

**Exploring the implementation of the ‘model families’ approach as a strategy for diffusing desirable health practices in the community:
The case of Yelmana-Denssa District, Ethiopia**

**A mini-thesis submitted in partial fulfilment of the requirements for a
Master’s Degree in Public Health (MPH) in the School of Public Health,
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DECLARATION

I declare that this mini-thesis, ‘Exploring the implementation of the ‘model families’ approach as a strategy for diffusing desirable health practices in the community: The case of Yelmana-Denssa District, Ethiopia’, is my own work and that all sources used or quoted have been acknowledged by means of complete referencing. I also declare that this work has not been submitted before for any other degree at any other academic institution.

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DEDICATION

To my family, who prayed incessantly. To the one who hears and answers prayer, my Lord Jesus Christ, and his mother St. Mary, my source of strength.

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ACRONYMS

| | |
|--------|---|
| AIDS | acquired immunodeficiency syndrome |
| AKHS | Aga Khan Health Service |
| ANC | anti-natal care |
| CHW | community health worker |
| CNHD-E | Centre for National Health Development, Ethiopia |
| CP | Community P participation |
| FGD | focus group discussion |
| HEP | health extension programme |
| HEW | health extension workers |
| HIV | human immunodeficiency virus |
| IDS | Institute of Development Studies |
| JSI | John Snows International |
| L10K | the 'Last 10 Kilometre' project |
| MDG | millennium development goal |
| MOH | Ministry of Health |
| PATH | Programme for Appropriate Technology in Health |
| PHC | primary health care |
| PNC | post-natal care |
| SNNPR | Southern Nations, Nationalities and Peoples' Region |
| YDD | Yelmana-Denssa District |

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ABSTRACT

Background: Ethiopia's health extension programme (HEP), which aims to improve access to and extend the coverage of health services in the country, makes use of the 'model families' approach as a strategy for diffusing desirable health practices in the community. The approach, which emphasises prevention and health promotion, assumes that through training and accreditation 'model families' will be able to set an example and encourage communities to embrace healthy lifestyles. However, the programme's implementation is not progressing at the pace originally envisaged. In addition, factors influencing the implementation of the 'model families' approach have not, to date, been explored adequately. Thus, the aim of this study is to investigate the factors hindering or enabling the implementation of the 'model families' approach as a strategy for improving primary health care (PHC) services in Yelmana-Denssa District (YDD).

Method: The qualitative study was both exploratory and descriptive, using in-depth interviews and focus group discussions (FGDs) to collect data. Two kebeles (Ethiopia's smallest administrative units, similar to wards and with an estimated population of approximately 5000 people each) were selected according to specific criteria. These were that both kebeles should be located in the district of interest, Yelmana-Denssa, and that the experience and outcomes of the 'model families' approach to HEP implementation should be different in each kebele. In other words, the two kebeles should represent the diversity of implementation experiences in the district. Key participants in the programme included mothers in model families, health extension workers (HEWs), community representatives, the head of the nearest health centre, and the relevant district official. These role players were engaged in focus group discussions (FGDs) and in-depth interviews with the aim of exploring factors impacting on the implementation of the 'model families' approach. Interviews and FGDs were conducted in Amharic, the local language spoken in the district. The data was analysed using thematic analysis.

Ethical clearance was obtained from the University of the Western Cape and the Amhara Regional Health Bureau. Informed consent outlining participants' rights – including voluntary participation and confidentiality – was obtained from each participant prior to the interview

concerned. Coding and pseudonyms were used to protect and ensure participants' anonymity. Only the researcher and supervisors had access to the interview data.

Results: The study showed contrasting experiences in the application of the 'model families' approach across communities or kebeles. A significant proportion of 'model families' in one of the kebeles failed to live up to preset performance standards, and therefore were not accredited or certified. On the other hand, model families in the other kebele all succeeded in fulfilling the minimum standards for accreditation. The study also identified factors explaining these contrasting levels of success in applying the approach in two communities in YDD with similar demographic and socioeconomic profiles. These included differences in the depth of community consultations conducted; the nature of the relationship between HEWs and community members; the competencies of HEWs and the adequacy of the training they provided to model families; and the level of support and supervision HEWs received. Differences in access to support as a result of transport and human resource challenges were also identified.

Conclusion: The study was valuable in identifying conditions crucial to the uptake and successful application of the 'model families' approach to improving access to and extending the coverage of primary health care services in the district. It highlights the significance of giving due cognisance to issues of ownership, community consultation and participation, as well as the importance of regularly capacitating and supervising HEWs when implementing community-based interventions. The study could therefore contribute towards building a body of knowledge about the 'model families' approach, which currently seems to be lacking.

1 INTRODUCTION

1.1 Background

In 2003, the Ministry of Health (MOH) in Ethiopia embarked on a massive up-scaling of health service delivery throughout the country. One of the strategies designed and implemented to achieve this goal was a health extension programme (HEP) aimed at accelerating the expansion of primary health care (PHC) services nationwide. The main objective of this programme is to improve access to preventive interventions at grass-roots level, based on the ‘model families’ approach. ‘Model families’ are role models, who are expected to educate their communities and increase awareness of positive health practices. ‘Model families’ are often households whose members have been actively involved in development work in their communities, thus enjoying higher-than-average levels of acceptance and credibility among the communities in which they live. For this reason, ‘model families’ are perceived as strategic in effectively diffusing positive health practices and behaviour in their communities.

It is estimated that the HEP could prevent between 60% and 70% of health problems at community level through effective intervention at grass-roots level (MOH, 2005). The principal focus of the programme is therefore on community level prevention and intervention, together considered to be one of the pillars of the country’s health system and crucial in attaining health-related millennium development goals (MDGs), namely: improving maternal health; decreasing child mortality; and combating HIV/AIDS, malaria and other transmittable diseases (MOH, 2009).

The HEP comprises sixteen packages, grouped into four areas of preventive health programmes (Alula, 2008):

- hygiene and environmental sanitation;
- disease prevention and control;
- family health services; and
- health education and communication.

Model families are expected to perform within the scope of these packages and to work closely with their cadre of local health extension workers (HEWs), who are community-based, government salaried employees deployed at each health post and mainly responsible for

implementing the HEP. They are mostly females who have completed 10th grade general education and have one year of training in the HEP. Like HEWs, ‘model families/households’ are selected from their respective kebeles.

The programme’s target is to train approximately 360 model families per year in each kebele (MOH, 2007; MOH, 2009). Unlike HEWs, model families do not receive any remuneration, participating in the programme voluntarily.

1.2 Problem statement

Using the ‘model families’ approach, the HEP targets households as catalysts in improving the health status of families at community level. The programme is designed to enable participating families to assist in implementing health extension packages once they have completed their training.

However, according to Rapid Appraisal of Health Extension Programme, Ethiopia Country Report (JSI, 2008), selected ‘model families’ are not graduating at the rate expected. Similarly, in the YDD study site, only one kebele out of 33 was confirmed to have all ‘model families’ (N= 500) implementing at least 75% of the 16 HEP packages, the criterion for certification (West Gojjame Zone Health Department, 2012). There could be several reasons for this. A government report has already linked low levels of HEW-assisted delivery, ante-natal follow up, tuberculosis control activities, institutional deliveries and health-seeking behaviour to under-performance. However, although some studies have been conducted on implementing the ‘model families’ approach at national level, (John Snows International [JSI], 2008 and Tewledbrhan, 2007), we lack an in-depth understanding of factors that have helped or hindered the implementation process as a strategy for diffusing desirable community health practices.

This study could contribute towards arriving at a better understanding of the issues entailed.

1.3 Study aims and objectives

1.3.1 Aim

The aim of the study was to explore factors found to have helped or hindered the implementation of the ‘model families’ approach as a strategy for diffusing desirable community health practices across two kebeles located in the same health district.

1.3.2 *Objectives*

- Describe the process of introducing the ‘model families’ approach to the HEP in YDD.
- Explore the experiences of district officials, HEWs, ‘model family’ members and community representatives regarding the selection of ‘model families’, their training and the certification process.
- Identify key challenges in implementing the ‘model families’ approach.
- Identify key factors in the successful implementation of the ‘model families’ approach.
- Explore possible strategies for addressing the challenges experienced by ‘model families’ in implementing the HEP.

2 LITERATURE REVIEW

This chapter examines the body of literature in Ethiopia and other countries on the implementation of community based health interventions such as the model families approach as a strategy to diffuse desirable health practices in the community. Factors influencing uptake and impact of community-based health interventions have been discussed under sub-topics like socio-economic determinants of health service utilization, community consultation and ownership, community participation, and support and supervision for health care providers. Furthermore, aspects of the model family approach including its rationale and underlying principle, the role of HEWs as champions of the approach, and recruitment and accreditation of model families are covered in this chapter.

2.1 Factors influencing the uptake and impact of community-based health interventions

2.1.1 Socio-economic determinants of health service utilisation

Social structure and individual characteristics leading to poor social cohesion can constrain the health-seeking behaviour of individuals and their utilisation of health services. For example, a study conducted in Sri Lanka showed that women with low levels of education, employment status and intra-household decision-making power are less likely to use modern facilities – whereas women with higher status as a result of wealth, knowledge and decision-making opportunities tend to take the initiative in seeking care for themselves and their children

(Caldwell, 1996). A study conducted in Nepal confirmed the extent to which the education of women, the structure of their households and their economic status influence their utilisation of available health services (Matsumura & Gubhaju, 2001). Studies conducted in Mali (Gage, 2007) and Zambia (van den Boogaard, Arntzen, Chilwana, Liyungu and Mantingh, 2008) also showed that social and cultural norms were site-level factors influencing the utilisation of PHC services.

Studies on health-seeking behaviour have highlighted the importance of key elements of health service provision in determining the rate at which their utilisation increases. These include their availability and accessibility to the general population (Develay, Sauerborn and Sauerborn, 1996; Magadi, Madise and Rodrigues, 2000).

From the perspective of health care service users, poverty itself constitutes a massive obstacle to effective PHC. According to a baseline survey conducted in Kenya, food scarcity and concomitant malnutrition presented the greatest challenges to successfully implementing PHC services (AKHS, 2004). Similarly, research conducted in Tanzania (Hetzel, Iteba, Makemba, Mshana, and Lengeler, 2007) identified the cost, level and quality of available PHC services as site-level factors influencing the extent to which they were utilised. A study from the Cebu region in the Philippines found that an increase in the price of childbirth services by any one of a number of different types of providers reduced the probability of that service being used (Schwartz, Akin, and Popkin, 1986).

