Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

Gifti Paulos

Date

Singing Your Way To Safe Delivery

Ву

Gifti Paulos

MPH

Department of Global Health

Stanley O. Foster MD, MPH

Committee Chair

Lynn Sibley RN, PhD, FAAN, FACNM

Committee Member

Singing Your Way To Safe Delivery

Ву

Gifti Paulos

Bachelor of Science

Johns Hopkins University

2009

Thesis Committee Chair: Stanley O. Foster MD, MPH

An abstract of

A thesis submitted to the Faculty of the Rollins School of Public Health of Emory University

in partial fulfillment of the requirements for the degree of Master of Public Health in Department of Global Health

2012

Abstract

Singing Your Way To Safe Delivery

By Gifti Paulos

Maternal and neonatal mortality rates in Ethiopia are among the highest in the world. The maternal mortality ratio is 676 per 100,000 live births and the neonatal mortality rate is 37 per 1000 live births (Demographic Health Survey (DHS), 2011). Because the rates were so high, the Maternal and Newborn Health in Ethiopia Partnership (MaNHEP) was established to improve maternal and neonatal health. A major part of their initiative is to use behavioral change communication methods such as music, to promote healthy behaviors. As part of that initiative, the author focused on birth songs sung by women in Oromo communities in Ethiopia, one of the sites where MaNHEP is working. The objectives of this thesis are to identify the role the birth songs play in these communities and determine the content and meaning of the messages in the songs. The author uses qualitative research methods including observation of women singing birth songs; focus group discussions with mothers, traditional birth attendants and frontline health workers; and in-depth interviews with MaNHEP staff. Results suggest that the birth songs, particularly the birth ceremonies of which they are an integral component, play a huge role in the lives of the women. They are seen as joyous social activities that facilitate camaraderie among all the women in the community in celebrating a woman's successful delivery. The results indicate that songs in general have also been useful in teaching important lessons regarding maternal and newborn health and that music is a great communication vehicle that should be further explored in the Oromo communities.

Singing Your Way To Safe Delivery

Ву

Gifti Paulos

Bachelor of Science

Johns Hopkins University

2009

Thesis Committee Chair: Stanley Foster MD, MPH

A thesis submitted to the Faculty of the

Rollins School of Public Health of Emory University

in partial fulfillment of the requirements for the degree of Master of Public Health in Department of Global Health

2012

Acknowledgements

First and foremost, I would like to thank my Savior Jesus Christ for allowing me to be a part of this opportunity and for the many provisions that I've been dependent on throughout the duration of this project. I'm so grateful that I was able to lean on Him for strength, encouragement and endurance and I am nothing without Him.

One of the provisions that I've been extremely dependent on for this project has been my faithful, thoughtful and passionate thesis advisor who I lovingly call my advocate. Dr. Foster is an advocate for the voiceless and the misunderstood. When it seemed that nobody at Rollins understood what I wanted to do with my thesis; he got it. Not only did he get it, but he embraced the idea with open arms. I will never forget that moment, because I realized that without Dr. Foster as my advocate, my idea would not come to fruition. I believe what makes him a great advocate is his confidence and belief in himself and in his students to express themselves in their unique way instead of imitating others. Also, I'm so grateful for all of the time, focus and encouragement that he put towards this project. His encouragement and feedback really made a significant contribution to this project. My project would not have reached this stage without him.

I'm also grateful to Dr. Lynn Sibley for all of the accommodation she facilitated during my time in Ethiopia and ensuring that my living costs would not hamper my efforts to be a part of MaNHEP. I'm also grateful for her feedback and words of wisdom in conducting this project.

I would also like to acknowledge the wonderful MaNHEP staff for all of their help with the project and to my co-moderator Seifu Hailu for all of his help moderating the discussions, transcribing and translating the discussions.

Last but not least I would like to thank my family and friends who have encouraged me to keep at it and to keep things in perspective. There's nothing more gratifying to know that you have a circle of people that are always cheering for you and urging you to do better, think bigger and reach higher.

Table of Contents

Abstract	X
Acknowledgments	xii
Introduction	1
MaNHEP	2
Music-health communication	10
Purpose	11
Literature Review	12
Review of BCC interventions	12
Mass media	14
Social marketing	15
Community mobilization	16
Music	
Home based lifesaving skills	19
Methods	
Institutional Review Board	25
Location & Population	25
Recording of songs	27
Focus Group Discussions	28
In depth interview	29
Analysis	30
Results	32
Demographics of Participants	32
Birth Song Information	34
Role of birth songs	
Messages in birth songs	39
Role of tradition	41
MaNHEP approach	45
Messages for future songs	47
Conclusion	49
Appendix A Informed Consent (English)	54-55
Appendix B Focus Group Discussion Guide (English)	56
Appendix C Informed Consent (Afaan Oromo)	57-58
Appendix D Focus Group Discussion Guide (Afaan Oromo)	59-60
Appendix E Take Action Card (English)	61-62
Appendix F Take Action Card (Afaan Oromo)	63-64
References	65-66

<u>Acronyms</u>

ANC	antenatal care
BCC	Behavioral communication change
CHW	Community health workers
CMNH	Community maternal and newborn health
DHS	Demographic Health Survey
FGD	Focus Group Discussion
FLW	Frontline worker
HBLSS	Home based lifesaving skills
HEW	Health extension worker
IDI	In-depth interview
IRB	Institutional Review Board
LHW	Lady Health Workers
M &E	Monitoring & Evaluation
MaNHEP	Maternal and Newborn Health in Ethiopia Partnership
MNH	Maternal and newborn health
TBA	Traditional birth attendant
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
vCHP	volunteer community health promoters
vCHW	Volunteer community health workers

I. INTRODUCTION

1.1 Maternal and Neonatal Mortality

Maternal and neonatal mortality rates are high in Ethiopia. The maternal mortality ratio is 676 per 100,000 live births and the neonatal mortality rate is 37 per 1000 live births This is due to several factors, but particularly because of the inaccessibility to quality medical care during pregnancy, childbirth and postpartum. When comparing all women in Ethiopia, only 8.1% of women were delivered by a skilled provider and only 8.0% of women delivered in a health facility. (DHS, 2011) A staggering 91.5 % of births in Oromia take place at home. Most of the births occur at the mother's home without the presence of a skilled provider. When comparing urban and rural women in Ethiopia, a huge contrast can be seen. Fifty percent of births to urban mothers were attended by a skilled provider and 49 percent were delivered in a health facility, compared with 4 percent and 4 percent, respectively, of births to rural women. Finally, when comparing mothers' education, 72% of mothers with some secondary education received care from a skilled provider; whereas only 4 % of women with no education received care by a skilled provider. (DHS, 2011) From looking at these patterns, we can see that a woman's residence and educational background can influence her access to basic obstetric care; this has a profound impact on maternal and neonatal mortality rates in Ethiopia. In Ethiopia, the total mortality rate under five deaths is 88 deaths per 1000 live births (DHS, 2011). Neonatal mortality accounts for 30% of these deaths. When looking at the neonatal causes, 60% of the neonatal deaths are due to asphyxia and infection in Ethiopia; these can be reduced by essential care (Bang, 1999).

1.2 Maternal and Newborn Health in Ethiopia Partnership (MaNHEP)

Recognizing the high neonatal and maternal mortality rates in Ethiopia, the Ethiopian Ministry of Health in partnership with Nell Hodgson School of Nursing and the Bill and Melinda Gates Foundation created Maternal and Newborn Health in Ethiopia Partnership (MaNHEP, 2010), a project designed to demonstrate a community oriented model for improving maternal and newborn health care in Ethiopia and to prepare for its use nationwide. (MaNHEP, 2010)

MaNHEP's Mission



Source: www.manhep.org

MaNHEP works with the Federal Ministry of Health in Ethiopia to strengthen six woreda-level health systems to become models for the effective delivery of maternal and newborn health services. If these new community-based approaches to delivery are proved effective in reducing maternal and neonatal mortality, then the service delivery practices developed by these model woredas will be adopted throughout Ethiopia.

MaNHEP's Vision

All women and newborns in rural Ethiopia will receive the appropriate package of care *in time, every time* around the time of birth.

For the mother, the package of care consists of:

- Care at delivery: clean delivery; administration of drugs, such as misoprostol, that cause the uterus to contract and reduce blood loss after delivery; and uterine massage
- Postpartum health assessment: breast check, bleeding check, trauma check (fistula), and fever check
- Counseling: breast care, nutrition (esp. fluids), personal hygiene, rest, uterine massage, illness recognition and care seeking

For the newborn, the package of care consists of:

- > Thermal protection
- Clean cord care
- Resuscitation, if needed
- > Postnatal health assessment: color check, activity check, feeding check
- Counseling of mother for: promotion of immediate, exclusive breastfeeding, thermal care, kangaroo mother care for preterm/small babies, hand-washing, clean cord care, illness recognition and care seeking (MaNHEP, 2010)

Three Key Components of MaNHEP:

1) Improve the capability and performance of frontline health workers

- 2) Demonstrate a 'lead woreda' approach to improving maternal and newborn health practices and services
- 3) Increasing demand for maternal and newborn health services and

promoting behaviors in pregnant mothers that increase newborn

survival rates (MaNHEP, 2010).

These goals are being fulfilled through strengthening the capacity of front

line workers in providing specific interventions in caring for pregnant women, the

mother and the newborn that has been created by MaNHEP.

