was cleaned and exported into SPSS software for version 22 for analysis.

3.6.1 Questionnaire

A semi structured questionnaire comprised of open and closed ended questions was administered through face to face discussion with sampled nurse midwives working at different health facility in Dar es Salaam region, this consisted 195 nurses from Ilala, Kinondoni and Temeke. The face-to-face approach enables the researcher to collect adequate information through in depth discussion and get insights from respondents through gesture and direct observation. Face to face enables nurse midwives to clarify all issues, which are not understandable to the researcher to make the process of data collection very easy.

3.6.2 Interviews

Purposive sampling technique was used to obtain health care providers who were knowledgeable and able to provide valued contributions during the interviews. In-depth interviews were conducted to the Reproductive and Child health coordinator (DRCHCO) of the three districts Temeke, Ilala and Kinondoni who routinely work with health facilities maternal and child sections to supervise and monitor performance of health care providers as well as coordinating reproductive and child health activities including newborn resuscitation activities. They also interview the Program Manager who was knowledgeable on how the program was designed, managed and implemented.

3.6.3 Documentary Review

Main program documents including Program monitoring plan, annual work plans, implementation reports including baseline reports, activity reports, meeting notes and performance reports, success stories and integrated, Maternal, Newborn and Child Health Learning Resource Package were reviewed by the study coordinator. These documents provided information on sustainability strategies set in the design of the program and their implementation through planned activities. Desk review was conducted prior to actual fieldwork which provided a road map on focused questions to be asked in in-depth interviews in the field visits.

3.7 Eligibility Criteria

Health care providers working in labour and neonatal wards of the trained health facilities. Council Health management team (CHMT) members, Ministry officials working with reproductive and child health section (RCH) and organization staff working on the program.

3.7.1 Inclusion Criteria

Managers: Should have been involved in the project at some point of program implementation. Health care providers: Should have received HBB skills through formal or on the job training and be aware and have been involved in the HBB activities.

3.7.2 Exclusion Criteria

Managers:

Those who are unware of the newborn resuscitation program implementation in Tanzania.

Health care providers:

Those who are not aware of the newborn resuscitation program implementation.

3.8 Ethical Consideration

3.81 Informed Consent

A written consent was prepared and sought from all study participants prior to the start of the interview.

3.8.2 Confidentiality

Confidentiality of study participants was observed through anonymous participants' identifiers. All study participants were kept confidential and only be shared among the study team.

3.8.3 Payments

This study did not involve payments to participants since participation to the study was absolutely voluntary.

3.8.3 Ethical Clearance

The study did not secure ethical clearance as it was considered to be a non-human subject. Permission to conduct the study was obtained from the Regional Reproductive and Child health coordinator through district reproductive and child health coordinators of respective councils who are the co-opted members of the Councils Health Management teams (CHMTs).

3.9 Data Analysis

Both qualitative and quantitative approaches was used to analyze data collected for this study. Qualitative data especially unstructured information collected through

interview was organized and analyzed through theme-content analysis technique, whereby information was categorized according to themes relevant for answering key research questions.

Unlike qualitative data, quantitative technique used to analyze data collected through questionnaire. Under this method, data was summarized, coded and entered into computer based software Statistical Package for Social Sciences (SPSS Version 22.0) in order to generate descriptive statistics such as frequencies and percentages.

Data validity and reliability analysis

Data reliability is a state that exists what data is sufficiently complete and error free to be convincing for its purpose and context (Morgan,2004). It refers to repeatability of the findings. This means if the same assessment were to be conducted several times regardless of who conducts it, the findings would be almost the same. Validity refers to credibility or believability of the study. Valid data measures exactly what is intended to measure. It implies applicability and usefulness of the data obtained through such reliable design (C. Kothari 2007)). This study managed to conduct a pilot study in order to test if the tools are measuring the intended values. In the same pilot study, data reliability was made before the formal data collection started. The pilot study revealed consistent results across multiple respondents.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSION OF THE FINDINGS

4.1 Introduction

This chapter presents the results and discussion regarding to the data collected from the fieldwork on the described study area. The study involved health providers who attended training on helping babies breathe (HBB).