In line with this, there is substantial evidence from different sources that the distance patients must travel in order to obtain treatment is a primary deterrent in the utilisation of health care services in general and of maternal services in particular in Zambia (Gabrysch, Cousens, Cox and Campbell, 2011), Tanzania (Mrisho, Obrist, Schellenberg, Haws and Mushi, 2009), Egypt (Kane et al., 1988), Kenya (Voorhoeve, Kars and van Ginneken, 1984), Nigeria (Attah, 1986), Bangladesh (Rahman, 1981), Mexico (Potter, 1985) and India (Bhende, 1983).

One study suggests that clients seem less willing to travel long distances for preventive than for curative services. It has been found that, for the most part, people use preventive services only when they are available within a three-to-five kilometre walk of where they live (Favin, Bradford and Cebula, 1984).

Evidence suggests that similar factors affect PHC service utilisation in Ethiopia. For example, a study conducted on a systems approach to improving rural care showed that rough geographic

terrain and long distances to services, inadequate financial resources, and cultural norms all play their part in making individuals hesitant to use formal health services – although this differs across PHC units (Bradley, Byam, Alpern, Thompson, Zerihun, Abebe and Curry, 2012).

2.1.2 Community consultation and ownership

Inadequate community consultation and no consultation at all are also known to undermine the success of health care interventions. A household survey of health extension packages in Ethiopia found that a low level of health-related community knowledge and resistance to proposed interventions from community members are major constraints in implementing any initiative (Teweldberhan, 2005). It has been reported that lack of community consultation can spark resistance to health awareness programmes, impacting negatively on a community's understanding of health issues and – in turn – the successful implementation of the 'model families' approach.

Among other things, 'model families' should be fully conversant with the skills and resources at their disposal, how these can be complemented by other members of the community, gaps needing to be filled from external sources or potential stakeholders in this process, and the level of integration necessary (Teweldbrhan, 2005; MOH, 2007).

According to Lehmann and Sanders (2007), a sense of ownership is vital to the effective implementation of PHC services at large and community-based programmes in particular. They report that, by their very nature, community-based programmes – including those using CHWs – are vulnerable unless driven, owned by and firmly embedded in the communities themselves (Lehmann and Sanders, 2007). In addition, while it has been acknowledged that there are few success stories of lasting CP, the ownership and active participation of communities are non-negotiable pre-conditions to the sustainability and impact of any programme (Neuwelt, 2005; Bhattacharyya et al., 2001).

2.1.3 Community participation (CP)

It is widely documented that CP is key to primary health care (Preston, Waugh, Larkins and Taylor, 2010; Morgar, 2001; Neuwelt, 2005; Zakus and Lysack, 1998). CP is commonly understood as the collective involvement of local people in assessing their needs and organising strategies to meet them (Zakus and Lysack, 1998). Approaches that saw communities primarily

as the passive recipients of health care have given way to those seeking to make more of the potential of active CP to enhance accountability and improve responsiveness to services (Loewenson, 1999). Cornwall, Lucas and Pasteur (2000) point out that, in recent years – and at least partly in response to an emerging crisis in health care provision in many countries – there has been a major shift in attitudes towards community involvement.

Current health promotion policy and practice places a high value on CP (Robinson and Elliott, 2000) because its purpose is to enable communities to identify problems, develop solutions and facilitate change (Blackburn, 2000). Various countries employ different approaches in using CP as a PHC strategy, ranging from community health workers (CHWs) (Lehmann and Sanders, 2007) to community forums and committees linking different levels of health service provision (AKHS, 2004). The form community mobilisation efforts take can be part of large-scale political transformation, such as in Brazil or China, or through local initiatives often facilitated by non-governmental, community-based or faith-based organisations (Lehmann and Sanders 2007).

Preston, Waugh, Larkins and Taylor (2010) have also argued that there is some evidence to suggest that CP can contribute to positive health outcomes. By way of example, studies in Kenya (AKHS, 2004) and South Africa (Kironde and Kahirimbanyi, 2002) using the CHW model have shown a direct link between major improvements in health outcomes and CP. The CHW model has been widely used in many developing and developed countries as a strategy for health service provision in hard-to-reach areas using lay health workers with some form of training (Lehmann and Sanders, 2007). For example, collaboration between communities, health committees, CHWs, government and non-governmental organisations (NGOs) has been credited for positive health outcomes and broader community development across Kenya. Some communities have established dispensaries using their own resources; the use of safe water supplies has risen from 14% to 63%; and the practice of family planning from 13% to 23%. All other key indicators have also improved: immunisation coverage; the application of oral rehydration therapy to combat diarrhoea; the use of latrines; and a decline in the infant mortality rate (AKHS, 2004).

According to Lehmann and Sanders (2007), the largest and most successful example of CP is the Brazilian Family Health Programme, which has integrated CHWs into its health services and institutionalised community health committees as its preferred social participation method for

ensuring the sustained use of municipal health services. This means that, instead of being an option, CP forms an integral part of the state's responsibility in respect of health care delivery.

2.1.4 Health care provider support and supervision

From the perspective of a health care provider, research has underscored the importance of adequate supervision and support. Several studies indicate that the supervision of primary health care services – particularly programmes involving CHWs – is critical to effective service delivery. A study on the role of CHWs in improving child health programmes in the rural areas of Mali has confirmed this (Perez, Ba, Dastagire and Altmann, 2009). Likewise, Bhattacharyya et al. (2001) have argued that the success of a community-based programme hinges on regular and reliable support throughout the process of recruiting, selecting, training and supervising community lay workers. Lehmann and Sanders (2007) have concluded that small-scale projects are often successful because they manage to establish effective support and supervisory mechanisms for lay workers that may even include a significant amount of supervision and oversight by the community itself. By contrast, national programmes are rarely able to achieve this consistently.

There is also substantial evidence from different sources that lack of supervision has undermined the implementation of Ethiopia's programme (Abebe, Mengistu and Mekonnen, 2008; Habetamu, 2007; Alula, 2008).

2.2 The 'model families' approach

In Ethiopia, the 'model families' approach was launched in 2003 as a strategy for up-scaling access to and the coverage of PHC services. Since its inception, this community-based intervention has met with contrasting responses in different communities. This section presents a review of existing literature on the approach.

2.2.1 Rationale and underlying principles

As noted by Mesrak, (2011) and the John Snows International (JSI) 'Last 10 kilometre' (L10K) project (2008), the training of 'model families' is one of the HEP's most important strategies in Ethiopia and is an adaptation of Everett Rogers' theory of mass communication and the diffusion of innovation. The term 'diffusion of innovation' refers to the spread of abstract ideas and concepts, technical information, and actual practices within a social system, where the spread

denotes flow or movement from a source to an adopter, typically via communication and influence (Rogers, 1995).

Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system (Ray, 2001). An innovation is diffused within a social system through its adoption by individuals and groups (Stoneman, 2002). Rogers (1995) concludes that “The heart of the diffusion process consists of interpersonal network exchanges between those individuals who have already adopted an innovation and those who are then influenced to do so”.

The notion of diffusion is not new to health care, as there have been attempts to apply it to the design and understanding of various kinds of health interventions. By way of example, there is evidence suggesting that ideas or information about contraception may diffuse horizontally between proximal regions (Bocquet-Appel and Jakobi, 1997), through social networks (Paz Soldan, 2004) and across regions speaking the same language (Amin, Basu and Stephenson, 2002). It is also possible that women who are in a position to observe the benefits to children and mothers of smaller families are encouraged to change their preferences in this regard.

As one form of diffusion, the presence of many ‘model families’ in a community has been identified as a promoting factor in the implementation of health programmes. For example, a study conducted on the uptake of modern contraception in a Gambian community showed that uptake rates accelerate when there are more users from whom other community members can learn the true costs and benefits of contraceptive use (Mace, Allal, Sear and Prentice, undated)

‘Model families/households’, as part of a community, are seen to be major role players in successfully implementing PHC programmes generally, and at grassroots level in particular (Teweldbrhan, 2005; MOH, 2007). This is based on the premise that ‘model families’ are strategic in transferring knowledge and skills, thus enabling communities to ‘own’ their health (MOH, 2007; AKHS, 2004; Kautzky and Tollman, undated). However, because there is limited literature on ‘model families’ as a primary health care strategy, this study draws on literature about other models of community engagement, focusing on how to structure programmes using community members as lay workers.

Women are key role players in successfully implementing the approach because they constitute the majority of actively participating members in ‘model families’. Consequently, women are

significant stakeholders in implementing the HEP. The Ministry of Health (MOH) emphasises that women's involvement in all decision-making processes is central to the implementation of the programme (MOH, 2007). The impact of women's involvement in improving health provision was confirmed by a study conducted on the impact of 'model families' in Tigray, Ethiopia. This research found a 40% reduction in the mortality rate among children under five after mothers had been trained to administer anti-malaria medicines to sick children in their own homes (Institute of Development Studies [IDS], 2008).

In Ethiopia – as is the case in many other countries – 'model families/households' as part of their communities are well placed to identify and prioritise not only their own health needs but also to utilise untapped skills and knowledge fundamental to the effective implementation of the HEP (MOH, 2007). In addition – having used and benefited from available health services such as ante-natal care (ANC), delivery, post-natal care (PNC), infant vaccination programmes, and malaria treatment – they are well suited for modelling service utilisation, as the term 'model families' implies (Abebe, Mengistu & Mekonenn, 2008).

2.2.2 HEWs as champions of the approach

As government salaried employees recruited from the community they serve, HEWs are key role players in facilitating the 'model families' approach. Deployed at each health post and mainly responsible for implementing the HEP, they are mostly women who have completed 10th grade general education and have one year of training in the programme. The selection criteria set out in the HEP guideline include the ability to easily follow and understand the training entailed, readiness to serve as a model for families in the community, openness to change, and the ability to convince others.

2.2.3 Recruitment and accreditation of 'model families'

'Model families' are selected by HEWs and work closely with them. Like HEWs, 'model families' are selected from their respective kebeles. The HEP target is to train approximately 360 'model families' a year in each kebele (MOH, 2007; MOH, 2009). However, unlike HEWs, 'model families' do not receive any remuneration and participate in the programme on a voluntary basis.

In Ethiopia, ‘model families’ are trained for 96 hours over a four-month period and are equipped with knowledge and skills necessary to practise key aspects of the 16 health extension packages, which are grouped under four components namely hygiene and environmental sanitation, disease prevention and control, family health services, and health education and communication (Zufan and Jens, 2009; Alula, 2008; MOH, 2007). The 16 health packages are grouped across four thematic categories.