Table 1 Priority Actions Being Promoted by MaNHEP to Improve				
Maternal & Newborn Health				
Target Population	Risks	Actions		
Pregnant Women	Tetanus	Tetanus Toxoid		
	Anemia	Iron Supplements		
	Toxemia	Treatment		
	Pregnancy	Inform mother &		
	Complications	family of danger		
		signs		
	Family decisions	CMNH training with		
	without education	family caregivers to		
	about MNH health	develop birthing		
		plan		
Women at Delivery	Pregnancy	Referral to Health		
	complications	Center		
	Not enough money	Birth preparedness		
	for medical care	(Birthing plan)		
	No transportation to	Birth preparedness		
	transport mother to	(Transportation		
	health center	plan)		
Post Partum	Improper Hygiene-	Take-action cards		
	Transmission of			
	bacteria & infection			
	Inadequate nutrition	Immediate &		
	of baby	exclusive		
		breastfeeding		
		included in take		
		action cards		

Furthermore, MaNHEP wants to improve the capability and performance of frontline health workers in developing healthy behaviors during pregnancy, delivery, and post-partum. The work of the frontline workers is very important in carrying out MaNHEP's goal to get more women to seek out maternal and newborn health (MNH) services and to motivate frontline health workers to provide such services. The BCC messages are now been tailored to raise awareness about the role of frontline workers [traditional birth attendants (TBA) and health extension workers (HEW)]. The messages specifically highlight how important it is to have a trained person in attendance during labor, delivery and the postnatal period. The messages highlight how the health system can be improved and are designed to foster collaboration among the HEWs, TBAs and the health managers at the primary health centers, hospitals, woreda and zonal levels. They all have to see that their goal is shared and that they are all working on the same team to reduce maternal and neonatal morbidity and mortality. These messages are designed to raise awareness to the family about pregnancy risks and actions they can take to reduce risk. The messages also encourage the family to speak up and address their concerns at kebele, primary health center, woreda, hospital and zonal levels. They can also hold health staff accountable for the services conveyed in the BCC messages.

According to the MaNHEP BCC Strategy, behavioral change communication is defined as an interactive process with communities to develop tailored messages and approaches using variety of communication channels to bring behaviors, promote and sustain individual, community and societal behavior change, and maintain appropriate behaviors (MaNHEP, 2010). The BCC approach will enable MaNHEP to fulfill the following goals:

- ✤ Increase knowledge
- Stimulate community dialogue
- Promote essential attitude change
- Reduce pregnancy/birth-related risks
- ✤ Advocate
- Promote CMNH services
- Improve skills and sense of efficacy
- Create a demand for maternal and newborn health services

Using the template of USAID's conceptual framework for behavior change communication for HIV/AIDS, MaNHEP created a conceptual framework to streamline their BCC goals. Also, they created the framework to outline the various stages of behavior change and the strategies needed for each stage of change. The framework also outlines the various forms of BCC methods that MaNHEP wants to use ranging from music to poetry and outlines other factors by which these methods can be implemented like enabling an environment where the cultures of the communities are respected and valued and that the appropriate stakeholders are involved. The MaNHEP framework that incorporates all of these things is shown below.



Fig 1.1 A Conceptual Framework for the MaNHEP BCC Strategy

Source: MaNHEP BCC Framework

The following are the steps used to implement the goals that are outlined in

the MaNHEP framework:

- State program goals
- Involve stakeholder
- Identify target populations
- Conduct formative BCC assessments
- Segment target populations

- Define behavior change objectives
- Design BCC strategy & M& E plan
- Develop communication
- Pre-test
- Implement & monitor
- Evaluate
- Analyze feedback and revision

In Ethiopia, songs have been traditionally used to describe pregnancy and delivery. As noted in the conceptual framework above, songs have been identified as a potential effective channel of communication. Particularly, MaNHEP wants to explore the use of music in achieving their goals. "Music and rhythm find their way into the secret places of the soul (Plato, 458 BC)," stated the philosopher Plato. The effects of music could also be described this way: "one good thing about music, when it hits you, you feel no pain" (Marley in song "Trenchtown Rock"), stated by the famous reggae artist Bob Marley. Thus, recognizing the powerful effects of music on people, music became an instrumental tool in the behavior change communication methods (BCC) of MaNHEP. The behavior change communication method is a commonly used approach by health organizations to promote behavior change in the communities they serve. BCC is "grounded in on the humanrights based and results-based approach to program planning and development" (p.5, UNICEF, 2006). It is an interactive process with the facilitators and the communities creating personalized messages for the

behaviors they are promoting such as family planning and smoking cessation. It has been used in areas ranging from hygiene promotion to promoting safe motherhood.

1.3 Music as a health communication vehicle

Having been intrigued by the role of music communicating behavioral change, the author wanted to understand how music was being used among Oromo women to convey their understanding of pregnancy. The author also wanted to explore the potential of songs as a BCC tool to reduce maternal and newborn mortality rates. Specifically, this thesis analyzes the role of traditional Oromo music, specifically birth songs, as it relates to maternal and newborn health in the Oromia region in Ethiopia.

MaNHEP is using the BCC approach through songs, skits, a full feature film and posters targeting the two biggest ethnic groups in Ethiopia: the Oromos and the Amharas who reside in the areas that have high neonatal and maternal mortality rates. During the summer of 2011, MaNHEP's BCC team was using songs to convey desirable behaviors among the Oromo ethnic group. The BCC team created three songs with three distinct messages that aligned with MaNHEP's goals.

- Song #1- encourage unity among the front line workers in order to better serve the families in their communities
- Song #2 describing the problems mothers face during childbirth such as excessive bleeding

Song # 3- describing the problems mothers face in getting access to obstetric medical care during childbirth

In developing these new songs, it was important for MaNHEP to understand current songs about pregnancy and delivery and to build on this traditional method of communication in developing the new songs. MaNHEP wanted to see the health messages being conveyed in the songs. Thus, this thesis project was created.

1.4 Purpose of Thesis

The main purpose of this thesis is to explore the purpose and role of traditional Oromo birth songs in three woredas in the Oromia region of Ethiopia where MaNHEP is working. In addition, the author is exploring the messages within the traditional Oromo birth songs that the mothers in these communities sing after a woman has given birth. These songs are sung after a woman has delivered.

Videotaping the women singing the songs gave the author an opportunity to see how the women performed the songs and gain a sense of the emotions being displayed. Furthermore, by conducting focus group discussions with both the mothers and the frontline workers, the author explored how the songs were being perceived in the communities and how the messages in the songs were being perceived. Finally by conducting in-depth interviews with the MaNHEP staff, the author explored additional information on the messages of the songs from the experiences of the staff and their perspective as an outsider. By getting an understanding of the messages within the traditional Oromo birth songs, MaNHEP will use that information as a basis for the new songs they are creating. Incorporating elements from traditional songs will increase the likelihood of the communities of embracing the new songs and accepting the behaviors being promoted.

II. LITERATURE REVIEW

2.1 Review of BCC Interventions

This literature review highlights studies that discuss the role of community participation along with the help of frontline workers in reducing maternal and infant mortality. This review will also look at the role of music as a BCC approach and how it differs in changing behavior when compared to other forms of BCC methods.

There have been several studies that have looked at community participation and the effect it has on maternal and neonatal (MNH). Rosato et al in 2008 observed community participation and lessons for MNH and concluded that programs that feature community mobilization activities can lead to cost-effective and significant reductions in mortality and improvements in the health of mothers, newborn, infants and children. In Pakistan, an organization called the Lady Health Workers was created in 1994 that acted similarly to the frontline workers in Ethiopia who provide health education to rural communities and attend to maternal and newborn health needs and other needs (Hafeez, 2011). Similarly in Nepal, an organization named Female Community Health Volunteers was created that served the same role that the Lady Health Workers did in Pakistan(Era, 2007). Both of these organizations were created to address the MNH needs in Pakistan and Nepal and of the rural communities which did not have adequate access to primary health care centers (Hafeez, 2011). Specifically, these organizations were intended to fulfill the following goals:

- strengthen community participation in health activities
- increase access to the health system
- to provide basic curative and preventative care (Era, 2007) (Siddiqi, Haq, Ghaffar, Akhtar, & Mahaini, 2004).

These programs have been extensively reviewed in many articles. According to a study by Hafeez et al (p. 210, 2011) of the Lady Health Workers organization in Pakistan, the authors concluded that "health indicators are significantly better than the national average in areas served by the LHWs." Similarly, a study by P. Dawson et al (2008) observed that Female Community Health Volunteers in Nepal were able to successfully diagnose and treat pneumonia cases and in doing that were able to successfully reduce the children's mortality levels in their communities.

In addition to the use of frontline workers, BCC messages are also another tool that can bring about behavior changes. BCC can help change behavior in a variety of ways such as:

- Increase knowledge
- Stimulate community dialogue
- Promote essential attitude change
- Create a demand for information and services
- > Advocate
- Improve sense of skills and efficacy (p.17, USAID, 2002)

Once the purpose for using a BCC tool has been identified, then certain principles must be applied so that the BCC tool can be effective. Community participation is a necessary component to understand their needs and gain their inputs into the process. Formative BCC assessments (p.11, USAID, 2002) "must be performed to assess the needs of the population that has been targeted." Finally, pretesting and monitoring and evaluation of the programs should be implemented to assess the quality of the program and allow feedback for improvement of the program. The BCC tools should be incorporated as an essential component of the program and contribute to the achievement of the objectives. "Community participation must also be a necessary component as well as the involvement of stakeholders."