4.2 Demographic Characteristics of Respondents

The demographic characteristics of the respondents comprised of the age, sex, level of education, cadre and the position of the respondents. A total of 195 participants were interviewed in July 2016. Participants were recruited from 88 health facilities in the three municipalities of Dar es Salaam; Ilala, Kinondoni and Temeke. Kinondoni had a contribution of the majority of participants with 38% of them.

4.2.1 Age of Respondents

Respondents were asked about the age category of which they belong and the majority were aged 20 to 36 years equal to 57.4 percent, followed by 24.1 percent aged to 37 to 45 years and 15.4 percent aged more than 45 years. The least of the respondents aged below 20 equal to 3.1 percent.

Table 4.1: Age of Respondents

Age Group	***Frequency***	***Percent%***
Below 20	6	3.1
20-36yrs	112	57.4
37-45	47	24.1
45+	30	15.4
Total	**195**	**100.0**

Source: Field Survey Data (2016)

The majority of the health providers who are working in antenatal, postnatal and labour wards are aged between 20-36(53.3%) years and 37-45(25.9) years. This implies that the majority of the healthy providers interviewed have enough working experiences. Also the study shown that there were some few health workers aged 37-45years.

Some health care employers a developed strategy for "disability management" that may include efforts to reduce declines in work performance resulting from age-related physical, cognitive, or sensory disabilities (Tishman, Van Looy, & Bruyère, 2012).

4.2.2 Sex of Respondents

Another characteristics of the respondents was sex and majority of the respondents were female equal to 82.6 percent and male were 17.4 percent.

Table 4.2: Sex of Respondents

Age Group	***Frequency***	***Percent***
Male	34	17.4
Female	161	82.6
Total	**195**	**100.0**

Source: Field Survey Data (2016)

The Table 4.2 show that the group of health providers working in antenatal, postnatal and labour ward were dominated by women which was more than third quarter and the rest were male. This implies that females were more favourable working on antenatal and postnatal and labour wards than males. According to (WHO, 2008) described that women make up about 42% of the estimated global paid working population. Within the health sector, in many countries women comprise over 75% of

the workforce, making them indispensable as contributors to the delivery of health care services. However, in many countries, women still tend to be concentrated in the lower-status health occupations, and to be a minority among more highly trained professionals. In particular, the distribution of women by occupational category tends to be skewed in favour of nursing and midwifery personnel and other 'caring' cadres such as community health workers (WHO, 2008)

4.2.3 Level of Education

In terms of educational attainment, majority 89.7 percent of the study participants had completed Secondary Education while 6.2 percent have primary education. A few 4.1 percent have university education.

Table 4.3: Level of Education

Level of Education	***Frequency***	***Percent***
Primary	12	6.2
Secondary	175	89.7
University	8	4.1
Total	**195**	**100.0**

Source: Field Survey Data (2016)

The study revealed that about 93.8 percent of all the respondents attained secondary education which is minimum qualification for nurses.

4.2.4 Cadre of Respondents

A total of 195 participants were involved in the study. Majority 71.3 percent were nurse midwives, while 25.6 percent were clinical officers and 3.1 percent Medical Assistants and Medical Assistants.

Table 4.4: Cadre of Respondents

Cadre of Respondents	*Frequency*	*Percent*
Nurse Midwives and MA	139	71.3
Clinical Officers	50	25.6
Medical Officers	6	3.1
Total	**195**	**100**

Source: Field Survey Data (2016)

From Table 4.4 shows that registered nurse and Nurse Midwife occupy more than half of the all providers participated in the interviews. There were fewer number of medical attendants and assistance nursing officers.

4.3 Availability of Funds

Managers and administrators were asked about the additional funds after the donor's fund ceases. Responses from District Medical Officer (RMO) and Program manager.