Category 1- Disease Prevention and Control

- 1/ TB and HIV/AIDS and other STIs prevention and control
- 2/ Malaria prevention and control
- 3/ First Aid emergency measures

Category 2- Family Health Service

- 4/ Maternal and child health
- 5/ Family Planning
- 6/ Immunization
- 7/ Adolescent Reproductive Health
- 8/ Nutrition



Category 3- Hygiene and Environmental Sanitation

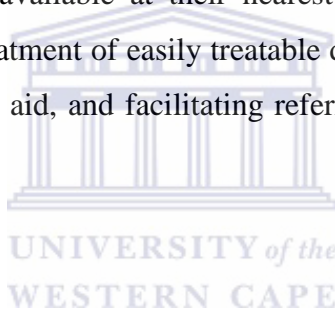
- 9/ Excreta Disposal
- 10/ Solid and liquid waste disposal
- 11/ Water supply safety measures
- 12/ Food hygiene and safety measures
- 13/ Healthy home environment
- 14/ Control of insects and rodents
- 15/ Personal hygiene

Category 4- Hygiene and Environmental Sanitation

16/ Health Education and Communication

At the end of the training, the ‘model families’ are evaluated by district health officials on topics contained in the HEP guideline. These topics include packages related to excreta disposal, solid and liquid waste disposal, food hygiene and safety measures, personal hygiene, a healthy home environment, water supply and safety measures, maternal and child health, malaria prevention and control, and HIV/AIDS prevention and control. Required to be capable of implementing at least 75% of the 16 health extension packages in the programme, ‘model families’ who meet competencies set by the HEP guidelines receive a certificate of recognition. They are then expected to ‘model’ positive health practices within their respective communities, working closely with their HEWs (MOH, 2009; MOH, 2007; Teweldbrehan, 2005).

Performing within the scope of the HEP’s 16 health packages, ‘model families’ are thus expected to use and model PHC services available at their nearest health post. These include ANC, delivery, PNC, vaccination, the treatment of easily treatable diseases such as malaria using rapid diagnostic and testing (RDT), first aid, and facilitating referrals to the next level of health care services (MOH, 2007).



3 METHODOLOGY

3.1 Study Design

This study adopted an exploratory descriptive qualitative design in order to better understand factors that have helped or hindered the implementation of the ‘model families’ approach as a strategy for improving PHC service in YDD. A qualitative approach was selected because this allows the researcher to explore the experiences and perceptions of study participants (Pope and Mays, 1995), providing in-depth information on the realities facing ‘model families’, district officials, HEWs and community representatives that impact on health service delivery (Neuman and Kreuger, 2006).

3.2 Study setting

Yelmana-Denssa District is one of the fourteen Districts in West Gojjam Zone in Amhara Regional state. In the District there are 33 Kebeles. The district has a population of 230,615 (51% Female and 49% male), and covers 99,180 hectares. The livelihood of almost all (99%) of

the population is based on rain-fed agriculture. Orthodox Christianity which is intertwined with the culture of the people is the dominant religion in the district. With regard to health, Yelmana-Denssa District has 9 Health Centres, 33 Health Posts and 71 Health Extension Workers.

Each Kebele in the district has its own Kebele council. The Council has many duties and responsibilities overall the implementation of the packages, plan, implement, monitor and evaluate health extension programme, solicit resource (mobilize, allocate and utilize), mobilize community organizations and community members for health extension program, strengthen community involvement and ensure the availability of health extension commodities (contraceptives, vaccines, anti-malaria drugs, other medical supplies and commodities, etc.) (MOH 2007).

3.3 Study population

The study's target population comprised 'model families', community representatives, HEWs, the head of health centres and a district official. As Fossel, Harvery, McDermott and Davidson (2002) note, there is no minimum number of participants prescribed for conducting sound qualitative research. However, information needs to be gathered in sufficient depth to fully describe the phenomenon being studied. Hence, sampling in qualitative research continues until themes emerge and no further information can be gleaned. Because of time and financial constraints, for the purposes of this study the researcher selected two kebeles in the district. From each of these kebeles seven 'model families', two HEWs and seven community representatives with experience in implementing the HEP were selected.

3.4 Sampling

A purposive sampling method was employed to recruit study participants. This sampling technique helps to identify participants who are able to provide rich data within the study context. As pointed out by Rice and Ezzy (1999), the goal of qualitative research is not to ensure that the sample is statistically representative, but to identify information-rich cases. On this basis, the researcher selected one kebele that had implemented the 'model families' approach successfully, and one that had failed to do so. From each kebele, seven 'model families' were selected with the assistance of the HEWs. The mothers of these families were then interviewed. In addition, four HEWs (two from each kebele), twelve community representatives (recommended by the chairman of each kebele as people able to express their ideas

competently), one health centre head and the district official in charge of the programme (the health extension officer) were recruited.

3.5 Development of instruments

Data was collected by way of interviews and FGDs using a semi-structured questionnaire for the in-depth interviews and an FGD guide, both of which were designed in English and translated into the local language, Amharic.

Data was collected according to interview schedules and FGD guidelines based on the following topics:

- the process of introducing the ‘model families’ programme;
- the experiences of key role players in implementing the ‘model families’ approach; and
- key challenges experienced and factors identified while implementing the ‘model families’ programme in YDD.

3.6 Data collection

In-depth interviews were conducted with mothers in ‘model families/households’, the head of health centres and one district health official. FGDs were conducted with community representatives. The interview questions were open-ended and began with an initial question to spark discussion. Generally, interviews and FGDs were carried out in a harmonious, friendly and open atmosphere. It is interesting to note that most of the HEP packages are implemented by women in the house. Thus, they were approached to provide information on behalf of the model family they are part of. Community representatives also happen to be men perhaps a reflection of the patriarchal society.

Data collection took place between 12 and 24 September 2012, with all interviews and FGDs conducted by the researcher. Interviews with the mothers in ‘model families’ took place in their homes, with HEWs at their health post, and with the head of health centres and district official at their respective offices. FGDs with community representatives were conducted at each kebele office by arrangement.

Before proceeding with an interview or FGD, care was taken to ensure that each participant understood the purpose of the study; the use of coding and pseudonyms in maintaining confidentiality and anonymity; and that only the researcher and supervisors would have access to

the data collected. The researcher arranged for each interview and FGD to take place in a room set aside for the purpose.

While semi-structured interview schedules and FGD guides were prepared, the probing questions technique was used to elicit in-depth information during a period of between 35 and 60 minutes per interview or FGD. Each interview and FGD was captured using a mini cassette recorder and then transcribed.

3.7 Rigour

The rigour of a qualitative study is determined by the validity and quality of the research entailed, both of which in turn inform its trustworthiness. To ensure validity, interviews were conducted in Amharic, a language understood by both the interviewees and interviewer. Direct quotations from interviews and FGDs were used to provide insight into key issues.

The researcher also applied a variety of different mechanisms to strengthen the rigour of the study (Creswell and Miller, 2000; Gifford, 1996). One of these was the triangulation of data sources, cross-checking data from in-depth interviews and focus group discussions in order to enrich the information received. Another was researcher reflexivity, in terms of which the researcher disclosed his personal beliefs and kept an audit trail of the interview process. The third was member checking, which entailed the researcher referring the data from a FGD and its interpretation back to participants, providing them with an opportunity to confirm the credibility of the information and its narrative account. In addition, the researcher provided detailed and comprehensive descriptions of the study setting based on data from the district's Finance and Economic Development Office. This was to appropriately inform the process of applying the findings of the study to other settings.

3.8 Data analysis

While recorded interviews and FGDs were transcribed by the researcher, data analysis also occurred concomitantly with data collection using the following techniques:

- The researcher listened to each recording as soon as possible after the interview or FGD concerned, in order to become familiar with the data.
- The researcher prepared short notes taken from the interviews and FGDs in order to internalise key points.

The thematic analysis method was used to analyse the data by applying a step-by-step coding and categorising scheme as proposed by Richie et al. (2003). On this basis, the following steps were taken:

- Initial themes and concepts were identified from the transcripts by listing what appeared to be important themes.
- An index was built by identifying links between the listed themes, then sorting and grouping them under main and sub-themes.
- Sorting and accurately labelling the data within the index by copying and pasting sentences and phrases within the transcripts and arranging them under specific sub-themes.
- Summarising and cross-referencing the key points in each piece of data using thematic charting across all sub-themes listed under each specific theme. To consolidate the findings of the research, these key points were then interpreted.

3.9 Ethical considerations

Ethical clearance was obtained from the University of Western Cape and Amhara Regional Health Bureau. The application for research permission included the status of the research proposed, a description of the project and its significance, the method and procedures entailed, and details of the CP envisaged during the study. Since data was collected in a normal social setting, it did not run the risk of falling within the category of sensitive research. The extent of the problem in the district and nationally was explained with the aim of reassuring study participants that the issues being explored were not exceptional but occurred elsewhere.

An information sheet describing the study's aim and objectives – as well as underpinning ethical principles such as confidentiality and the right to voluntary participation – was discussed with all participants. Similarly, the concept of informed consent was explained and explored to ensure that each participant understood his/her rights before being required to sign the informed consent form indicating a willingness to participate in the interview process. FGD participants were required to sign FGD confidentiality binding forms committing them not to disclose any information discussed during group sessions.

The anonymity and confidentiality of both participants and the information they provided was protected using numerical coding, while each kebele and its participants were assigned pseudo-

names. Everyone understood that only the researcher and his supervisors would have access to the data, which would be saved for a reasonable period of time and kept secure.

3.10 Scope and limitations

The research was conducted in two kebeles of the district. Given the paucity of published studies on ‘model families’, the findings shed light on the challenges of implementing the ‘model families’ approach in YDD, as well as similar locations. While the study focuses on the experiences and perspectives of key role players in implementing the ‘model families’ approach, it acknowledges that time and resource constraints prevented the involvement of some stakeholders – particularly those in the Regional Health Bureau and the Federal Ministry of Health, both of which impact on the HEP and, by implication, the functioning of ‘model families’.

Mothers in ‘model families’ that took part in the study were often preoccupied with several responsibilities, as it is the case for other women in the community, and it was a challenge for them to make time to participate in the research, or complete the interviews. Another challenge during data collection was the strong cultural norms that discourage women from being expressive or promotes shyness and thus compared to their male counterparts, women participants tend to be reserved. To cope with these challenges, the researcher had to make repeated visits to develop rapport with participants and ensure they had time and space to actively engage in the research.