Mass media, social marketing, community mobilization and music are various forms of BCC that health professionals can use to promote behavior change. It is important to incorporate multiple outlets of communication so that the behavior change can be reinforced; repetition helps in implementing a new behavior among the people.

2.2 Mass Media

For instance, health professionals are using mass media by integrating a specific health message into entertainment; this approach is called "entertainment-education" (p.11, Population Reference Bureau, 2005). Mass media has been shown to be an effective tool to promote behavior change as the case with a family planning campaign that was conducted in Tanzania by Johns Hopkins University (p.12,

Population Reference Bureau, 2005). The program included a 52-episode radio soap opera, accompanied by radio spots, promotion of a new logo for improved family planning services, stories in newspapers and magazines, and audiocassettes promoting spousal communication about contraception. At the conclusion of the study, it was found that, when comparing women who did not hear the message with women who not only heard the message and could recall the radio messages, these women discussed modern contraception with their husbands and also used modern methods. "Women who recalled one media source were twice as likely to be using modern contraception; those who could recall six sources were 11 times more likely to be using modern methods" (p.11, Population Reference Bureau, 2005). Overall, promoting healthy behavior change has a lot to do with the presentation of the ideas and ensuring that it is in a manner that is engaging and creative.

2.3 Social Marketing

Another important communication tool is social marketing which is defined as "adapting commercial marketing strategies including mass media to sell subsidized health-related products—bed nets, oral rehydration salts, condoms, birth control pills—and promote the behaviors related to them. The technique depends on careful consumer research to offer the "4 P's"—an attractive product (or service), a price affordable to the intended beneficiaries, convenient places where it will be available, and persuasive promotion" (p.11, Population Reference Bureau, 2005). According to a Population Services International campaign in Cameroon, the organization sought out 600,000 sexually active urban youth ages 15 to 24 to

encourage them and instruct them about using condoms or abstaining from sex as a way to reduce risks of sexually transmitted infections and unwanted pregnancies. Young Cameroonian peer educators, journalists, comic-strip artists, radio personalities, and scriptwriters were assigned to create messages and activities targeted toward these youth. The activities featured youth who went against social norms to protect their health. A serial radio drama entitled "Solange: Let's Talk About Sex" and a call in radio show was very popular (p.11, Population Reference Bureau, 2005). "Face-to-face sessions with youth using role-plays and other interactive techniques also reached about 10,000 in-school and out-of school youth each month" (p.11, Population Reference Bureau, 2005). In addition, more than 40,000 condoms were sold through these outlets. "After 18 months of program activities, youth of both sexes who were exposed to the program were significantly more likely to know how to use condoms correctly, less shy about buying them, and more likely to have used a condom the last time they had sex with a regular partner." (p.11, Population Reference Bureau, 2005) Although some critics may see social marketing as inappropriate solicitation, we can clearly see that this is an effective tool in public health.

2.4 Community mobilization

Similarly, community mobilization is another important tool in behavior change, but this tool is different from the other tools that have been discussed. This tool is more dependent on the community that is being targeted and their participation in the activities. Community mobilization "involves tapping into social networks, helping stakeholders identify common health goals, and building on the

strengths of cultural values rather than radically departing from them" (p. 12, Population Reference Bureau, 2005). It also "requires enlisting community leaders to advance the cause." Community mobilization has also been used to engage the elderly in making an influence on the younger generation. For instance, in a project in Senegal, "grandmothers served as nutrition educators and positively influenced younger women's practices." Also, community mobilization has been used in Kenya to eradicate the harmful practice of female circumcision in several communities. A program called "Alternative Rites of Passage" was created by PATH, an international NGO and Maendeleo Ya Wanawake, Kenya's largest women's organization. "This program built on existing rituals and celebrations marking the passage from girlhood to womanhood and omitted genital cutting. Research showed that the communities were unaware of the health risks associated with circumcision of girls and in fact held strong beliefs that it enhanced health. Moreover, parents believed that uncircumcised girls would be rejected as wives. Parents also valued the seclusion period where girls learned about wifely roles; although the girls suffered pain, they enjoyed the community recognition of their graduation to womanhood and the festivities that followed" (p.12, Population Reference Bureau, 2005). The community education was beneficial in raising awareness about the health risks and that young men did not object to marrying uncircumcised women. This finding led to a milestone in which respected community leaders decided not to have their daughter circumcised but also signed up to be leaders of the new movement in opposition of female circumcision. Once the community observed the stand that the leaders took in adopting this new practice, the practice of this new alternative rite of passage spread quickly. Almost none of the 5000 graduates of the alternative rite of passage got circumcised; an independent evaluation concluded that the combination of intensive community sensitization and the option of an alternative rite played an important role in the attitudinal and behavioral changes that occurred. By implementing this alternative, the traditional practices are still being observed, but the harmful practice of genital cutting is omitted. It raises awareness that this practice is harmful and does not lead to the effects that it was intended.

2.5 Music

Finally, music has been shown to be a helpful health communication medium. The organization BRAC in Bangladesh, whose mission is to empower people and communities in situations of poverty, illiteracy, disease and social injustice (BRAC, 2011) incorporated music as part of their BCC MNH campaign in 2006. Their overall goal with their BCC campaign was to convey to their target population of pregnant women, mothers of newborns, and under 5 children messages about birth preparedness, family planning, antenatal care, delivery care, post-natal care, newborn care practice and immunization. They used a variety of BCC methods including music. Specifically, local songs in the form of folk music known as *jaarigan* and street theatre known as *naatak* in Bangladesh were used to reach rural communities in the Nilphamari district of Bangladesh. The use of the folk music was particularly intended to convey messages about antenatal care, safe delivery, postpartum care, family planning, and infant and child health (BRAC, 2011). There have been other programs that have also used music as part of their BCC campaign. "In Tanzania, traditional singing and dancing performance called *mamanju* is held as

part of a three-day festival on the theme of skilled care. Incorporating music, singing and traditional dancing, in Burkina Faso, the performances dramatized different scenarios to promote use of facility-based skilled care." (p.32, BRAC, 2011) The BCC organizers learned that music was a more effective tool when the songs and the dances were incorporated within community events like holidays, market days and other related events. In addition, "TBAs in the remote rural district of Pallisa in eastern Uganda play a significant role through simple songs where they are able to teach mothers about ANC, birth preparedness, newborn care. The songs also identify the major local killers of women in childbirth such as, anemia, cephalopelvic disproportion and malaria and facilitate early identification and referral. It was seen that in these villages without doctors and hospitals, TBAs and community members themselves are solving the most serious health problems through the teaching power of songs." (p.32, BRAC, 2011).

Mass media, social marketing, health education and community mobilization have made significant impacts on communities. Most importantly, it was the messages that were formatted in a creative, engaging and memorable manner that respected and observed the traditional practices of the community that had the most lasting impacts.

2.6 Home Based Life Saving Skills

Now another successful example will be presented of how community mobilization and health education can make a character come to life and take on meaning about MNH. From April 2000 to December 2003, Save the Children Foundation (US), the Ethiopian Ministry of Health, and the American College of

Nurse-Midwives (ACNM) field-tested the Home-Based Life Saving Skills (HBLSS) program in Liben District, Guji Zone, Oromia Region, southern Ethiopia, as part of two USAID-funded Child Survival projects (Sibley et al, 2010). According to Sibley et al, the home based lifesaving skills is defined as "community competency-based program that aims to reduce maternal and newborn mortality by increasing access to basic lifesaving measures within the home and community and decreasing delays in referral (where referral is possible). HBLSS is implemented through HBLSS guides who are selected by their communities. In Ethiopia, the HBLSS guides are trained traditional birth attendants. They impart HBLSS knowledge and skills to women, family caregivers, and home-birth attendants (i.e., those who are directly responsible for care and decision making during normal delivery and when complications arise)" (p.284, Sibley et al, 2010). Qualitative and quantitative methods were used to assess the HBLSS guides transfer of information to the women and their families through group interviews and exposure to HBLSS topics. The results indicated that through qualitative methods, women and their families were confident of their knowledge of HBLSS topics via take action cards. The results also indicated that exposure to HBLSS topics were higher among women who were attended by a HBLSS guide than those attended by an unskilled birth attendant (Sibley et al, 2010). Overall through community participation and health education using the take action card booklet, we can see that women and their families in Liben were made aware of MNH and take the necessary actions to maintain it.

III. METHODS

3.1 Institutional Review Board Ethics

Since this study was being run within the framework of the MANHEP study, Ethiopian IRB approval was already established. However, my specific proposal which involved videotaping and focus group discussions of traditional songs still had to be reviewed. The proposal of the study was reviewed by the Institutional Review Board (IRB) of Emory University and met the criteria for exemption under 45 CFR 46.101(b) (2) and was exempt from further Emory IRB review. During the focus group discussions, all the participants gave their written consent to participate after the study objectives and procedures were explained to them (Appendix A & C). All the participants were given a chance to ask questions about the project before the discussion began and were told that they have the right to not participate in the study, if they desired. All of the participants in the FGDs were given light refreshment for their time.

3.2 Location and Population

Research was carried out in the Oromia region, one of two sites where MaNHEP is working and an area in which Afaan Oromo is spoken in which the author is fluent.

Fig 3.1 Map of Oromia



Three sites in the Oromia region were chosen based on the presence of MaNHEP activities. However the sites were originally chosen by the Ethiopian Ministry of Health for MaNHEP due to the

- High maternal and newborn mortality rates
- > Their potential to serve as lead woredas in Ethiopia

The focus group discussions were held in these three woredas in the North Shewa area: Kuyu, Degem and Werejarso. These woredas were within a two hour drive of Addis Ababa, the capital city of Ethiopia. The discussion in Werejarso was held in an elementary school classroom. The discussions in Degem and Werejarso were held outside on the field. In Degem, the groups were stationed outside the health post and in Kuyu near a mill.