"…. We actually depend on government budget and donors' funds to implement any updates, the allocation of funds in health sector is focusing the areas with very high priority…" ***DMO Kinondoni Municipal.***

Also during the interview, the program manager Newborn Resuscitation Program was asked to provide her inputs about the availability of the funds after donors' fund ceased and response was as follows.

"... The fund that we received from CIFF was three year scale up of newborn resuscitation and after that the program will be owned by ministry of health in respective RHMT. Therefore, allocation of funds in CCHP is very important…" Program ***Manager –Newborn Resuscitation Program***

Also the program Manager added that, it is not possible to maintain program staffs after the funding the funding is over.

"…the implementation of NRP was under ministry of health and Jhpiego, funding included maintaining staff's salaries and benefits. Once the funding is over then all the program activities were handled over to the government…" Program ***Manager – Newborn Resuscitation Program***

4.4 Availability of Equipment and human resources

Healthcare providers were asked about the availability of equipment required for supporting newborn resuscitation. 84.6 Percent said "YES" while the minority of the 11.8 percent said "NO". The rest said they "Don't remember" which is 3.6 percent.

Table 4.5: Supply of Equipment

Supply of equipment	***Frequency***	***Percent***
Yes	165	84.6
No	23	11.8
Don't remember	7	3.6
Total	**195**	**100**

Source: Field Survey Data (2016)

4.4.1 Availability of Skilled Human Resources

The research wanted understand the availability of the skilled human resource to support the program.

Table 4.6: Availability of Human Resource

Availability of human resource	***Frequency***	***Percent***
Strong Disagree	28	14.4
Disagree	21	10.8
Neutral	15	7.7
Agree	78	40.0
Strong Agree	53	27.2
Total	**195**	**100.0**

Source: Field Survey Data (2016)

Results in the table above shows that the majority of the respondents 40% agreed that availability of human resources is adequate enough to support newborn resuscitation activities even beyond the program implementation period.

However; a smaller percentage (27%) strongly agree with the availability of human resources. Twenty-five percent of the respondent thought that the existing human resource is not adequate enough to sustain newborn resuscitation interventions after donor funds is discontinued. Only 7.7% did not know whether the availability of human resources is adequate to sustain newborn resuscitation activities after donor funds ceases.

4.5 Supportive Leadership

Table 4.7: Supervision from CHMT

Supervision from CHMT	*Frequency*	*Percent*
Yes	171	87.7
No	24	12.3
Total	**195**	**100**

Source: Field Survey Data (2016)

The Table 4.7 shows the analysis of respondents to a question which wanted to know if they received a formal supportive supervision visits during the implementation of newborn resuscitation activities. The results show more that 87% of the respondents reported to have received a formal supportive supervision that would help health care providers to retain skills and adhere to the standard operation procedures to newborn resuscitation practices. However, a small percentage (12%) reported that they did not receive a formal supportive supervision for newborn resuscitation.

4.5.1 Frequency of Supervision

Table 4.8: Frequency of Supervision

Frequency of supervision	*Frequency*	*Percent*
Monthly	25	14.4
Quarterly	136	79.5
Semi annually	11	6.2
Total	171	**100**

Source: Field Survey Data (2016)

The analysis in this table shows the frequency of supportive supervision reported by respondents as conducted for newborn resuscitation activities. The majority of respondents reported that they received either on quarterly or monthly basis. About 6% of the respondent reported to have received supportive supervision semiannually.

4.5.2 On Job Training

Table 4.9: Providers Received on Job Training

Providers received on Job Training	***Frequency***	***Percent***
1 to 3 providers	114	58.5
4 to 6	49	25.1
More than 6	21	10.8
None of them	11	5.6
Total	**195**	**100**

Source: Field Survey Data (2016)

The above table shows that about 94% of the providers who received formal training managed to provide on job training to more that 1 provider at their work places and impart skills on newborn resuscitation.