4 RESULTS

This chapter presents findings from the interviews and FGDs conducted with community representatives, HEWs, the district officer and ‘model family/household’ members in YDD. In addition to describing participants’ demographic characteristics, findings from the interviews are organised into themes and sub-themes shown in the table below:

Table 4.1

| Theme | Sub-theme |
|---|---|
| Process of setting up ‘model households’ | Selection and recruitment of ‘model households’ Training of ‘model households’ Certification of ‘model households’ |
| Role of ‘model households’ in the Kebele | Stakeholders’ views on the role of ‘model households’ |
| Success of the ‘model household’ approach | Disease prevention Environmental hygiene |
| Factors enabling implementation of ‘model households’ approach | CP Relationship with HEWs and the community support structure |
| Factors hindering implementation of ‘model households’ approach | Difficulty in changing community attitudes Poor communication between stakeholders Lack of adequate support structure |

4.1 Characteristics of respondents

Participants of the study were drawn from two kebeles with contrasting experiences of implementing the ‘model families’ programme. Kebele A, having met the preset minimum standard for successful implementation of the programme, is designated certified. This means that all the ‘model families’ in its jurisdiction have demonstrated the successful adoption of at least 75% of the HEP’s 16 prevention and promotion packages: the criterion for certifying model households. By contrast, Kebele B is not yet certified since it has not been successful in ensuring

that all its ‘model families’ fulfil the 75% uptake of the 16 health packages. Approximately 50% of ‘model families’ in the kebele met this criterion, according to HEWs in Kebele B.

A total of 32 participants participated in the in-depth interviews and FGDs. Of the 32 participants, 20 participated in in-depth interviews and twelve in FGDS. While 26 participants were members of ‘model families/households’, the remainder included four HEWs, one district officer and one head of a health centre – each of whom participated in a key informant interview.

The distribution of ‘model household’ representatives drawn from the two kebeles was proportional. There were 12 participants from Kebele A (42% fathers and 58% mothers), and 14 participants from Kebele B (50% fathers and mothers each). All ‘model household’ representatives were married. The educational level of household representatives was generally low and there was little difference across kebeles. Two-fifths of the representatives had no formal education whatsoever, while the remainder had primary level education.

Regarding the profile of the six key informants, while the four HEWs were single, the others were married. Regarding education levels, all HEWs had completed 10th grade general education and were certificate holders, while each of the others had a diploma and a first degree. The following table depicts the distribution of ‘model household’ representatives by gender and education level across the two kebeles.

Table 4.1: Distribution of participants by gender and educational level

| No | Educational level | Certified (Kebele A) | | Not certified (Kebele B) | | Total |
|----|---------------------|----------------------|--------|--------------------------|--------|-------|
| | | male | female | male | female | |
| 1 | No formal education | 3 | 4 | 3 | 6 | 16 |
| 2 | Primary education | 2 | 3 | 4 | 1 | 10 |
| | Total | 5 | 7 | 7 | 7 | 26 |

4.2 Awareness of process, rationale and benefits of programme

Since all key informants – including HEWs and the district officer in charge of facilitating the ‘model families’ implementation process in the kebeles and the district – were evidently well

aware of the procedures entailed, they were charged with the responsibility of informing and training target households and communities about the process.

An interview with the district HEP officer revealed that the ‘model families’ approach was introduced in the district during 2004. Because not all kebeles in the district had HEWs at that time, the programme was initially introduced in eight kebeles and gradually expanded to cover them all.

Other informants confirmed this, adding that the programme’s implementation had involved gathering baseline information, along with the recruitment and training of ‘model households’. These activities were reportedly undertaken by HEWs. The following excerpts drawn from the responses of key informants describe this process:

The approach in the district was introduced in 2004, after the programme was launched in the country. When we assigned them, we told them before they started the training they should register all the communities in their kebele. We checked that they registered the households.

district official

The programme was started in 2004. I am the first HEW who graduated and got deployed in this kebele. I first registered all the community members in our kebele. Then I selected a few model households and started the training.

HEW 2, Kebele B

Participants were asked to recount their experiences and perceptions of how the ‘model households’ programme was introduced in their respective kebeles. This was done with the aim of understanding whether there were any differences in the way ‘model households’ were introduced that could help to explain the disparate levels of success between the two kebeles in implementing the programme.

There was a marked difference in the level of awareness participants from each of the two kebeles had about the process of introducing the programme. Representatives of ‘model households’ from Kebele A claimed that they were informed – prior to or during their enrolment as model families – how and why the programme was being implemented in their kebele. This process was reported to have been led by the kebele chairman and the HEWs, who explained the

importance and benefits of the HEP, how it would be implemented, and issues related to its sustainability. The following responses from representatives from Kebele A provide further insights:

One day, our kebele leaders called us for a meeting. In the meeting they told us the government wants to provide preventive health services by constructing a tena-kella (heath post) and deploying health extension workers.

community representative 4, Kebele A

In the meeting the leaders told us the importance of the programme and how it would be implemented by health extension workers.

Community representative 5, Kebele A

By contrast, most representatives of the ‘model households’ from the non-certified Kebele B reported that they had not been consulted about the roll-out of the programme in their kebele. As a result, unlike participants in Kebele A, participants in Kebele B could not describe the process of introducing the programme. One of the mothers from the non-certified Kebele B mentioned that she was not aware of any process in introducing the programme in her kebele.

I do not know how the introduction of the model household approach was (done) exactly.

representative of model household 3, Kebele B

The above findings suggest differences in the level of awareness among representatives of the two kebeles about the programme, which may be related to differences in the level of information provided to these two groups.

Participants in the interviews and FGDs identified a significant change in attitude among ‘model families’ and community members as one factor determining the effectiveness of the programme and the number of ‘model families’ certified.

We don't think they aren't aware of the issues, because they can explain the issues more than us. I think it is the lack of change in attitude that is the main problem.

health extension worker, Kebele B

4.3 Role of ‘model households’: participants’ knowledge and perceptions

‘Model households’ have both routine and occasional tasks in implementing the programme. While most of their responsibilities involve training and sharing their experiences with neighbours, when they encounter cases requiring medical attention they advise the family concerned either to visit a HEW at the health post or to go to the health centre. It is one of the underlying assumptions of the ‘model household’ programme that people should learn good health practices by observing those using them (‘model households’) and, ultimately, gaining sufficient confidence to implement the same practices in their own homes. Programme usage is expected to accelerate when there are more ‘model households’ from which other members of the community can learn the benefits of good health practices. The following section illustrates the roles (actual or expected) and contributions of ‘model households’ in their communities.

Regarding ‘model families’ credited with setting good hygiene and health standards in their communities, district officials commented as follows:

The community can perform better by observing the best performer in their kebele more than they learn from an expert or health extension worker. I think the existence of many successful models in the kebele creates competition among them. Nobody wants to be seen as inferior to his/her neighbour.

district official

HEWs in the certified Kebele A explained that – by citing ‘model families’ who have been exemplary in implementing the programme – they help other members of the community to relate to the training, creating an environment in which households strive to excel in the spirit of healthy competition.

When we teach the community, we refer to the names of the best households in the kebele. We describe their personal and environmental sanitation, their improved traditional stoves, shelving and so on. This makes the training more fruitful in various ways. First, the community can observe what we said in practice. Second, it creates competition among members of the community, because they are motivated to do better and become a good

example for the rest of the community. Third, the best performers also strengthen their efforts to continue being the best.

health extension worker 2, Kebele A

By contrast, in non-certified Kebele B, despite HEWs recognising the significance of well-performing ‘model households’, they reported difficulty in finding exemplary households to which they could refer in their attempts to facilitate the implementation of the programme.

We struggled, despite our efforts, to certify many model families for the programme. We could not achieve this. We have a very limited number of model households in our kebele.

health extension worker 2, Kebele B

Even though the plan was to complete (the programme) in three years after it was launched, due to different reasons like lack of awareness of the importance of the programme and so on, most kebeles could not certify many model households.

district official

The study found that there was a marked difference in the stakeholders’ perceptions regarding the role of the ‘model household’ in the programme. HEWs, the district official in Kebele A and Kebele B, and ‘model families’ in the successfully certified Kebele A all appeared to have a clear understanding of the role of ‘model families’, including leading by example and pioneering the use of health packages in their communities.

They train their neighbours and are models for others.

health extension worker 1, Kebele A

I practically saw those who could be an example for others, who could share their experience and give support to others.

health extension worker 2, Kebele A

The role of model households is to disseminate the programme. They can teach their families and neighbours in their village. Their experience also serves as a good benchmark for others.

district official

‘Model households’ in the certified Kebele A were aware of their role and acted in keeping with expectations, while mothers reported how they strive to put into practice lessons they have learned and to share their knowledge and skills with others.

I trained my neighbour on how to make ‘chise-alba medija’ (improved traditional smokeless stove). Sometimes I would make it for them and give health education.

representative of model household 1, Kebele A

I implement what I learned. Sometimes I give support to those who could not get wood for the preparation of a toilet.

representative of model household 3, Kebele A

On the other hand, ‘model families’ in non-certified Kebele B were uncertain of their role in the HEP programme. Despite being aware of what was required, they did not act accordingly.

Since I could not implement the model house package I could not play the role of model household.

Representative of model household 2, Kebele B

One of the HEWs from the non-certified Kebele B described how the challenge of having many defaulters who fail to live up to their role and responsibilities undermines their ability to sustain participation in the programme.

They are expected to be a good example for others. We struggle to achieve this. In our Kebele most of the households did not implement the programme and could not be a good example for the rest. Sometimes even those who implemented some part of the programme will abandon it and go back to the previous situation.

health extension worker 2, Kebele B

4.4 The selection process: participants’ knowledge and perceptions

As outlined in the HEP guideline, selection criteria for ‘model families’ include the ability to easily follow and understand the training involved, readiness to be a model for other families, openness to change, and the ability to convince others. These criteria appear to be realistic and feasible. As would be expected, most of the key informants knew what criteria were used for selecting ‘model households’.

We selected the model households based on the ability to easily follow and understand the envisaged training, readiness to be a model to other families, readiness to change and willingness and ability to convince others.

health extension worker 1, Kebele B

The criteria were clearly set in the HEP guideline. I knew and implemented it.

health extension worker 2, Kebele A

However, there were discrepancies in the level of awareness about the selection process and criteria between community representatives and ‘model households’ in the two kebeles. Most representatives of ‘model households’ from the non-certified Kebele B were not clear about the procedures and had no information about the selection criteria.

I do not know what the criteria for selecting model families were but I was told that I am a model family by the health extension worker.

representative of model household 5, Kebele B

I am not sure, but I think it has to do with being an active participant in the community meeting.

community representative 1, Kebele B

This lack of awareness and clarity about the selection process among Kebele B representatives could be related to HEWs allegedly communicating inadequately with ‘model households’, and the general absence of information about the process of identifying ‘model households’ mentioned above.