Fig 3.2 Outline of Tasks



3.3 Recording of Songs

The women in each of the three woredas were asked for their consent in allowing the author to videotape them singing the songs. Once their signatures were collected to verify their consent, the author videotaped them singing the songs. The author videotaped the women singing the birth songs to see how the women performed the songs and gain a sense of the emotions being displayed.

The author also used information from Oromo songs sung in Liben, Ethiopia which discussed CMNH training that is a part of the MaNHEP curriculum. These songs were created as the content for the take home cards were still being developed. The importance of these songs is to show the past and current influence of the CMNH training on the women in these communities

While recording the songs, the women went out of their way to show the genuine style of the songs and were also gracious hosts. They first gathered the women to sit around one another and then some of the women began cooking the porridge that usually accompanies the birth song ceremony. They would serve it to the guests first which included the MaNHEP MNH specialists and the author. They were very hospitable and made the guests feel at home. Once everyone had eaten, they would assemble themselves and their props and begin singing the various birth songs. The author was able to participate with them and learn from them how to do the dances which was also videotaped using a digital camera. Overall, it was a great experience for the author to not only participate in the singing and dancing of the birth songs, but also to also witness the sequence of events of the ceremony itself.

3.4 Focus Group Discussions

Two separate focus group discussions were held in each woreda. One focus group discussion was held with mothers and the other focus group discussion was held with the front line workers. The MaNHEP specialists told them briefly about the purpose of the focus group discussion and invited them to participate in the discussion. Once all the participants were assembled, the author and co-moderator explained the purpose and procedures in detail to the participants in Afaan Oromothe language most commonly spoken in the Oromia region (Appendix D). Then we requested permission to tape record, discussed confidentiality measures and obtained informed consent by having all the participants either sign their names, if literate or stamping their fingerprint on the consent forms (Appendix C).

3.5 In Depth Interview

In addition, in-depth interviews were carried out with MaNHEP staff. This method was used to increase understanding of the context regarding the roles of birth songs in the communities. Before each interview, the author explained the procedures and purpose of the interview and asked for their verbal consent to participate and to be tape recorded. In total, five in-depth interviews were conducted with the MaNHEP staff. The interviews were conducted with the Oromia Manager, three Oromia Maternal and Newborn Health Specialists and the BCC coordinator. The author facilitated the in-depth interviews in English using a semistructured interview guide. In the interview, the author asked the participants questions about the types of Oromo songs they are familiar with, the types of Oromo birth songs they know and the role and purpose they serve in these communities. The interviews lasted for about an hour.

All of the focus group discussions and in-depth interviews were tape recorded. The co-moderator and the author transcribed the audiotapes verbatim and translated them into English. Transcripts were then imported into MAXQDA, a qualitative software package that helps users analyze the data. The interviews were conducted in the MaNHEP office in the capital city Addis Ababa. All of the interviews were face to face interviews conducted with one participant at a time.

Fig 3.3 Topic guidelines for in-depth interviews and focus group discussions

Topics covered in FGD/IDI guide				
Topic 1: Types of songs sung by women in the community				
\triangleright	Most common songs sung			
\blacktriangleright	How are these songs ranked in importance			
Topic 2: Tradition	al Oromo birth songs			
	Who sing the songs?			
\blacktriangleright	Who is the target audience?			
Topic 3: Birth song	gs as teaching tools			
	Are the songs used as teaching tools? How can they be used as teaching tools?			

3.6 Analysis

The thesis objectives were achieved using qualitative research methods via primary data collection, using focus group discussions with the mothers and frontline workers who are participating in the MaNHEP program and in-depth interviews with MaNHEP personnel.

Qualitative methods were used for this project, because this methodology is more appropriate for "understanding the meanings and interpretation" (p.9, Hennink, 2011) that participants give to a particular event or behavior. The approach used to analyze the qualitative data that was used is grounded theory which is not a theory itself but a process for developing theory from qualitative data.

The two following qualitative methods were used: focus group discussions and in-depth interviews. The focus group discussions were used for the singing groups, because this method is more appropriate for understanding socio-cultural norms among groups (Hennink, 2011). Specifically, the focus group discussions were used to explore the community's understanding and general attitudes of Oromo traditional birth songs and in general births in the communities. The MaNHEP maternal and newborn health specialists in each of the 3 woredas recruited mothers and traditional birth attendants for the focus group discussions based on residence, participation in the MaNHEP activities, self-identification as a mother or a front line worker (FLW). Frontline workers consisted of traditional birth attendants (TBA), health extension workers (HEW) or community health workers (CHW). Conducting a focus group discussion with the existing groups of frontline workers proved to be very valuable. Advantages of working with existing groups are obtaining local knowledge from the participants; participants are familiar with being part of a group and rapport and trust are already established among the participants. This allows the moderator to dive right into the questions without spending time establishing rapport among the group members.

Before arriving to Ethiopia, focus group discussion guides were created. Then Lynn Sibley, director of MaNHEP reviewed the guides and gave feedback on revisions. Once the corresponding revisions were made, the guides were translated by the MaNHEP BCC director, the Werejarso MNH specialist and the author into Afaan Oromo. In preparation for the focus group discussion, a graduate student familiar with the dialect of Afaan Oromo of the Oromo people living in N. Shewa was recruited upon referral. The author met with the student and instructed him about the role of co-moderator as it relates to the rules and techniques.

IV. RESULTS

4.1 Demographics of Participants

Fig 4.1 Participants in FGD & IDI

Woreda	Туре	Profile
Kuyu	FGD	 Mothers: 8 Age Range: 18-24 # of Children: 1-6
		 ◆ Front Line Workers: 7 total ◆ 3 TBA > 2 TBAs were also vCHW ◆ 3 vCHW (Volunteer Community Health Worker) ◆ 1 HEW
Werejarso	FGD	 Mothers: 6 Age Range: 28-37 # of Children: 2-6 Front Line Workers: 7 total 4 TBA 2 vCHW 1 HEW
Degem	FGD	 Front Line Workers 14 total 8 vCHW 3 TBA 3 Guide Team members (MaNHEP)
Addis Ababa	IDI	 MaNHEP staff: 5 Oromia Regional Director Kuyu Maternal and newborn health (MNH) specialist Werejarso MNH specialist Degem MNH specialist

After looking at all the key players involved with the birth ceremony where the traditional birth songs are sung, it was noted that the women who usually attend these ceremonies consisted of mothers, and frontline workers which included traditional birth attendants. A total of 43 participants: 15 mothers and 28 frontline workers were recruited for the focus group discussion across the three woredas. In Degem, both focus groups consisted of front line workers which is why there is a greater number of frontline workers than mothers. In the discussion section, the author will state the reason for this occurrence in Degem. Among the frontline workers, 22 were women and 6 were men. All of the 6 men were Volunteer Community Health Workers. Thus, the maternal and newborn health specialists in each of the three woredas were instructed to recruit about 5-8 mothers and 5-8 frontline workers who have attended the birth ceremony where the songs are sung. These areas are mostly rural areas populated by farmers as are most areas in Ethiopia; about 83.6% of Ethiopia's population lives in rural areas (Abebe, 2011). People living in these areas have a limited access to services and markets.
4.2 Birth Songs

Fig 4.2 Birth Song # 1: Wasabe

Name:	Wasabe
Lyrics in Afaan Oromo:	Wasabee yaa wasabee Wasabee yaa soosilaa Dhalataa ya gisila
Lyrics in English:	Congratulations on delivering successfully. Congratulations on giving birth to a strong, healthy child.
Input from FGD:	This birth song celebrates the fact that the mother and the newborn's health were not compromised during the delivery. It's a way for the community to share this joyous occasion with the mother and acknowledge that this victory is communal.
Context:	The song is performed with a group of women usually older women leading the songs. They tend to be the most active in dancing and singing the songs. The song is sung by everyone, but it's usually the older women who initiate it and sustain the momentum of the singing and dancing. The dancing is accompanied with the singing is done with the women gathering in a semi-circle where they are standing shoulder to shoulder. The leading women will hold twigs in their hands and will move them in a rowing manner as they bend their knees and jump in line with the tempo of the song. At the climax of the song, two women will face each other and duel each other to see who can dance better while the rest of the women clap on goading the dancers. This is all done in front of the mother as a way to celebrate in her happiness and to show the mother that she has a community of women that she can depend on for support.

Fig 4.3 Birth Song	Refrain: Ammas Dalii Sung	g with Wasabe

Name:	Ammas Dalii
Lyrics in Afaan Oromo:	Ammas Dalii. Ilili. Repeated
Lyrics in English:	Give birth again. Repeated
Input from FGD:	In regards to this refrain, participants were asked how this song affects women who may already have a lot of children. Participants said this song is part of tradition and has been passed on through their forefathers and is not meant to be taken literally especially given the fact that the participants mentioned that they have learned about family planning methods.
Context:	Usually this song is sung by all the women after wasabe is sung. It is usually followed by ululation which is common in Oromo and general Ethiopian culture. The ululation signifies happiness and adds to the hype of the occasion.