4.5.3 Motivation and recognition

The study found that the program has been providing motivation to best performing trainers and health care providers. Trainers who have performed well have been recognized by invited by the Ministry to train in other regions and have been recognized as mentors. Best performing health care providers have also been recognized as mentors and have been recognized as mentors. Mentors usually provide mentorship to other health facilities in the same level and below. This means mentors working in Hospital levels may provide mentorship to hospitals or health centers and dispensaries but mentors from health center level may be able to provide mentorship in health centers and dispensary only but not in hospital level.

4.5.4 Retention of Skills

Through documents review, the study observed that the program managed to support the ministry of health in developing the guideline for reproductive, maternal, newborn and child health (RMNCH) with the intention of developing a clinical mentorship model to enable health care providers to benefit from regular clinical mentorship. In this way, it is expected that skills gained by healthcare providers would be retained and refreshed for longer periods. Although the process took place at the end of the program; two pilot regions Mara and Kagera had already been rolled out with plans for more regions.

4.6 Fitness of a project into the existing health care settings

The study collected responses regarding on the healthcare setting of the ministry of enriching program sustainability. Respondents were asked about program design and management, Health care setting, program management for sustainability, curriculum

reviews and provisional of pre service education. Program observed the importance of involving the stakeholders at different milestones of implementations to facility program ownership.

This has been observed in the road map for maternal and child health programs in Tanzania. The Ministry has been part and parcel of the program from designing phase of the program. The Ministry managed to form a committee, which included experts from in-country and abroad with the task of broadly discussing program implementation.

The Ministry also managed to have a focal person who provided guidance on program implementation for consistency. Regional and council levels were also on the driving seats in planning for newborn resuscitation rollout in their respective authorities. RHMT and CHMT members were trained on the program. On the other hand, most trainers came from regional and council health management teams. These were key in conducting supervision and mentorship to health care providers. These were observed in the program documents such as work plan and reports.

4.6.1 Program Design and Management

Program documents were reviewed to identify program, design, strategies and implementation. Program monitoring plan, program work plan, program implementation reports baseline assessment reports, meeting reports and performance reports, success stories and integrated community, clinical mentorship for reproductive, maternal, newborn and child health learning resource package which is in draft stage, helping babies breathe training materials and newborn care guidelines.

Routine monitoring has been implemented at program level in collaboration with the respective district. This has been done along with follow up visits four to six weeks' post training as well on quarterly basis where summarized data has been entered into the electronic database to be analyzed. The program monitoring and evaluation team had put in place a monitoring and evaluation system to be able to track all measurements of program activities.

The newborn resuscitation program was being externally evaluated by experts from within and out of the country. The external evaluation team was following up closely how the program team implemented activities as well as evaluating most of the program initiatives. The reports of the findings were made available for program improvement. The study found filing system where all program activities reports have been filed and well stored.

4.6.4 Preparation of Future Implementers

Upon reviews of program documents and in-depth interviews with the Program Manager, it was observed that the newborn resuscitation program worked with the Ministry of health to train tutors of the preservice schools (Nursing and Midwifery schools) to capacitate them with skills for newborn resuscitation. In this way, the program expected nursing students to graduate with updated skills in newborn resuscitation as a means for sustainability. However, the review of preservice school curriculum could not be done during the program implementation period. This would mean a great deal to sustainability of newborn resuscitation as nursing students could receive the updated newborn resuscitation skills immediately after graduation.

4.7 Adoption of Project in Government's Plan

Generally, the results showed that more than half of the participants, 104 (53.3%) agreed that the program would continue even after the project timeframe has ended. The results were analyzed with respect to cadres of the study participants. All cadres were of the same opinion on the possibility of project activities to continue after the project ends. The difference was found to be statistically significant between clinical officers and nurses (p value <0.01). Respondents working in the labour and delivery wards had less confidence on the continuity compared to those working in other departments of the health facilities.