While HEWs are expected to demonstrate the benefits of the programme, adult learning depends on transferring information in a way that the receiver understands. Similarly, an HEW's poor communication skills are likely to affect her effectiveness in changing the community's attitude towards participating in the programme. All these factors undermine the potential for the programme to be successfully implemented.

On the other hand, most of the mothers from the certified Kebele A had some understanding and knowledge about the selection criteria for 'model families'. In a FGD, one community representative said that 'model households' needed to have some understanding of the criteria for selection.

The extension workers select models who can understand the training and are willing to participate in the programme.

community representative 2, Kebele A

One of the mothers from Kebele A clearly articulated the criteria used in selecting her family as a 'model household'.

The extension worker and member of the kebele leaders told me that since I am active in leading an informal group (neighbour), I could understand the training that I will be given, and could be a good example for the rest of the community in my village, so they selected me as a model.

representative of model household 2, Kebele A

4.5 Training of model households: participants' experience and perceptions

As outlined in the HEP guideline, 'model households' are required to complete 96 hours of training under the supervision of HEWs. Participants in the study shared perceptions about different aspects of their training, including adequacy, duration and timing.

Participants from Kebele A reported that holidays and religious gatherings were used for training, and for disseminating information about 'model families' or health packages. This was said to be followed by visits by HEWs to 'model households', often during week days.

The training was given most of the time on holidays but in the working day they visited the work of the models in their houses. Very rarely they taught in the church on Sunday after prayers.

community representative 1, Kebele A

HEWs indicated that they perceive training not just as a transfer of information to ‘model household’ members, but also as an opportunity to demonstrate practically how certain tasks are accomplished – often during home visits.

If we planned to teach them, we teach them just by helping with their household work and doing it together with them.

health extension worker 1, Kebele B

Interviews with HEWs confirmed the use of holidays for training purposes, mainly because it is easier to find household members in their homes on such occasions. The convenience of engaging with mothers in particular during that time was emphasised.

I believe that I got enough training to implement it. I received the training on holidays, including Sundays.

representative of model household 3, Kebele A

Regarding the amount of time dedicated to training, different responses were received from each group. Participants from Kebele A were generally content with the intensity and duration of their training, which they reported as having been adequate. Some indicated that, compared to training they had received in the past from other sources, the ‘model families’ training had been superior.

I think the duration of the training is enough. We are teaching them by going house to house. We are all the time conscious that most of the mothers are busy in their household work.

health extension worker 2, Kebele A

We try to arrange a convenient time – most of the time we use holidays to teach. Sometimes, if we are going to their home on a working day, we observe their work and give advice to improve on what they have done

health extension worker 2, Kebele B

The extension worker told us the training would be given for four months.

For me it was enough. We were not trained for these amounts of time in other fields (e.g. agriculture), but we implemented the training.

community representative 4, Kebele A

The representatives of ‘model households’ from the non-certified Kebele B seemed unable to evaluate the adequacy of their training since it had not been a continuous, focused experience.

Since I could not follow the training properly (gave less attention and time), I could not say it is enough or not.

representative of model household 4, Kebele B

A key informant from the district expressed reservations about the standard of training provided in most kebeles, despite the duration of the time set in the guideline being sufficient.

I believe that the duration set in the guideline was enough for the training. But I do not believe that in most kebeles, especially in those who didn't certify, the training was given for 96 hours as it was set in the HEP guideline. They teach most of the time on holidays and sometimes on working days.

district official

4.6 Experience-sharing visits

As outlined in the Amhara Regional Health Bureau manual for up-scaling best practice and health development (2012), the district office is expected to organise experience-sharing visits for HEWs and community representatives to areas where the ‘model household’ programme is well developed. The purpose of these visits is to build confidence in the feasibility of the programme as one way of facilitating its implementation. Experience-sharing visits can be within or outside the district. Most participants from both kebeles reported that, while visits had been organised for a select group of community representatives, not all kebeles had been given this opportunity – perhaps due to lack of funds. Respondents who did participate in experience-

sharing visits commended their significance in motivating them to persevere with the programme.

Three years ago we visited another region (Tigray) and a few districts in our region (Dangila, Finot-Selame and Dega-Damot Districts) which have been implementing the model household approach effectively. We observed how they changed their environment. We were surprised. We observed that the fertility of our soil and our weather conditions could not be much different to theirs, so we asked ourselves, 'Why not change our environment as they did?' We went back to our kebele and discussed the issue. So then we committed ourselves to change our kebele. Now we have made improvements in our health situation.

community representative 3, Kebele A

By contrast, in non-certified Kebele B, community representatives were not given the opportunity to visit the best performer in their own district or see the 'model household' approach implemented successfully. The same applied to HEWs in that kebele.

In our kebele, nobody has gone to other districts to see the implementation of the model household approach.

health extension worker 1, Kebele B

We heard that a few people have gone to other districts (Dangila and Finot-Selame), which are the best performers in the region, to share in their experience of implementing model households. This helped them to change their kebeles. But no one went to these districts from our kebele. We have no clue what is happening in other areas, and so we are not that motivated to implement the programme. I think being exposed to what others are doing is very important, and might prompt us to do the same in our kebele. I have no idea why no one was invited for such a visit from our kebele. I heard that representatives from other kebeles went.

community representative 5, Kebele B

4.7 The process of certifying 'model households' and its significance

The certification process reflects the status of a ‘model household’ when it is assessed against the objective of the initiative in a specific area over a set period of time. At the end of the training, the success of a ‘model family’ is evaluated according to the percentage of health extension packages implemented. A minimum of 75% of all 16 packages must be implemented by a ‘model family’ if it is to be certified. District health officials conduct each assessment, measuring performance in implementing each health extension package against criteria set out in the HEP guideline. Criteria across all 16 packages include excreta disposal; solid and liquid waste disposal; food hygiene and safety measures; personal hygiene; a healthy home environment; water supply and safety measures; maternal and child health; malaria prevention and control; and HIV/AIDS prevention and control.

‘Model families’ who meet criteria set out in the guidelines across 75% of all 16 health extension packages receive a certificate of recognition, and are then expected to ‘model’ positive health practices. The purpose of the certificate is to motivate each ‘model family’ to implement the programme and to foster competition between the individual ‘model households’. This study explored the process of certification, its role in the programme’s implementation and the level of implementation achieved in the two kebeles selected. District officials and HEWs identified varying levels of discrepancy across all kebeles in the district in the programme’s implementation, with the certification rate of model households ranging from 49% to 100%.

In the district there is no uniform level of certification throughout kebeles. It ranges between 100% and 49%. Most of the kebeles did not complete the packages and only one kebele got certified. Few kebeles reported that they completed the packages but due to time constraints we did not evaluate their performance and certify them until now.

district official

In our kebele, since most households didn’t implement the do-able packages, more than half the households in the kebele were not certified.

health extension worker 1, Kebele B

A sense of pride and accomplishment was reported among mothers in the certified Kebele A who managed to execute 75% of the 16 health packages and were certified as ‘model households’.

Conversely, mothers from the non-certified Kebele B who could not fulfil the minimum requirement for certification expressed disappointment.

Since I implemented the training I received from the extension worker in my home, I got a certificate from the officials two years ago and this made me happy.

representative of 'model house hold' 2, Kebele A

One community representatives from the certified Kebele A described the significance of public recognition associated with being a 'model family' as a motivating factor in implementing the programme.

When you receive a certificate in front of members of the community from the officials, you feel happy and motivated to do better.

community representative 1, Kebele A

The training was very good. I think it is adequate. Since they (HEWs) visit us regularly, we implement what we are taught before we forget it. The graduation was very exciting. Our work was displayed. All we had to do to graduate was to apply what we were taught. Since I don't want my house to look untidy after being designated and graduated as a model, I always look after it very well.

representative of model household 5, Kebele A

One participant from the non-certified Kebele B nevertheless expressed her hope to be recognised in her community as a certified 'model family' one day.

I heard that good performing model families have been rewarded, but since I could not implement all of the packages, I did not receive this certificate. One day I will be certified.

representative of model household 3, Kebele B

During the study it was reported that, occasionally, 'model households' and HEWs initiated an evaluation process themselves when they felt that they had met the required performance levels.

After they completed the do-able health tasks, the HEW and kebele leaders would report to the nearest health centre or district office about the status of implementation of the package in their kebele and request the district office to evaluate their performance and accredit them.

district official

When we believe that they are implementing what they were trained for, we tell them they will be certified. We call district officials to evaluate the level of implementation of the programme and certify them. Then we prepare a ceremony for the certification day and certify them.

health extension worker 1, Kebele A

4.8 Success of the ‘model household’ approach

As defined in the Oxford dictionary, success is the accomplishment of an aim or purpose. In this study, success implies being able to implement 75% of the HEP’s 16 health packages as a certified ‘model household’ and to encourage other community members to adopt the same health practices. Participants in the study drawn from the certified Kebele A reported how the successful application of the HEP’s 16 health packages by ‘model families’ has contributed to better health conditions in the community. Participants confirmed that the programme had enabled them to take preventive action in the four broader categories of hygiene and environmental sanitation, disease prevention and control, family health services, and health education and communication.

Previously our children used to get sick frequently. Even our neighbourhood was not clean. But now the occurrence of disease has declined and our environment is clean.

community representative 2, Kebele A

I once visited a neighbouring village and saw a girl having a skin rash. I told her parents that she was having the condition perhaps because she was not cleaning her cloths regularly, and I advised her and her family to improve their personal and environmental hygiene.

model family, Kebele A

Participants in the FGDs and interviews in certified Kebele A reported that the health of community members had improved since implementing the 'model household' approach in their kebele. One of the mothers from a 'model family' in certified Kebele A described how the incidence of disease in her household had declined.

Previously we used to get sick frequently. I remember that once my two children and I got sick and my husband took us to the health centre. At that time I remember how my husband suffered to get us to the health centre. But now we are not suffering from such problems.

representative of model household 1, Kebele A

The health education I received has helped me practise family planning. I have two kids. The older one is five years old, the younger one is one year old. We never cared about hygiene in the household. When we woke up early in the morning, all we worried about was preparing food for our children and members of the family who would be going to work. However, when we realised that food prepared in an unhygienic setting is detrimental to our health, we started cleaning the house properly before preparing food. Since we were never convinced of the benefit of using bed nets, when we were told to use one we often were reluctant because we used to feel pressurised. But now we understand the benefits of using nets because they protect us from being exposed to malaria.

representative of model household 5, Kebele A

One 'model family' member from Kebele A also spoke of changes in the behaviour of 'model households' resulting from applying what they have learned during training.