Fig 4.4 Birth Song # 2: Eshururu

Name:	Eshururu
Lyrics in Afaan Oromo:	Eshururu Ho'uu ilma kee
	Eshururu Ilma angafaa
	Eshururu nan gadafaa
	Eshururu ho'u ilma kee
	Eshururu ilma quxusoo
	Eshururu maltaa guddisu
	Eshururu hin nyaka nyekaa
Lyrics in English:	Here is your child
	Your second Child
	Who will raise the child
	The baby is in need of your breast
	Here is your child
	Your first born
	I will care for him
Input from FGD:	The role of the song varies from woreda
	to woreda. In Werejarso, participants
	have said that it's been used at baptisms.
	But in Kuyu, they sing it as a lullaby for
	the baby. Finally in Degem, participants
	have said they sing it during baptism,
	weddings and as a lullaby. They all agree
	that the song is full of good wishes and
	expectations for the newborn and is
	commonly used as a lullaby.
Context:	Usually this song is sung with a group of
	women where now a solo singer will sing
	a phrase and the rest of the women will
	chime in with the refrain. The solo singer
	is usually the woman in the group who
	knows the song the best and is usually
	one of the older women among the
	group. Other improvisations can be
	inserted as a verse, which are usually
	good wishes for the child.

4.3 The role of traditional birth songs

The birthing ceremony filled with music, laughter, food and drinks is a meaningful social event in the lives of the mothers it celebrates. The ceremony is also an opportunity for neighbors to bond with one another and their families in the community. As soon as a woman delivers in the community, word travels fast and women are beckoned to attend and participate in the ceremony. As the neighbors in the community are making their way to the mother's house, friends and relatives of the mother begin the food and drink preparations for the guests. They prepare a porridge or better known as murka in Afaan Oromo, the language most commonly spoken in the Oromia region. They also prepare arage which is a very strong, clear alcoholic drink which has a taste similar to vodka. While the guests are being served, the close relatives of the mother pamper and feed her. After everyone is served, the women gather together and decide on what birth songs they are going to sing for the guest of honor: the new mother. The women will usually sing at most two to three birth songs and may even add other songs such as a popular love song. Meanwhile, the husband and other male members will construct a bed for the mother to sleep on that she will begin using after this ceremony. But until then, she will sleep on the floor on a mat with a blanket which provides no support or comfort. Essentially, the bed serves as a trophy for the mother to conclude her victory celebration. Overall, although the birth ceremonies are a way for neighbors to bond and share in the new mother's celebration, their main purpose is to serve as a victory party for the mother and to ensure that she is honored in the utmost way.

It's no coincidence that they would conduct the birthing ceremonies 3-5 days after birth. Here it is best explained by Aynalem, the Oromia regional manager during her in-depth interview, "They think there's an evil spirit. The evil spirit wants to attack these women in these particular days [in reference to the days after birth]. There's a lot of different range of risks for the woman to die in that period. So if she dies, let her die. But if not, we will wash her on the third day and claim she is free after that. I think that notion of risk made them wait for 3 days." Similarly, Hanna also said that some of the women have cried when discussing this practice, because they said that 3 day period was a very scary time for them, because some thought they would die. Many of them thought they would die and didn't know that this practice of not bathing for 3 days was good or bad, but they felt compelled to practice it, because it was part of the culture. But now, they are grateful that they are aware that this practice is bad and have made the necessary changes.

The birth songs sung at the birth ceremony are also seen as a celebration from this critical period after birth and generally from the pregnancy. Particularly, the front line workers have said that the birth songs celebrate the fact that the mother has been "released from the bondage of pregnancy." Some other participants have described it as "tension." When asked, why these songs are sung, the participants said that the songs are a way to congratulate the mother on successfully delivering a healthy baby. Not only do they celebrate her health, but also the health of the baby too. Through analyzing the transcripts, the author can sense that delivering successfully is seen as a huge accomplishment and in essence it has become a rarity. Although this is true when looking at the maternal and newborn mortality statistics of Ethiopia, it's interesting to see how communities have grappled with that issue. They may not be knowledgeable about the statistics or know to what extent maternal and newborn mortality, but they have had to face it on a very personal level.

4.4 Messages within the birth songs

Among the songs that are sung, the most common birth song that is often sung in these three woredas is wasabe. Wasabe essentially means congratulations on delivering your child successfully. It refers to the fact that both the mother and the newborn's health were not compromised during this great ordeal. The song talks about the strength of the child and compares it to that of the nyala which is a symbol of strength. It can also be said that wasabe is a celebratory song that congratulates the mother for defeating the natural process of pregnancy. The women in these communities know too well about the heartbreak of a newborn's death especially within the critical 48 hour period after birth.

Other birth songs that are sung that are mentioned above are ammas dhali and eshururu. The birth song refrain ammas dali, encourages the mothers to give birth again and again. When the author asked the participants in the focus group discussions how this has been interpreted, many of the participants have iterated that it is not meant to be taken literally, but it's a part of tradition. Hanna, the maternal and newborn health specialist from the Kuyu woreda has observed changes due to the awareness that the communities have community issues. Here is what she had to say about ammas dali, "As I said it's [referring to ammas dali] more

cultural, but the mother cannot deliver again and again, because she has some awareness not only for the kid. It's not good to deliver now and now too many children can count as a small risk for her and the children. Our uterus needs some rest. If a woman has a child this year, the uterus needs some rest for two years or more or else it will be difficult with each term and she has some awareness now. But this song is part of tradition. That's why they are doing it. The message says one thing but they are not practicing because nowadays even the market pressure is not good. Previously people had money and so many animals. Nowadays that one is minimal. As you know, we are a poor country. It is so difficult to have many kids. You know before the population was small, they could survive it. But nowadays it's so difficult to have many children; even raising one or two kids is so difficult. So now everyone is aware and is not practicing this. It's a normal song that's why they sing it." However, Hanna has also noticed that some people still favor seeing many children as noted by one vCHW. He said that when women give birth to many children, it is seen as a way to increase the clan. He continues to say that before families cherished having many children, not only for help with the farm work but also feel that they are doing their part to increase the clan for generations to come. In turn, the community and her husband will look upon the woman with many children more favorably than a woman without many children. So again we see that culture is important and that in of itself is a part of the messages of these birth songs, but that because of MaNHEP's intervention and changing circumstances such as the economy, cultural practices have been adapted accordingly.

4.5 The role of tradition

Usually, it's the older women who sing these songs or are expected to lead these songs; they usually learn these songs in their adolescent years from their mothers. They have also learned it by attending these birth ceremonies as a youth. When asking the participants about the purpose of the songs, over and over again they replied saying it was part of tradition and that it was passed onto them by their mothers. They felt that they had a responsibility to carry it on for the future generations and that it was not up to them to question why certain aspects have been a part of the tradition. One particular community health worker went as far to say that, "there is no teaching about the culture." He admits that things have been passed on without a real understanding of the messages. This was in reference to why men are not allowed to participate in the birth song ceremony. The author could sense that the participants were very protective about their traditional practices, but also willing to make changes to practices if it saved lives as mentioned by a TBA. Here is what the TBA from Degem had to say: "Making these changes is very important, because we've seen the troubles that have occurred. Today we are saving the lives of children and their mothers. Before many children died; however, now many of them live. They have learned a lot. During delivery, the mother would bleed a lot. But now, there is medicine and there is guidance for her. If she experiences a lot of bleeding, then she goes to the health post. Making these proper changes is a good thing. Therefore we are grateful for the changes you have brought. For myself, I've cried over the troubles that I experienced."

Similarly, the MaNHEP staff has spoken about observing the transition they've seen in terms of the cultural norms that is usually associated with the birthing ceremony. Before the communities in these three woredas were instructed by MaNHEP about the importance of hygiene, the tradition was that the woman would bathe herself 3-5 days after she has delivered. This would mean they would continue wearing the blood soaked clothes for that period. But now the MaNHEP staff has taught the mothers to bathe themselves immediately after they have They've also taught them about risk and transmission of infection and delivered. prevention strategies using the community maternal and newborn health take action cards developed by the American College of Nurse Midwives. The cards were intended for health workers to use to teach communities to develop safe practices that are culturally acceptable and likely to be used when needed (MaNHEP, 2010). More importantly, the staff told them that the regular traditions like the songs and the food celebration that usually accompany the bathing process can still continue, but that these new bathing guidelines should accompany the regular traditional practices. As with the example mentioned above, the new mothers would bathe 3 or 5 days after birth. Because of the great risk and transmission of infection, this was one particular practice that the MaNHEP staff wanted to change. They advised the women to bathe immediately but could still have the birthing ceremony at the usual time. Overall, the MaNHEP staff sees the songs as an affirmation of the new practices that they have introduced to the woredas and have been amazed at the changes that they've witnessed.

The MaNHEP staff has also advised against practicing other traditional practices that may not have been directly associated with the birthing ceremony but have negatively affected the newborn. Normally, the women would bathe the newborn immediately after birth in cold water, which they believe would help the child cry. Also, according to Hanna, the newborn health specialist from Kuyu noted that they would give the baby butter to eat for the first couple of days while the mothers wait for the colostrums to turn to breast milk. Some additional reasons for why the colostrums was not given the baby that were noted in the MaNHEP formative report were that the women did not want to feed the child with milk that had stayed in the breast too long, the colostrums was not good for the infant and that the colostrums was unclean. When Hanna asked the women about the purpose of the butter, she was told that it served two purposes: the butter was used to clean the baby's voice and also used as food until the breast milk was produced. As noted in the MaNHEP formative report, other reasons for giving the butter was that it was part of the their culture, strengthens the baby's body, and that it would protect the newborn's body from drying out (MaNHEP, 2011). Hanna also learned that some mothers delayed breastfeeding because of their lack of experience. They have advised the women to wait for 24 hours before bathing the newborn and to bathe the newborn in warm water. They also advised the women to refrain from giving the baby butter but to breastfeed the baby exclusively for the six months including giving the baby colostrum.