Staff from the central government and from the program shared the same level of opinion that program activities may continue post donor funding with expectations that the government is prepared to fund such lifesaving interventions from the upcoming financial budgets. They cited examples from many district councils that have started setting aside funding for newborn resuscitation related activities such as purchasing of essential equipment, supportive supervision and refresher training to health care providers in order to retain gained newborn resuscitation skills. Such districts are Iringa, Babati TC, Mwanga DC, Nanyumbu, Kilindi, Kilolo DC, Gairo.

4.8 Satisfaction on Newborn Resuscitation Services

Variable	% satisfaction
I am satisfied with way the program was implemented	96%
I am satisfied with thw way stakeholders were involved in the design of the program	98%
I am satisfied with the way the government was involved in advocating funds budgeting	95%
Satisfied with the quality and quantity of equipment supplied by the program	94%

Figure 4.1: Satisfaction on Newborn Resuscitation Services

Generally, the graph above results shows that all study participants were satisfied with the services provided to babies with difficulty in breathing during the period of program implementation. Participants who participated in planning for newborn resuscitation activities including regional and district councils' health management teams, those who received training of trainers and those who received clinical skills training on newborn resuscitation showed satisfaction by 96%, 98%,95% and 94% respectively as seen in Figure 4.1. The high level of satisfaction observed is a proxy indicator that the program met its objectives and it conforms to the beneficiaries demands.

4.9 Discussion of Findings

This study looked into the process undertaken by the Newborn resuscitation program to learn the factors that may have been identified as the factors to affect the sustainability of donor funded programs. The NRP program showed strengths for the design and management in a couple of enabling factors for sustainability which included; program partnership with the ministry of health and managed to develop guideline for clinical mentorship which has been fully adopted by the ministry health as part of strengthening the capacity of health care workers' knowledge and skills from council to facility levels. The program also worked with the ministry of health in strengthening the Health Information Management System (HMIS) registers and reporting tools to enable monitoring and evaluation of newborn resuscitation information across the country. Some other findings were as follows:

Respondents were dominated by female health care providers about 82%. The findings are not far from the WHO findings which suggest that within the health

sector, in many countries women comprise over 75% of the workforce, making them indispensable as contributors to the delivery of health care services. In terms of education attainment, majority 93.4% of the study participants have acquired secondary which is a minimum qualification for nursing degree. Clinicians with Bachelor of Science in Nursing (BSN) degrees are well-prepared to meet the demands placed on today's nurse (AACN, 2014). Managers and Administrators thought that it was important for district councils to set aside in CCHPs funding to sustain newborn resuscitation activities as a means for sustainability beyond donor funding.

On the availability of newborn resuscitation equipment 84% of the respondent said for a program to be able to sustain its implementation beyond donors funding, availability of equipment is equally important while the same proportion suggested that availability of human resources to carry out newborn resuscitation activities is important to its sustainability. This finding agrees with (Buchan, 2004) who concluded that one of the fundamental principles of quality health systems performance is effective human resource availability and its management. All participants (100%) agreed that for program to sustain its activities, it has to be incorporated into the existing supportive supervision. Studies have shown that nursing performance can benefit from supportive supervision (Drach-Zahavy, 2004),

Program document review revealed that the program managed to incorporate its key indicators into the national Health Management Information System (HMIS). This means, all health facilities are obliged to report newborn, resuscitation indicators on monthly basis which is key for project monitoring and evaluation; a great step towards sustainability of project activities.

In order to retain skills of health care providers over time; clinical mentorship was one of the areas that implemented during the newborn resuscitation program. Studies have suggested that clinical mentorship is important in enabling process that provides not penalties but an opportunity for personal and professional growth (Butterworth, 2009) as opposed to supportive supervision, which comprises of several checklists to be performed during a visit such as administrative;

In the opinion on program continuity, about 53.3% of the respondents agreed that newborn resuscitation activities will continue even after project timeframe has ended.

CHAPTER FIVE

SUMMARY OF THE FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

In this chapter a summary of the study is presented and the conclusion based on the findings of the study are discussed. These will be followed up by the recommendation for based on the findings and observation of the study.