Once we were done with eating our meals, we used to leave in the open the leftover food on the plates without properly covering it, over which flies would hover, and when kids ate this food they then got exposed to various communicable diseases. But now once we are done eating our meals, I will wash the plates and put them on the cupboard I built with local material. I

cover it with plastic so that flies don't get to it. This way I have been able to protect myself and my family from various illnesses as a result.

representative of model household, Kebele A

One 'model family' from Kebele A also said that, without HEWs, she would not have had access to family planning and vaccination programmes for her children.

Participants also reported improvements in environmental and overall hygiene.

Before the introduction of this programme, I used to dispose of both liquid and solid waste indiscriminately in front of my door. As a result there were a lot of flies in my home, which looked neglected outside as well. But now, I have prepared 'fesashe-masergia' (a pit hole for disposing of liquid waste). In addition, I also dug another pit hole for dry waste. As a result, my home and its surroundings have been fly-free. See Fig:1 and 2, model household 6, Kebele A

The figures below depict the different kinds of pit holes 'model families' prepare for waste disposal as part of the health packages they implement in order to be certified.



Fig 1: solid disposal pit hole



Fig 2: liquid disposal pit hole

Since we prepared a toilet within reasonable distance from our home and developed the habit of hand washing after visiting the toilet, we can keep ourselves free from different parasites and diarrhoea.

representative of model household 7, Kebele A

The figures below illustrate two of the measures ‘model families’ employ to maintain hygiene and environmental cleanliness.



Fig 3: toilet with covering



Fig 4: toilet with access to water for hand washing

One mother from certified Kebele A spoke of the health benefits of building a smokeless cooking stove as one of the requirements of the health extension packages.

As you know, we used animal dung and wood to bake ‘injera’ (local pancake, the community’s staple food) inside the home. They are smoky, which causes irritation of eyes, cough, sneezing and other discomfort for us and our children. So before I prepared a ‘chise-alba medija’ (traditional improved smokeless stove) which reduces smoke indoors. But now, I have prepared a ‘chise-alba medija’ from mud with an opening in the wall of the kitchen to vent the smoke. Thanks be to God my eyes became healthy.

representative of model household 4, Kebele A

The figures below illustrate the smokeless stove, which has been adopted by model families as part of the various health packages they implement.



Fig 5: traditional improved smokeless stove



Fig 6: ventilation hole for removing smoke

Another community representative from certified Kebele A provided an example of how training to become a ‘model family’ had transformed her attitude towards bed nets.

Previously, even though we received a bed net, we did not use it properly. We even used it for other things. But now if you go to our house you can see that it is hanging over our bed.

community representative 2, Kebele A

Other mothers from the certified Kebele A described how the training they received motivated them to make changes to their behaviour across a range of issues, from reproductive health to hygiene.

Since I got health education, I use the family planning service from the health post. I have two children. The first one is five years old and the second one is one year old.

representative of model household 3, Kebele A

Before the introduction of this programme, I did not bother about the cleanliness of my home. I woke up early in the morning and prepared food or did other work. But now, I understand that food which is prepared in a dirty area is the cause of disease. So, before I prepare the food, I wash my hands and face and clean my home. In addition we used the bed net to prevent malaria.

representative of model household 1, Kebele A

The figures below show the interiors of typical ‘model households’.



Fig 7: clean salon



Fig 8: clean bedroom with bed net

The mothers of one ‘model family’ described the benefits of another health practice learned during her training.

After we ate our food we used to leave the dishes with leftover food uncovered. As a result, flies would infest it. After some time the kids would then eat it and develop diarrhoea. But now I have prepared ‘aremadiwon’ (traditional shelving) from local materials and put the utensils inside it covered with sheets to protect them from flies and other insects. Consequently, my family and I have become healthier.

representative of model household 5, Kebele A

The figures below illustrate how ‘model families’ store food and utensils.



Fig 9: traditional shelves

HEWs in certified Kebele A reported the multifaceted changes that took place in the kebele following the introduction of the ‘model families’ approach and its positive impact on community health.

The health situation in our kebele is changed. The households made ‘chise-alba medija’ (improved traditional stove), toilets, traditional shelves (armadiown), pit holes for the dry and liquid waste (fesashe-masergia) – and they are careful about their personal, home and environmental sanitation.

health extension worker 2, Kebele A

The number of women using family planning has increased.

health extension worker 1, Kebele A

The key informants interviewed confirmed that the ‘model families’ programme had improved health-seeking behaviour among community members and helped to control outbreaks of preventable diseases.

Before the introduction of this programme, the communities of our district were exposed to easily preventable diseases and spent a lot of time seeking curative services. Epidemics occurred in different kebeles. But now since we implemented this programme, we have controlled epidemics and we have created model households who are examples to the rest of the community.

district official

Health service seeking behaviour has increased and the disease burden decreased.

head of health centre

By contrast, the figures below illustrate the unkempt homes and surrounds of model families that did not implement the health packages effectively



Fig 10: outside home environment



Fig 11: inside home environment



Fig12: latrine

kitchen

4.9 Factors that enable or hinder the implementation of the ‘model family’ approach

In this section, factors contributing to or affecting the implementation of the ‘model household’ programme are discussed. The study identified several enabling factors as well as factors hindering the implementation of the ‘model household’ approach.

4.9.1 Community participation (CP)

This study examined the level of CP in the programme and whether that had influenced its implementation. Among HEWs, there was general recognition of the importance of community involvement in successful implementation.

If you don't have a positive relationship with the community you work with, you cannot succeed in your work. The support visits we receive have helped us to be effective. If the kebele community is participating in the programme, it is easier to implement.

health extension worker 1, Kebele A

If there is no community participation in a programme, it will be difficult to achieve the objective of the programme.

health extension worker 2, Kebele B

HEWs operating in the two kebeles targeted shared different experiences pointing to significant differences in the level of participation of community members in the programme.

The experience of working in Kebele A was generally described as having been positive. Community members were receptive to the programme and responsive to calls for communal engagement such as meetings, which were reported to be useful platforms for mobilising communities and addressing problematic issues.

In my kebele, if there are issues which need the decision of the community we call for a meeting. Most of the time community members come to the meetings to discuss problems and find solutions.

health extension worker 2, Kebele A

One community representative in certified Kebele A emphasised the importance of a sense of responsibility when participating in finding solutions to problems affecting the entire community, such as maintaining clean surroundings.

When the kebele leaders and the health extension workers call us to take part in environmental sanitation we go voluntarily to the place and drain the pooled water and clean the swampy area.

community representative 3, Kebele A

By contrast, in Kebele B participants in the study experienced multiple challenges and a range of negative responses to their attempts at generating CP in implementing the programme. This may partly explain the relatively slower and generally poor uptake of the programme in the area.

When we call the members of the kebele for environmental sanitation, most of the time most of the people will not come to the place. They give us many reasons for their absence, like 'I am busy, this is a serious time. I am ploughing, preparing land' and so on. So if they do not participate in the activity, it will affect the implementation of the programme.

health extension worker 1, Kebele B

There are people in our kebele who care little about health and do not participate in environmental sanitation

community representative 6, Kebele B

HEWs in non-certified Kebele B expressed frustration at the lack of adequate community involvement in the consultation process, which they had organised in an attempt to build consensus. This, they suggested, had hampered progress in implementing the programme. According to them, although the HEP guideline points to many roles for community members and kebele leaders in programme implementation, local government officials appeared to overlook them.

We (HEWs) sometimes called a meeting. There are people who didn't come to the meeting. If you do not discuss the problems and reach consensus, how you can solve them? Although kebele administrators are willing to participate in the implementation of the programme, due to different government assignments and business they did not participate as required in the HEP guide. I think this is another problem.

health extension worker 2, Kebele B

Since we are not fully aware of the programme, I think we are not effectively participating in the implementation of the model household approach.

community representative 1, Kebele B

I think the kebele leaders did not actively participate in the implementation of the program.

community representative 3, Kebele B

Along with HEWs from Kebele B, the district official also expressed frustration at the lack of community involvement in making the ‘model family’ approach a reality, despite ongoing efforts at raising awareness. This was seen to be characteristic of implementation in most kebeles in the district.

Either because our plans were ambitious or due to lack of proper implementation, the programme could not progress as expected. The programme was planned to be completed within three years. For different reasons, the community has not been able to apply what was learned. Many kebeles have not been able to certify as many model families as they should. It is now our eighth year. It has taken us more than double the time we planned for, and we haven't yet finished.

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district official

Usually when you teach them, they say that they have understood and will implement what they learned. But they never do. I find this very puzzling. If they understood when you trained them, then why aren't they implementing it? This is the problem we have here. Since it is my livelihood, apart from telling them repeatedly to apply what they learn, there is nothing I can do. I don't know why they don't apply their knowledge or what their problems are. I don't think they really accepted the fact that this is something that can really benefit them. As the saying goes, 'You can't wake a person who is knowingly asleep'.

health extension worker.1, Kebele B

We teach them to keep their cattle separately but they don't implement it. We teach them to build toilets, they don't implement it. If they ever do, it is

not done properly, without a cover for the pit or without a hand washing facility close by.

health extension worker 1, Kebele B

4.9.2 Relationship between HEWs and their communities

HEWs are tasked with the responsibility of selecting and training families to implement the ‘model household’ approach in the communities in which they are operating. The study examined the nature of the relationships HEWs have built with community members, and whether that influences programme implementation. Generally, HEWs recognised the importance of a positive working relationship with community members to successful programme implementation.

If you do not have a smooth relationship with people you work with, you cannot be successful.

health extension worker 1, Kebele A

The experience of HEWs in the two kebeles was distinctly different. A positive working relationship between HEWs and their community was reported to enhance the implementation of the programme in the certified Kebele A.

I think we have good relationships with the model households and the community as a whole. I think this helped us to succeed.

health extension worker 2, Kebele A

A community representative from Kebele A emphasised the importance of understanding, respect and collaboration in building relationships between HEWs and their communities. When the community holds HEWs in high esteem, it will strive to practise what has been learned during training.

They strive to improve our health and a better life for us. We struggle to implement what they teach us. We respect their effort. They appreciate our fight. We have a good relationship.

community representative 1, Kebele A

They are the ones who got us here. They are so hard working. They always teach tirelessly, travelling from one village to another.

community representative 1, Kebele A

Even though we have an appointment for a home visit for them to teach me, if something happened that was not planned, I would tell them to come back some other day and they do not feel bad.

representative of model household 4, Kebele A

By contrast, HEWs and community members in the non-certified Kebele B had not managed to establish amicable relationships. This was reported to have hindered the implementation of the programme, which became apparent during FGDs and interviews with key informants, when participants pointed to different reasons for this including lack of mutual respect, lack of proper communication, and lack of trust.