Another cultural phenomenon that Abebe, the MNH specialist from Werejarso, has witnessed a big influence on the maternal and newborn health care.

That phenomenon is in regards to traditional healers. According to Abebe, the traditional healers are regarded as respected people in the community and people consult them as they would consult a doctor. However, because there are more healers than there are doctors in these communities and that they are highly accessible, they are often consulted for advice frequently. Traditional healers have been known to advise the expecting woman to give birth at home instead of going to a health post which can be detrimental to the mother and the baby. That same idea was also echoed by a TBA in a focus group discussion. A TBA during a focus group discussion also mentioned that she thought it was better to give birth at home, because she thinks that women won't experience many problems and that normally women have safe deliveries at home. In one story that Abebe recounted, a pregnant woman died because the traditional healer and her mother who was not instructed in the CMNH training advised the mother incorrectly. Soon after moving to the kebele where her husband was raised, she became pregnant and her husband and she began taking CMNH training during her third trimester. According to cultural customs, the expecting woman has to return to her mother's house to give birth. So when her date of expected delivery was near, the expecting woman traveled to her mother's home which was in another kebele. When the labor started and finally became prolonged, the husband began shouting and calling people to take her to the health facility. He was saying that he has learned about this issue and that she needed to go seek medical attention immediately. Unfortunately, because the mother and the traditional healer have not taken the CMNH training had advised the expecting woman to remain at home and unfortunately she died. Now, because of this situation with traditional healers and relatives who have not participated in CMNH training, this issue is being addressed by the MaNHEP quality improvement team which is responsible for identifying the issues that prevent women from getting the medical care that they need whether they get it from the FLW or going to a health post. Now, traditional healers are being trained and understand the impact of their role in an expecting woman's life and the life of her child.

4.6 MaNHEP's approach

The MaNHEP staff has been able to teach the women about the harm of these practices successfully through their teaching sessions using a cascade approach¹. It begins with the maternal and newborn health specialists inviting key regional health bureau staff and health extension worker supervisors to teach them to be trainers. These new trainers then work in pairs to conduct training sessions for 60 HEWs. Finally, newly trained HEWs, working in pairs, lead training of trainers' sessions for 60 selected volunteer community health promoters (vCHPs) and birth attendants in their respective woredas. Two vCHPs and two birth attendants are selected from each of 10 kebeles in a woreda, for a total of 60 vCHP-birth attendant pairs who are called guide teams. In the end, each kebele will have two guide teams to implement the CMNH (community maternal and newborn health) Training Program. They will train a total of 2,000 family teams annually per woreda, consisting of pregnant women and family caregivers/decision makers particularly

men. By using this approach, MaNHEP can be able to strengthen those systems like the family units that play a critical role in the care a woman seeks and actually accesses.

The maternal and newborn health (MNH) specialists along with the guide team and FLWs have been able to influence the attitudes and practices in these three woredas. They have been able to do it by using the cascade approach and also using educational materials such as the community maternal and newborn health take action card booklet in Afaan Oromo. This booklet contains cards that address various issues ranging from prevention of problems before, during and after birth to solutions to pregnancy complications such as excessive bleeding and instruction on important practices like breastfeeding. On the front side there is a large drawing of a problem and on the back side there are six drawings of actions which respond to the problem on the front side of the card. An example of the take action card can be found in Appendix E & F. The drawings are to remind the audience of what they have been taught in the learning sessions. The cards are easy to understand, because there isn't a lot of text, but rather the drawings are used to convey the message. Thus, someone who is illiterate could still understand the sequence of actions and be able to carry out the actions. But even if they can't quite understand the particular details of a picture, they can ask the guide team questions about it during the family sessions with the family team. The booklet is also very useful, because the families can keep a copy of the booklet with them so that they can use it as a reference to guide their actions if a situation comes up. By carrying out the actions, they can reduce the severity of a problem until a FLW or a medical

professional can attend to them or even prevent the problems altogether. In other words, it's a powerful tool, because the families can now feel empowered that they can now play an active role in the outcome of their health and their newborn's health and not have to solely rely on the FLW.

The home based lifesaving skills that the take action card booklet is based on were implemented in Liben, Ethiopia before MaNHEP used this approach. These communities created songs about Looko's story but sang songs about her life before and after she was educated about maternal health. The way they've interpreted the stories capture the main differences that was evidenced in Looko's life as seen in their lyrics as shown in the table below. Most importantly, this is a clear example of how song can serve as an instrumental role in conveying, dispersing and teaching vital information for the intended audience especially if it's integrated into a ceremony that is dependent on songs.

Looko's Road to Death	Looko's Road to Life
Story	Story (Now called Iftu's
	story)
She's my Looko	Educated Looko
Looko is not educated	She's my Looko
She's my Looko	She understood the
	education
She has a large family	She's my Looko
She's my Looko	She took all the lessons
She didn't take family	She's my Looko
planning	
She's my Looko	She used family planning
She's not educated	She's my Looko

	Chair and a start and
She's my Looko	She is pregnant now
She's pregnant	She's my Looko
She's my Looko	She saw blood
She saw bleeding	She's my Looko
She's my Looko	She called her husband
She went to do laundry.	She's my Looko
She's my Looko	She took money
The bleeding got worse	She's my Looko
She's my Looko.	She went to the health
	facility
She returned home	She's my Looko
She's my Looko	She gave birth at the health
	facility
She called for her husband	She's my Looko
She's my Looko	She delivered safely and
	returned home
Her husband is poor	She's my Looko
She's my Looko	She gave birth to a son
He went to farm	She's my Looko
She's my Looko	She's my Looko
He went to plow his land	
She's my Looko	
He's plowing his land	
She's my Looko	
He doesn't have money	
She's my Looko	
He went to look for money	
She's my Looko	
He could not get money	
She's my Looko	
The land is far	
She's my Looko	
The road is curved and long	
She's my Looko	
Looko didn't get treatment	
She's my Looko	
This comes from not	
knowing	
She's my Looko	
Looko lost her soul (died)	
She's my Looko	

4.7 Messages Desired to be Included in Future Songs

Given the influence of songs at the birth ceremonies, the author wanted to explore how the experiences of the MNH specialists would tie in with the messages of future songs. Thus, the author asked the MNH specialists what messages they would like to see being conveyed in songs for the women in these communities. Below is a table showing the responses by the MNH specialists of messages that they think are important to be featured in future songs.

MaNHEP Personnel	Topics desired to be featured in future
	songs
Aynalem- Regional manager of Oromia	Exclusive breastfeeding for 6 months
	Waiting 24 hours after birth before
	bathing the newborn & ensuring the
	newborn is bathed in warm water
	Abandoning the practice of giving butter
	to the newborn
	Giving colostrum to the newborn in lieu
	of the butter
	Mother bathes immediately after
	delivery
Abebe- MNH specialist for Werejarso	Improvement of mother's hygiene
	Importance of immunizations for the
	newborn
	Education about postnatal complications
	i.e. excessive bleeding and seizures
	Importance of immediate and exclusive
	breastfeeding the newborn
	Abandoning the practice of giving butter
	to the newborn
Hanna-MNH specialist for Kuyu	Didn't specify a particular topic but said
	general knowledge
	Stressed that birth song ceremonies
	serve as an influential platform to teach
	many women important lessons
Lelise- MNH specialist for Degem	Inclusion of Looko's story as members of
	the guide team in Degem have done since
	it discusses referral plan, early
	identification of problems, birth
	preparedness and role of communication

Table 5.1 Topics desired to be included in future songs

V. CONCLUSION

5.1 Main Findings

This study describes the role and purpose that traditional Oromo birth songs play in the three woredas in N. Shewa. It also looks at the messages of the songs and their effect on how the women perceive these messages. Also, the study highlights the changes that have been made to the traditional practices that usually accompany the birth song ceremonies brought through the MaNHEP interventions and economic conditions. Finally, we have seen how stories such as Looko's story have compelled the communities to be more engaged in teaching others about factors that lead to maternal and newborn morbidity and mortality or survival.

The birth ceremonies, where the birth songs are sung for the women provide a boost of morale for the mother of the newborn and instill a sense of camaraderie among the participants present at the ceremony. The event signifies social cohesion in that everyone shares in the mother's joy of her new child and sees it as her contribution in increasing the clan. The birth of her child is seen as a contribution for the greater good of the community. Most importantly, they celebrate her victory over death that has unfortunately led to the demise of many other women before her. Essentially, they are also recognizing the hardship and agony that a woman undergoes during the prenatal, peri-natal and postnatal stages. Particularly, they celebrate her liberation from the "bondage" or "tension" of carrying the baby for nine months and escaping death from the evil spirits during the critical period after birth. Unlike the birth songs in which the women only participate in, everyone plays an important role in this celebration. While the women prepare the food and drinks and entertain the mother, the men put their skills to use and build a bed of honor for her. This symbol serves as a trophy and a remembrance of all that she went through and all of the circumstances from which she has been delivered.