5.2 Summary of the Findings

This study looked into the process undertaken by the Newborn resuscitation program to learn the factors that may have been identified as the factors to affect the sustainability of donor funded programs. The NRP program showed strengths for the design and management in a couple of enabling factors for sustainability which included; program partnership with the ministry of health and managed to develop guideline for clinical mentorship which has been fully adopted by the ministry health as part of strengthening the capacity of health care workers' knowledge and skills from council to facility levels. The program also worked with the ministry of health in strengthening the Health Information Management System (HMIS) registers and reporting tools to enable monitoring and evaluation of newborn resuscitation information across the country. Some other findings were as follows:

(i) Respondents were dominated by female health care providers about 82%. The findings are not far from the WHO findings which suggest that within the health sector, in many countries women comprise over 75% of the workforce, making them indispensable as contributors to the delivery of health care services.

(ii) In terms of education attainment, majority 93.4% of the study participants have acquired secondary which is a minimum qualification for nursing degree. Clinicians with Bachelor of Science in Nursing (BSN) degrees are well-prepared to meet the demands placed on today's nurse (AACN, 2014)

(iii) Managers and Administrators thought that it was important for district councils to set aside in CCHPs funding to sustain newborn resuscitation activities as a means for sustainability beyond donor funding.

(iv) On the availability of newborn resuscitation equipment 84% of the respondent said for a program to be able to sustain its implementation beyond donors funding, availability of equipment is equally important while the same proportion suggested that availability of human resources to carry out newborn resuscitation activities is important to its sustainability. This finding agrees with (Buchan, 2004) who concluded that one of the fundamental principles of quality health systems performance is effective human resource availability and its management.

(v) All participants (100%) agreed that for program to sustain its activities, it has to be incorporated into the existing supportive supervision. Studies have shown that nursing performance can benefit from supportive supervision (Drach-Zahavy, 2004),

(vi) Program document review revealed that the program managed to incorporate its key indicators into the national Health Management Information System (HMIS). This means, all health facilities are obliged to report newborn, resuscitation indicators on monthly basis which is key for project monitoring and evaluation; a great step towards sustainability of project activities.

(vii) In the opinion on program continuity, about 53.3% of the respondents agreed that newborn resuscitation activities will continue even after project timeframe has ended.

5.3 Conclusion for The Study

The results from this study suggest the following conclusions.

Firstly; for a program to continue its implementation; a couple of sustainability models must be employed right from designing of the newborn resuscitation program where stakeholders must be involved. Furthermore, for the project to be sustain its activities beyond donor funding period; it is important that its activities are integrated into the existing central and local government authority's system. For the the Newborn Resuscitation program it was important that its activities such as training materials, pre service education curriculum, supply chain systems are integrated into the health care systems such as the Ministry guidelines and into reporting tools (HMIS). Lastly, the study found that for door funded projects to sustain, it is important that aggressive advocacy for Council's funding commitment to Comprehensive Council Health plan (CCHPs), inclusion of newborn resuscitation into the support supervision checklist as well as a guideline for clinical mentorship for newborn resuscitation.

5.4 Recommendations

(i) The design and management of the newborn resuscitation program demonstrated strengths in capacity of health care providers which was designed to be more hands-on to allow practical knowledge grasp as per program needs. The training

was coupled by the distribution of newborn resuscitation equipment which were used for practice during training and for use in the health facilities. Management of the newborn resuscitation program was more of the Ministry based. All high level decision was made in the presence of the Ministry officials which made it easy for government ownership and sustainability. Therefore, the approach used by the NR program, can be adapted by programs which needs to conduct the same kind of interventions. High level involvement of the Ministry in program management provides room for easier advocacy to funds budgeting at CCHPs.