We know that the government gives bed nets for new mothers. However, the HEWs in our kebele refuse to give bed nets for a mother claiming, 'You should have given birth with us, but you rather decided without consulting us to give birth at the health centre'.

community representative 5, Kebele B

The health extension workers are not serving everyone equally. They differentiate between rich and poor. They also despise some of us.

community representative 3, Kebele B

They particularly hate me because I disclose all their mistakes in public.

community representative 5, Kebele B

The programme's emphasis on preventive health care without resorting to medicines has resulted in misperceptions about its effectiveness. This has been identified as one of the factors undermining successful implementation, creating tensions between HEWs and their communities.

There was a time when there was shortage of Quorum. When such things happen the community expresses its resentment towards the services

provided by health extension workers. They will then refuse to engage with the health extension workers that visit them to provide education saying, 'You denied me medicine last time, now you have the nerve to come to my house'.

community representative, Kebele B

Some people come to the health post and ask us to give them medicine. If for some reason we refuse to give them the medicine, for instance, because they are not supposed to take it, they get angry, they insult us. They accuse us of selling the drug. We get very disappointed at times like this. We can do nothing except to continue working since we don't want to lose our livelihood.

health extension worker 1, Kebele B

These remarks tend to suggest that the negative relationship between HEWs and community members is because of misunderstandings or shortcomings on the part of HEWs, undermining trust and respect. References to alleged malpractice such as preferential treatment or the misappropriation of resources would appear to lay the blame for a breakdown in trust firmly at the feet of HEWs not taking responsibility for meeting the expectations of government and communities. Some participants in the study confirmed this.

Even though the HEWs have improved in terms of convincing the community and mobilising them for work, they still have problems expressing themselves properly without fear in front of others.

community representative 2, Kebele B

In some kebeles, there is a gap in communication skills among health extension workers, who struggle to convince their communities about the benefits of implementing the model household approach. Some expect higher officials to convince the people.

district official

The community has not accepted the programme as beneficial, and so is reluctant to apply it. From what health extension workers told us, there are

families that tell them never to visit or bother them, pointing to the fact that they are doing what they are doing to get a salary.

district official

There is nothing to suggest that the training of HEWs in Kebele B was inferior, or that they were less capable. It was reported that HEWs in both Kebele A and Kebele B were trained in the same technical and vocational education training colleges: one from each kebele having graduated from Deber-Markos and another from each kebele from Bahir-Dare. Both HEW teams were trained over a period of one year.

According to HEWs operating in the non-certified Kebele B, poor programme implementation is not caused by lack of awareness among target families or their inability to communicate the necessary information to their communities. Instead, they argue that it is because of a reluctance to embrace change. Insisting that they had paid sufficient attention to creating awareness of the benefits of the programme, they claimed that community members were fully aware of what needed to be done and why, but were unwilling to adopt good health practices. HEWs found this resistance to change frustrating.

The mother/father of the model household said that they understand what we have told them and are convinced to implement it. When we went back another day, they had not done it. We again teach, discuss and reach consensuses. When we go to their home, again we find they have not done it. We asked them why they did not do it. They gave us many unconvincing reasons like, 'I don't have time, I am busy and I don't have money' and so on. If you see their home you can observe all the goods are spread on the floor, their kitchen is dirty and disorganised. I think it is not a problem of knowledge because they told you a lot on the issue. I think the problem is lack of attitudinal change.

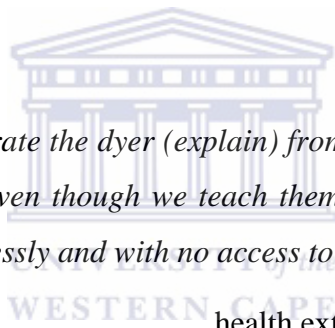
health extension worker 2, Kebele B

The figures below illustrate this.



Fig: 13: disorganised salon unhygienic kitchens

We teach them to separate the dyer (explain) from the rest of their home but they do not want to. Even though we teach them why to build a toilet and how, they built it carelessly and with no access to water.



health extension worker 1, Kebele B



salon

dyer



Fig11: same area of house for dual purposes

Fig 12: carelessly made toilet without access to water

We observed that there were people who complained when they did not receive the bed net. But when they received it, since they were not aware they did not use it properly. They did not hang it on the bed, but put it somewhere in the house or even used it to make rope and cover straw.

community representative 7, Kebele B

4.9.3 Supervision and support

The study explored levels of support available to HEWs and ‘model households’ in the district and at the health centre and their influence on the implementation of the programme. According to the HEP guideline, close supervision is believed to improve the quality of PHC services and to be especially important at community level. One HEW from the certified Kebele A reported a gradual improvement in the level of support received.

Previously the support that we got was not enough, but currently we get more or less better support from the health centre. Sometimes the district officials also give us support.

health extension worker 2, Kebele A

The support helped us with how to manage things.

health extension worker 1, Kebele A

By contrast, interviews with HEWs in non-certified Kebele B identified lack of support from the district health office and health centre as one challenge in effectively implementing the ‘model household’ approach.

I couldn't get enough support from the district and health centre. We did not even have a common plan for supervision. If you do not have enough support from the higher experts you cannot be successful in your work.

health extension worker 2, Kebele B

The supervisors came to the health post and to the model households from time to time. But we were not strongly supported by the district health office and health centre.

health extension worker 1, Kebele B

While the district official corroborated this claim, he explained that lack of support from the district office had been due to a shortage of human and financial resources.

Since there was a high turnover of staff, a shortage of human resources and lack of commitment among the workers (at the district health office and health centre), I believe that we have not given the necessary support to health centres and the health posts – especially those which are further from the district capital. As a result, the linkage between the health centres and health posts was weak, which affected the implementation of the programme. Workers in the health centre also did not consider activities in the health post as part of their work and duties. In general, if you don't give support for the health post at the grassroots level, then by implication the model household approach will not be implemented as it expected.

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district official

Until fairly recently, health posts in the kebeles were getting support directly from the district. It was then decided that they should receive support from the health centre. But since we (health centre) are preoccupied with urgent matters, we have not been able to carry out supporting visits to HEWs stationed in the health posts, especially those health posts that are located very far from the health centre; we have not provided proper support. Therefore, the link between health centre and health posts is loose. For those health posts located close by, we travel on foot to provide them some support. We are considering for the future for everyone in the health centre to provide support. It is not possible to provide proper support due to shortage of personnel, lack of vehicles, or absence of budget for transport and per diem allowances for them to travel and provide support.

health centre head

Supervisors occasionally come and visit the health post and model families. The supporting visit they undertake is not adequate. They don't support us properly.

health extension worker 1, Kebele B

Kebele B was located 15 kilometres away from the district capital. By contrast, Kebele A was situated adjacent to the capital and closer to the district office and health centre. The head of the health centre indicated that – because of inadequate resources for funding transport and *per diem* allowances – HEWs located in the kebele furthest from the district capital could not access sufficient support from supervisors based at the health centre and rotationally assigned to the health post. While Kebele A was accessible by foot, Kebele B could only be reached using motorised transport.

Since we are busy with unplanned current assignments and we have a shortage of human resources and funds for transportation (including per diem allowances), especially for those which are further from the health centre, I believe that we have not given the necessary support to the health posts and we have weak links between the health centre and the health posts.

head of the health centre

Contrasting experiences were reported regarding support provided by kebele administrators to the 'model families' programme. While administrators in Kebele A were motivated to succeed in implementing the programme, Kebele B administrators contributed very little.

For us to implement and benefit from what the health extension workers taught us and for the kebele not to lag behind other kebeles in the implementation of the programme, administrators from the kebele and sometimes experts from the district teach us, so there is good application of health activities in the kebele.

community representative 4, Kebele A

The kebele hasn't given it attention as something that is beneficial. If the kebele was to follow up everyone and penalise those who are not implementing, everybody would have been implementing it effectively. It is a matter of health. If my lack of hygiene is a reason for the illness of others, I should be punished. As a matter of fact, we discuss this a lot during meetings, but when we go home we forget about it. I haven't applied what I learned, and neither did others. It is better to start implementing disciplinary measures.

representative of model household 7, Kebele B

The kebele administration was not actively participating in the programme.

representative of model household 3, Kebele B

4.9.4 Construction of health post and deployment of HEWs

FGDs and interviews conducted during the study also pointed to the significance of the proximity of a health post and HEWs to a kebele. Respondents indicated that community members were willing to travel short distances for preventive services.

Prior to the initiation of the programme in the district, the community used to suffer from easily preventable diseases and had to waste a lot of time and energy travelling very far to get treatment. There were also incidences of epidemics, which used to affect many. But now since the programme has been launched, health conditions in the community have improved a lot. There is no evidence of an epidemic. The programme has also pioneered the use of local technologies like chimneys, traditional cupboards, dry waste disposal pits, and toilets. I believe, in the rural context, it is this programme that has given rise to these innovations.

district official

Since the health post was constructed in our kebele and there are workers in the health post, we do not waste time for simply treated diseases.

community representative 1, Kebele B

We could get medicine for malaria easily.

representative of model household 1, Kebele B

Since the health post is constructed in our kebele, we can use family planning easily.

representative of model house hold 3, Kebele A

These workers helped us to change our environment.

community representative1, Kebele A

The community in our kebele has benefited a lot by implementing the programme. Nothing is more important than health. At least the fact that a health post is opened close by and is providing a service should count for something. Imagine the kind of trouble they experienced. They used to travel very far just to get contraceptives. So ... if they were ever to encounter something unexpected, or if they happened to be busy and couldn't make time to collect the medicine, they would experience unwanted pregnancy.

health extension worker, Kebele A

These remarks suggest that the construction of a health post and the deployment of HEWs at each kebele generally impact positively on programme implementation. However, other challenges in Kebele B also undermined the success of the 'model families' approach.

4.9.5 Socio-economic challenges

The settings of the two kebeles, weather conditions, the living standards of their inhabitants, their socio-economic status and community culture were much the same. Poverty-related challenges and the amount of time available for engaging in programme activities were also similar in both kebeles. This would appear to suggest that these factors did not influence differences in the success of implementing the programme in the two kebeles.

Nevertheless, a FGD with community representatives in non-certified Kebele B cited poverty and lack of time as challenges to implementing the programme.