Similarly, when looking at the messages of the birth songs, we can see these same sentiments reflected in the lyrics. Wasabe congratulates the mother for delivering her child successfully and highlights the strength of the child. Eshururu is a participatory song that women use to prophesy good wishes for the newborn. It allows any woman the opportunity to express their expectations for the baby; whereas wasabe doesn't. Wasabe is sung in unison and doesn't allow the individual women to express their thoughts to the mother. Finally, ammas dali is a song that also speaks about the future but in particular for the mother. The women encourage the mother to give birth again and again. But as noted in the focus group discussions, this song is sung in accordance to tradition and is not expected for the woman to give birth again unless it is her choice. The participants echoed that although in the past, they would encourage the woman to give birth to as many children as possible; now, after being taught about family planning and being aware of economic conditions, they don't expect women to have large families.

Through the MaNHEP interventions, changes to traditional practices that have negatively influenced maternal and newborn health have been observed such as smaller family size, giving colostrum to the newborn, abandoning feeding the newborn butter and the improvement of the mother's hygiene. The most significant of these changes has been the practice surrounding the mother's hygiene.

According to tradition, the mother would remain in her blood soaked clothes after delivering the child for 3-5 days until she finally bathes on the day of her birth ceremony. The cleansing on this day signifies that not only has she been liberated from the "bondage" of pregnancy but that she has ultimately escaped from the final hurdle: the evil spirits. Because of the high risk of infection and transmission of infection during the 3-5 postnatal days, the MNH specialists instructed the women to abandon delaying bathing, but advising them to bathe immediately after birth. However, they also were aware to tell the women that they could still participate in the birth ceremony during the regular time frame which is 3-5 days after birth. Aynalem discussed this balance between culture and health prevention strategies. She does not want the communities to abandon their beautiful traditions, but would want the harmful practices to be changed so that maternal and newborn health in these communities will not be compromised. Overall, the MNH specialists have been careful not to overstep the boundaries of tradition, but they have made the communities aware of how they can improve maternal and newborn health by tweaking their practices. This conscientious thinking by the MNH specialists follows in accordance with the MaNHEP's approach that respects and builds on local knowledge and skills to develop safe practices that are culturally acceptable and likely to be used when needed.(MaNHEP, 2010)

Taking these observations into account, Temesgen, the BCC director of MaNHEP was given the assignment to create three songs that would discuss 3 different practices that MaNHEP wanted the women to adopt. These songs also had to comply with MaNHEP's broader BCC goal to get more women to seek out maternal and newborn health (MNH) services and to motivate frontline health workers to provide such services (MaNHEP, 2010). Specifically, the BCC strategy aims to address the following things: to increase support of mothers by frontline health workers; increase the number of mothers who attend community meetings, develop birth plans, and deliver safely; and enhance the capacity of frontline health workers to work together (MaNHEP, 2010). So, keeping this all in mind, Temesgen decided to address unity among front line workers and families, problems women encounter in gaining access to medical care and problems with providing medical care to the communities and finally a song that discusses the common pregnancy complications woman suffer from like excessive bleeding. He will be responsible for creating the lyrics and composing the music in a style that is reflective of the Shewa culture.

The songs will be sung with one professional vocalist and the other women will be the background singers as similarly done with Eshururu. The background singers will be screened by either two methods: listening to the songs that have been created and then asked to sing it on the spot or the singer will be asked to sing any of the common traditional birth songs. Temesgen has estimated that there will be at least ten background singers from the 3 woredas in N. Shewa and that he will allow as many background singers as possible given that that they pass the screening test. He will also include two singers from the guide team and at least one vCHW. During the time of this study, the production of the song was being evaluated for content and composition. With this new wave of songs, MaNHEP also hopes to use the birth ceremony platform to disseminate vital messages to a broader audience of women who otherwise would not have exposure to this information. Also, it serves as a great platform to recruit other women to participate in the CMNH training who have not had the opportunity to do so before or who have not heard about the CMNH training in detail. By doing this, the health awareness of these communities will be strengthened and ultimately maternal and newborn health will improve.

Overall, the goal for these communities, after being educated about the problems of maternal and newborn health, are to come up with specific, measurable, attainable, realistic, and timely solutions to these problems. It is a way for the communities to take ownership and feel empowered to not rely on others to solve matters that they can handle themselves. After observing the birth song ceremonies and discussing the issues at hand with the participants, the author now has a greater sense of appreciation for music and how it can really transform lives. It was very moving to see how the FLW could also observe the changes and be inspired by them. A TBA from Degem said it best when she said, "Making these changes is very important, because we've seen the troubles that have occurred. Today we are saving the lives of children and their mothers. Before many children died; however, now many of them live. They have learned a lot. During delivery, the mother would bleed a lot. But now, there is medicine and there is guidance for her. If she experiences a lot of bleeding, then she goes to the health post. Making these proper changes is a good thing. Therefore we are grateful for the changes you have brought. For myself, I've cried over the troubles that I experienced."

VI. APPENDIX

Appendix A: Informed Consent (English)

Informed Consent

Hello. Thank you very much for coming in to talk to me today. I am doing a study on the role of traditional Oromo birth songs. I am first going to be talking with you today about the kinds of songs that are used in your community. I would then like to learn more about songs that are particularly sung for birth. I will ask you questions about what some of the birth songs are, when they are sung, what their purpose is and other related questions. Overall, I would like to find out about the purpose of traditional Oromo birth songs sung here in this community and how they could be used as teaching tools.

Let me tell you about how I will conduct this group discussion. You have been invited to participate in this discussion, because you have either been present during the singing ceremony conducted after childbirth or participated in the singing ceremony yourselves. I am hoping to hear all of your opinions, because I value all of your opinions. There are no right or wrong answers. I will simply be asking for your opinions and experiences, so please feel comfortable to say what you really think. Please feel free to disagree with others and share your view, but also please respect the views of others. Just speak up when you have something to say, but it is also important that only one person speaks at a time so that we don't miss anything on the recording.

There is no benefit to you personally for participating. Should you agree to participate, in this small group discussion voluntarily, I want to assure you that everything that is said here today will be kept confidential. I will not be sharing your name with anyone. If at any point you feel that you would like to stop the discussion, please let me know and you may leave.

During the discussion, Tolcha will be taking notes to make sure we get down much of what you are saying. In addition I will be tape recording the session so that I don't have to worry about missing any of the important information you are giving me. Please let me know if you mind being tape-recorded. Note—If the respondent does not mind, then say... I am going to test the tape recorder now, to see that it works. (Turn the tape recorder on, invite everyone to say something and then play it back). The tape recordings will be stored in a safe place and will not be associated with your name. Rather, the information on the tape will be used for this study but will be destroyed at the end of the study. The findings from this discussion along with the findings from other discussions of this type will be shared. We anticipate that this discussion will take about 1-2 hours to complete. Do you have any questions before we begin?

Now we need to ask each of you whether you agree to be in the study. Remember, if you choose not to join the study, you will still be able to receive care for both you and your baby.

INTERVIEWER READ: "Would you like to give your consent to participate in the interview?" Y N

Signature of participant

Date when consent was given

Appendix B: Focus Group Discussion Guide (English)

Focus Group Discussion Guide

Date of focus group discussion (Month, Day, Year): [__--__] Location of interview: [_____] Time the interview begins in Ethiopian time: [____] Time the interview ends in Ethiopian time: [___] Interviewer:

Introduction Questions

Welcome, everyone. Before we begin, please tell the group three things: your first name, your favorite Oromo song, and why this particular song is your favorite.

Topic 1: Types of Songs

Thank you. Now let's talk about the different kind of songs that are commonly sung in this community.

1) What types of songs are usually sung by women in this community? (**Probe:** centered on events, which ones are most commonly sung)

2) Are some songs more important than others? (**Probe:** How would you rank these songs in order of importance? Why did you decide to rank it in this way?) (**Note to moderator:** If traditional birth songs are not mentioned, ask how traditional birth songs should be ranked? Why?)

Topic 2: Birth Songs

Now let's talk about traditional Oromo birth songs.

3) What birth songs do you know? (Probe: You have mentioned XYZ songs, are there any other birth songs that have not yet been mentioned?)

Make a list of the songs mentioned by the group. Then, for each song you have listed, ask the group the following:

4) From whom did you learn this song? At what age did you learn this song (how old were you)?

5) Who is supposed to sing this song? (Probe about gender and age—Women only? Older or younger women?

Appendix C: Informed Consent (Afaan Oromo)

Informed Consent

Akkam jirtu? Maqan koo Gifti jedhama. Gaafi fi deebi kanaaf eyeemama taatani haara dhufu keesaniif galatooma. Ani qorano ga'ee sirba adaa yeroo dauumsa Oromo irratin hojedha. Dura dursan wayya gossa sirboota hawasaa kessa jiran irrati hasofna. Kessamu iyyu ani waayya sirboota yeroo dauumsa barichu nan barbaada. Amma gaafi gossa sirbootataa dauumsa yeroo isaan itti sirbamanii fi essati akka sirbaman akkanutti himtan barbaada Akka wali galutt sirbun yeroo dauumsa kun maaliif akka sirbaman beeku na barbaada. Akkasumas halla kamin akka meesha barumsati akka fayyadan beeku barbaada.

Amma halla maren garee kun itti adeemsiifamu isiin itti hima. Isinni mare kanatti hirmaachu afeeramtaniritu, sababni isaa isini yeroo sirba dauumsa kun sirbaman hirmatanittu yookan immo ofimma kessani sirna kana irrati sirbitanirtu. Ani yaada keesa hunda dhagauudhaaf fedhi qaba sababani isa yaada hunda keesanifi iddoo gudda kenna. Yaada kana keesatti deebi'e sirridha yookan dogogora jedhamu hin jiru. Halla salpha ta'en yaada keesanniifi muxanno keesan isiin gaafadha.Kanaafo hin dhiphatin yaada isiniti fakkate hunda naaf kenna. Yaada nama bira isinitti hin fakkatin mormu fi yaada keesan ibsuu hin sodaatina. Yo yaada qabatan hin sodaatin bilisa ta'ati dubbadha garuu yeroo tokko namni tooko kofti dubbachu barbaachisadha.