(ii) The program worked in a close collaboration manner with district councils and Dar es Salaam in particular throughout its implementation which has helped to build capacity to CHMT members, health care provider. In this way, district councils stand a better chance on ensuring sustainability of the program something that other districts can learn from. Most of the trainers were drawn from these district and can be used as mentors and key facilitators in supportive supervision for newborn resuscitation even after donor funding is discontinued.

(iii)Findings from this study has shown that the newborn resuscitation program worked in collaboration with Ministry of Health to strengthen newborn resuscitation data in the Ministry formal health systems. Health care providers were formally oriented on how document newborn resuscitation uptake in HMIS registers as well as how to compile monthly reports. The program participated in the review of HMIS Labour and delivery registers to address data documentation challenges. In this way, the program has ensured itself of long term and

sustainable need and availability of data which indirectly encourages health care providers and councils to continue implementing newborn resuscitation activities.

(iv) Another finding from this study has shown one of the key areas to promote sustainability is the availability of newborn resuscitation equipment in health facilities. A small number of facilities were reported to have newborn resuscitation equipment in place before the program inception. The study recommends for availability of these equipment in the national logistic system and in this case Medical Store Department (MSD). The program, managed to work closely with MSD to ensure availability of newborn resuscitation equipment in the regional and zonal offices. Although this was not 100% successful at the end of the program, MSD through collaboration with MOHCDGEC is still actively following up to stock the facilities with the equipment. Other programs implementing the same program, are encouraged to work with the government entities to ensure sustainable availability of essential supplies for the program to avoid discontinuation of services after donor funding is stopped.

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APPENDICES

Appendix I: Questionnaire

This is questionnaire designed to health care providers who have received training on HBB and their facility have newborn resuscitation equipment. You will be asked to provide information on experience and skills concerning implementation of HBB program in relation to the sustainability process.

SECTION A: Demographic Information

1. Sex of respondent…
   a) Male
   b) Female
2. Highest level of education…….
   a) Primary
   b) Secondary
   c) University
3. Age……..
   a) Below 20
   b) Between 20 and 36
   c) Between 37 and 45
   d) More than 45
4. Cadre of the respondent……
   a) Nurse Midwife and Medical attendant (MA)
   b) Clinical Officer
   c) Medical officer

SECTION B: Program Management for Sustainability

6. Are you satisfied with newborn resuscitation services and equipment supply?
   a. Yes
   b. No

7. How many providers received on job training in your facility?
   a) 1-3 providers
   b) 4-6
   c) More than 6
   d) None of them

8. Did you receive a strong supportive supervision from CHMT on HBB related matters which may account to sustainability?

a) Yes
b) No

9. How was the frequency of the supportive supervision?
   a) Monthly
   b) Quarterly
   c) Semi annually

10. Did you receive clinical mentorship during the implementation of newborn resuscitation?
    a) Yes
    b) No

11. What is your opinion about the program continuity after donor funding get discontinued?
    a) The program will run smooth
    b) The program will not run smooth
    c) The program need restructuring after donor exit
    d) Other, mention_____

12. What kind of motivation and recognition did you receive as a result of receiving a HBB training at your facility?
    a) Attending other training on HBB
    b) Promotion
    c) Becoming HBB focal person
    d) Other, mention _____

13. The following table shows the participation of health providers in the program design and Management during HBB implementation.

Area of Proficiency	**Strong Disagree**	**Disagree**	**Neutral**	**Agree**	**Strong Agree**
Monitoring plan (Follow up)					
Preparation of the HBB work plan at facility level					
Program Continuity and Sustainability					
Training Materials for on Job Training					
Newborn Care guideline					
CHMT provides supportive supervision on HBB					
Availability of skilled human resource.					

++++Thank you very much+++++

Appendix II: In Depth Interviews

This questionnaire is designed for health care administrators and HBB program stakeholders who are engaged in weekly, monthly, quarterly, semiannual and annual program review. You are asked to provide information on your experience and skills on designing and implementation of HBB program in relation to the sustainability process.