Hirmana kessanifi fayyada argatan hin jiru. Kanaafu mare garee xiqqo kana keesati hirmachu kessanf wali galu hin dadeenya? Wanta isiin nan jettan yookan himtan ichittidhan qabuuf/akka nama bira kamitu hin himne isiniif mirkaneesa. Maqan keesaniis enyutu hin himu. Yeroo kamitu iyyu mare kana addan kuttu ni dandeesa.

Yeroo mare kun gegeefamu, Tolchan yaadolin nutti hasofne hund akka nu jala hin bane yaadano qabata. Dabalatan, ani sagalee keesan tapidhan nan warabaa. Kanaafu odeefannoo barbachisaa ta'an na jala ba'uuf jedhe hin yaada'u. Tapidha sagalee kessan yo warabee rakko jira? Ammamo sagalee kessan warabiin akka hojeetu nan shakalee ilaala. Sagalee tapidha warabamee halla gardhidhan fi akka hin banetti olkaama yookin hin qabama. Akkasumas maqan keesani akka wallin hin qababamne ni godhama. Odeefanoo tapi kana keesa jiru fayyada qoranoo kanaaf qofa oluudhaan dhumu irratti ni gatama. Bu'an qoranoo mare kana bu'a qoranoo mare wal fakkata gara biro irra argame isiniifis ni ergama/ ni himima.

Mare kun xumuruuf sa'at tokko hanga lama ni fudhata jenne ni yaadna. Utuun hin jalqabin, gaafi qabdu?Ammamo tokko tokkon keesan mare kana hirmaachuuf wali galu keesan ni gaafana. Yo mare kana hirmaachu dhisu filatan, ammas walaansa offi keesaniifi daimani keesani akka argatan yaadachisna. "Wali galte hirmaana keesani nu mirkaneesu ni dandeesu? Eeyee yookin Laki

Malatoo hirmaata

Guyyan wali galtee malata'i

Appendix D: Focus Group Discussion Guide (Afaan Oromo) Focus Group Discussion Guide

Date of focus group discussion (Month, Day, Year): [_ _ - _ _ _]

Location of interview:

Time the interview begins in Ethiopian time: [____]

Time the interview ends in Ethiopian time: [____]

Interviewer:

[

Introduction Questions

Baga nagaan dhuftan. Utuun hin jalqabin, maaloo waan sadaan kana naaf hima maqaan keesan, sirba Oromo jalatani fi maalif akka jalatan.

]

Topic 1: Types of Songs

Galatooma. Ammamo sirba adda hawaasa keesan keesatti dedeebieame sirbamu hasofna.

1) Sirba adda dubbartootan sirbamu maal maal fei? (Probe: Inni kuni maaliif? Cidhaaf mo booiichaf moo gamuuchu ibsachuudhaaf? Yeroo bayee irra dedeebieme kan sirbamu isakam?

2) Sirbun tokko tokko warra kaan challa barbaachisoo dha? (probe: Sirba isakamtu challati barbachisaadha sadarkaa sadarkaan natti hima? Maaliif sadarka akkasitti keesan? Sirba adda dauumsa irra fayyadamtan sadaaka isakam irra keesu? Maaliif sadarka akkasitti keesan?/ Tookofa irrati? Lamafa irratti? Sadafa irrati? Arfaafa irratti?

Topic 2: Birth Songs

Ammamo wayya sirba adda Oromo dauumsa irratti sirbaman hasofnu.

3) Sirba adda dauumsa isakam beetu? (Probe: Sirba kana nu himte, sirba gara bira hin jiru?

4) Enyu irra sirba kana bartan/enyu isiin barsise? Umurin kee maqaa turee yemmu sirba kana barte?

5)Hawaasa kana keesa, sirboota kana yeroo bayee enytu sirba/enyuu irra sirbun egama? (Probe: dubartoota bicha yokin ira kofa? Warra dulooma yookin dargoota, shamaran yookin dubarti herumte)

6) Ergan sirba kana maali dha/ sirbi kuni hikonsa maali dha/ maal jechu dha? Jechoon sirba kana keesa jira maali? Dhaggeeffatoota sirba kana enyuudhaaf?

7). Sirba kana walitti qabne. Ammamo Sirba kana ha dorgumsisnu waan ta'u mee ha ilaalu. Sirbooni kun lama kan wal isaan fakkeesu maali? Gargar baumsi isaani maali?

Sirbichi enyun ilaalata? Dubartoof mo, daiimaniif moo, deesistudhaaf mo yookin nama gara bira

Wayye sirba aada daummsa bayee hasofne. Nunis bayee baraneera. Ammamo waan Marianne kana irra deebiati yaada.

8) gaheen yookan kayo sirboota adda dauumsa irrati sirbaman hawaasa kana kessatti maali? Namooni nanoo kana maalif sirba kana sirbu? (Probe: Bashanaf moo? barsisuuf moo? maaliif?)

Topic 3: Birth songs as teaching tools

9) Barsiisudhaaf itti fayyadamtanii beetu? (Probe: dhageeffatooni kessan enyu turre?)

10) Sirbooni kun bayee saani dubartotaaf yookan hadhoolidhaaf. Sirbooni kun hawaasa balladhaaf akka ta'uti godhamu beeku? Fakkenyaaf ijooleef? abba mana/Dhiraaf? Hin gone taanan, jijirama akkami gochu danda'ama? Enyun hirmachisnu? Adeemsa akkamiti itti deemna? Jijirama kana gochun barbachisadha?

Yeroo keesan waan na laataniif bayee Galatooma. Wanti hafe jira jettani natti himuf kan barbadan?



Appendix E: Take Action Card Booklet (English)

Community Maternal and Newborn Health

5

Birth to 48 Hours Care



6

Take Action Card: Woman Referral

Community Maternal and Newborn Health

Birth to 48 Hours Care

Appendix F: Take Action Card Booklet (Afaan Oromo) Seenaa Lookoo, Daandii du'atti geessu



Eegumsa Fayyaa Haadholii fii Daa'imman Dhalatuu Hawaasa

1

wuldhaansa da'uumsa hanga sa'a 48tii



2

Seena Iftuu: Daandii Jireeynatti geessu

waldhaansa da'uumsa hanga sa'a 48tii

REFERENCES

- Abhay T. Bang et al., "Effect of Home-Based Neonatal Care and Management of Sepsis on Neonatal Mortality: Field Trial in Rural India," *Lancet* 354, no. 9194 (1999): 1955–61.
- BRAC, Behavior change communication tools: experience from MNCH programme, BRAC, 2011. Retrieved from http://www.bracresearch.org/workingpapers/RED%20Working_Paper _21.pdf
- Central Statistical Agency [*Ethiopia*] and ICF International. 2012. Ethiopia Demographic *and* Health. *Survey* 2011. Addis Ababa, Ethiopia
- Dawson, P., Pradhan, Y., Houston, R., Karki, S., Poudel, D., & Hodgins, S. (2008). From research to national expansion: 20 years' experience of community-based management of childhood pneumonia in Nepal. *Bull World Health Organ*, 86(5), 339-343.
- Duenas, Raya. (2010). Producer. HBLSS in Liben Ethiopia. Film.
- Elaine M. Murphy (2005).Promoting Healthy Behavior. *Health Bulletin* 2 Washington, DC: Population Reference Bureau.
- Era, N. (2007). An Analytical Report on Female Community Health Volunteers (FCHVs) of Nepal. Kathmandu: USAID/Government of Nepal.
- Gebremariam, Abebe. (2012). MaNHEP Project Update. Strategies. Emory. USA, Atlanta. Lecture.
- Hafeez, A., Bile Khalif Mohamud, Mobasher Riaz Shiekh, Syed Ayyaz, Imran Shah and Rashid Jooma. (2011). Lady health workers programme in Pakistan: Challenges, achievements and the way forward. *Journal of Pakistan Medical Association, 61*(3), 210-215
- Hennink, M., Hutter, I., & Bailey, A. (2011). Qualitative Research Methods. London: Sage Publications LTD.
- MaNHEP. (2010). Maternal and Newborn health in Ethiopia Partnership. Retrieved from http://www.nursing.emory.edu/manhep/index.html
- Marley, B. "Trenchtown Rock." Bustin Out of Trenchtown. Gong, 1971.

- Rosato, M., Laverack, G., Grabman, L. H., Tripathy, P., Nair, N., Mwansambo, C., et al. (2008). Community Participation: Lessons for Maternal, Newborn, and Child Health. *Lancet*, 372(9642), 962-971.
- Siddiqi, S., Haq, I. U., Ghaffar, A., Akhtar, T., & Mahaini, R. (2004). Pakistan's Maternal and Child Health Policy: analysis, lessons and the way forward. *Health Policy*, 69(1), 117-130.
- United Nations Children's Fund. (2006). Behavior Change Communication In Emergencies: A Toolkit. UNICEF Regional Office for South Asia, 2006. Retrieved from http://www.unicef.org/ceecis/BCC_full_pdf.pdf

United States Agency for International Development (2002). Behavior Change Communication for HIV/AIDS: A Strategic Framework. *Family Health International*. Retrieved from http://www.hivpolicy.org/Library/HPP000533.pdf