SECTION A: Integrate program services into existing health structures

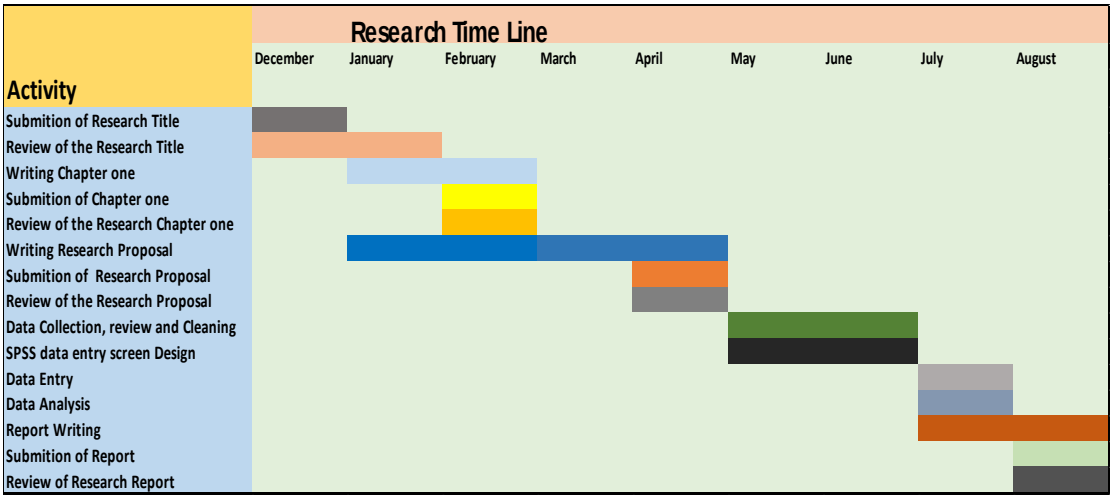
1. Does Newborn resuscitation program implementation fits in the current systems? If YES or NO state, why?
   ……
   …….
2. Do you have enough resources and supplies to support the implementation of this program? If YES or NO state, why?
   ……
   ……
   ……
3. The current HIMS supports the data requirement of the program.
   ……
   …….
4. Through ensuring health facilities are committed to continuing to use our programs or services.
   ……
   ……..

SECTION B: Managements and Administration (Managers and Administrators only)

1. We review our programs and services to identify additional funding needs.
   ……
   .....
   .....
2. Does the program have constant supervision and mentorship after donor fund ceased?
   ……
   ……
3. We have a long-term financial backup plan from the local government authorities in place.
   ……
   ……
4. We periodically revisit or make changes to our financial plan to changing circumstances.

Thank you for your participation

Appendix III: Research Timeline



Appendix IV: Budge

Budget Break down

S/N	ACTIVITY	RESOURCES	COST (Tshs)
1	Research Paper Writing	Stationary	130,000.0
		Photocopy	150,000.0
		Printing	250,000.0
		Binding	150,000.0
2	Data Collection & Logistics	Traveling & Enumerators	560,000.0
3	Communication	Internet and Airtime	450,000.0
4	Miscellenious		500,000.0
	TOTAL		**2,190,000.0**

Table above shows the budget breakdown

Appendix V: Facility with High Delivery Load

District	Facility Name	waliojifungulia kituoni_public facilities
Ilala Municipal Council	Chanika Ilala Dispensary	1345
Kinondoni Municipal Council	Kimara Dispensary	868
Ilala Municipal Council	Kitunda Ilala Dispensary	775
Temeke Municipal Council	Mbagala Roundtable Health Centre	2981
Kinondoni Municipal Council	Mbezi Dispensary	596
Ilala Municipal Council	Tabata A Dispensary	612
Temeke Municipal Council	Tambuka Reli Dispensary	870
Kinondoni Municipal Council	Tandale Dispensary	1386
Ilala Municipal Council	Vingunguti Dispensary	658
Temeke Municipal Council	Yombo Vituka Health Centre	1587

Source: DHIS2 2015