We prepared the pit for the toilet but, since we could not get wood and corrugated iron or hard grass for the roof, the hole became cracked by the sun and rain and was damaged.

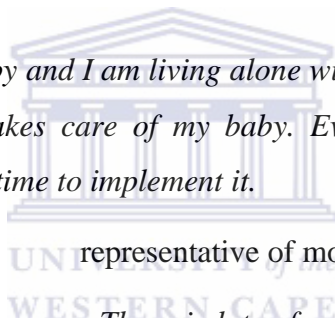
community representative 5, Kebele B

I do not have the resources to build different rooms and to make a separate house for the cattle. Even if I could do it, they (the cattle) might be stolen. So, we are forced to live together with our cattle in the same house.

community representative 2, Kebele B

Some ‘model families’ pointed to their work load and the time it takes to accomplish everyday tasks as constraints to implementing the programme.

As you see I have a baby and I am living alone with my husband. He goes to the farm so no one takes care of my baby. Even though I received the training, I do not have time to implement it.



representative of model household 4, Kebele B

As you know, we are farmers. There is lots of work in each season. That is why I could not implement the programme.

representative of model household 2, Kebele B

To be honest, I didn't take the training properly. When the health extension workers come, I tell them to come some other time. Even when they come on appointment, I haven't been able to listen attentively as there are kids in the house. I quickly express my agreement with everything they say and make them leave quickly.

representative of model household 5, Kebele B

I didn't take the training properly. When the health extension workers come, I give them excuses and send them away. When they come by appointment, the household chores are so numerous I have not been able to give them my full attention.

representative of model household 2, Kebele B

By contrast, two ‘model households’ in the certified kebele insisted that poverty and lack of time had not prevented them from implementing the programme.

I don't have a problem implementing the package. Whatever I can do, I carry it out. If I can't do it alone, I will do it together with my husband. Thus, we didn't face any problem. For instance, he built the toilet and dug the hole for disposing dry and fluid waste.

representative of model household 6, Kebele A

I think there is no challenge to be raised as such for being a certified model. I heard that a few people mention that lack of time and resources made them not to implement the programme. But I do not believe this is the real problem for them. Do we really lack wood to build toilets? Do we lack time to implement the programme? No, even though I do not know about the load of work in each household, as a member of the community I know in which months the community is busy and in which it is not. Rather they do not have deep awareness for the value of the programme. If they were interested to build the toilet, since this is a rural area the father of the house could bring wood from the ‘chaka’ (forest) or borrow from their neighbours.

representative of model household 1, Kebele A

4.10 Summary of results

This study identified marked discrepancies between different stakeholders’ in their knowledge and perceptions regarding the ‘model household’ programme. ‘Model households’ in the successfully implementing kebele were more knowledgeable and more involved in the introduction of the programme in their community, whereas most of the mothers in the uncertified Kebele B felt isolated. In addition, most key informants in the successful kebele understood the process of introducing the programme in their kebele and the broader district.

The process of certification motivated ‘model households’ in certified Kebele A to perform well, enhancing the implementation of the programme. Moreover, mothers who were certified as

‘model households’ in the successful kebele were glad to have benefited from improvements to their health as compared to their counterparts who had not participated.

Regarding levels of understanding among key stakeholders in the programme about the role of ‘model households’, while this was generally similar in both kebeles there was a marked difference in the practical application of what was learned during training. In the successful kebele, ‘model households’ were aware of their role and applied what they had been trained to do as was expected of them. By contrast, ‘model households’ in the unsuccessful Kebele had limited awareness of their responsibilities and consequently did not practically apply what they had learned.

Most importantly, the study confirmed that the health status of community members improved in the kebele where the ‘model household’ approach was implemented effectively. The programme enabled them to take preventive health measures and improved their health-seeking behaviour. CP, a positive relationship between HEWs and their communities, and the availability of support were all positive factors influencing the successful implementation of the ‘model families’ approach in the certified KebeleA.

In the kebele where the ‘model households’ approach was not successfully implemented, personal hygiene was poor and the home environment was neither clean nor conducive to disease prevention. The study identified resistance to attitudinal change, the absence of CP, unsatisfactory relationships between HEWs and community members, and poor supervision as challenges to implementing the programme effectively.

5 DISCUSSION

The study attempts to explore and understand the various factors impacting on the implementation of the ‘model household’ approach as an innovative health promotion and disease prevention initiative based on grassroots CP. Since its introduction in 2004, the programme has generated a great deal of interest in its potential benefits, with the result that efforts have been made to up-scale interventions aimed at implementing the programme more widely. The study findings show substantial differences in the success of the approach in two kebeles despite the fact that they share similar socio-economic profiles and policy implementation processes.

5.1 Diffusion of approach in the community

When the policy was initially conceived, policy makers explicitly made use of the diffusion of innovation concept in its design.

Diffusion is the process by which an innovation is communicated through certain channels over time among the members of a social system (Ray, 2001). An implementation approach based on diffusion theory seeks to catalyse change in a community by making use of outstanding members with the skills to influence the perceptions and practices of others (Rogers, 1995). For example, literature shows that ideas or information about contraception may diffuse horizontally between proximal regions through social networks, and across regions speaking the same language (Bocquet-Appel and Jakobi, 1997; Paz Soldan, 2004; Amin, Basu, and Stephenson, 2002). Similarly, one of the principles underpinning the ‘model family’ approach is that the process of diffusing knowledge and skills enables communities to ‘own’ their health (MOH, 2007; AKHS, 2004; Kautzky and Tollman, undated).

The findings of this research suggest that the success of the diffusion model was uneven in the district studied. Two distinct and different experiences emerged in certified Kebele A and uncertified Kebele B. In Kebele B, the programme was not implemented as planned within three years of its launch nationwide in 2004 (MOH, 2007). It was still not properly in place at the time of the study several years later, by which time only approximately half the ‘model households’ selected and trained met the requirement for accreditation: the practical application of 75% of the HEP’s 16 health prevention and promotion packages. In short, the information concerned was not transferred from the certified ‘model households’ to the rest of the ‘model households’ in particular, and to the community at large in general.

Key factors impacting on the success or failure of the diffusion process and the implementation of the programme are more broadly discussed below.

5.2 Critical factors in the successful implementation of the ‘model household’ approach

5.2.1 Community consultations

Community consultation and CP are critical in influencing uptake and increasing the likelihood of success in HEP interventions. The study showed marked discrepancies in awareness of the process of introducing the programme among ‘model households’ and community

representatives in both kebeles selected for the study in YDD. While the members of ‘model households’ and community representatives in successfully certified Kebele A were aware of the process entailed in introducing the programme, ‘model households’ and community representatives in uncertified Kebele B appeared not to be aware of the process and its details not only in their area, but also in the district as a whole.

Informing community members of these processes is the direct responsibility of HEWs. In Ethiopia, at the health post level HEWs undertake a host of community mobilisation activities. They provide counselling services; conduct awareness building and sensitisation activities by distributing material developed locally or at a higher level; and provide information on all key health and health-related issues (MOH, 2005). While the reasons for low levels of awareness of the relevant issues and for inadequately skilled ‘model households’ in Kebele B are not clear, this does seem to have contributed to misperceptions and resentment among members of community in the kebele, who implied that the programme was imposed on them with little consultation.

There were significant differences in the levels of CP and the extent to which each community endorsed and ‘owned’ the ‘model households’ programme in the two kebeles targeted for the study, with the community in certified Kebele A faring better. This may be due to differences in the level of consultation that took place on the ‘model household’ programme in these kebeles selected and the level of awareness among community members of the issues involved. In turn, this may well explain differences in the rate at which the ‘model families’ approach was adopted and successfully implemented between the two kebeles.

While ‘model households’ in the successfully implementing Kebele A were aware of their role and the responsibilities entailed, ‘model households’ in uncertified Kebele B were less certain about this and, as a result, did not apply what they learned, hindering the programme’s implementation. These findings resonate with literature on the stumbling blocks to CP in health initiatives – lack of awareness being one of them (Haines, Sanders, Lehmann, Rowe, Lawn, Jan, Walker and Rhutta, 2007; Teweldbrhan, 2005). Kironde and Kahirimbanyi (2002) refer to renewed interest in the role played by CP in PHC programmes, such as the delivery of effective anti-tuberculosis treatment to patients in high-burden settings. In addition, current health promotion policy and practice places a high value on community development work (Robinson

and Elliott, 2000) because it aims to enable communities to identify problems, develop solutions and facilitate change (Blackburn, 2000).

5.2.2 Relationship between HEWs and their communities

There is evidence suggesting that the harmonious working relationship that prevailed between HEWs and community members in the certified Kebele A enhanced programme implementation. By contrast, in the uncertified Kebele B, poor relationships between HEWs and community members were identified as a challenge to the successful implementation of the ‘model families’ approach. There were no clear reasons for these more hostile relationships. With HEWs being drawn from the community they serve, one could be tension around their selection. We were not able to explore this in greater depth during this study, as to do so would have required long and in-depth engagement with community stakeholders on community dynamics.

5.2.3 Training, support and supervision of HEWs

The literature underscores the significance of having competent HEWs for the successful implementation and up-scaling of HEPS (Centre for National Health Development, Ethiopia [CNHD-E], 2005). One of the first and most important tasks of HEWs is the recruitment, training and support of ‘model families’ (Banteyerga, 2011). However, a rapid appraisal of the HEP in Ethiopia (JSI, 2008) showed that the graduation of ‘model families’ is not happening at the rate expected, thus undermining one of the pillars of the programme.

One of the reasons for this lack of progress may be poor communication skills among HEWs, which in turn points to gaps in the training they receive. However, there is no indication in the study that HEWs in Kebele A received better training than those in Kebele B. Similar training may therefore either have had different outcomes among different HEWs, or may have been applied and received differently in each kebele.

The body of literature also emphasises the importance of well-designed and well-managed communication activities in generating awareness and in changing attitudes and behaviour over a period of time (Population Media Centre, Ethiopia, 2008), as well as the importance of communication skills for effective training and in implementing PHC programmes. According to Talbot and Verrindr (2010), health promotion and illness prevention are based on the principles of PHC. Health education and skills development activities involve discrete, planned individual

or group succession with the aim of improving knowledge, attitude, self-sufficiency and the capacity to change. Skilled interpersonal communication is widely recognised as being fundamental to this process (Dickson, Hargie and Morrow, 1997). In short, based on the findings of this research and the literature described above we can conclude that the communication skills of programme implementers were not always well developed and may have affected the extent to which implementation was effective.

Close supervision is known to improve the quality of PHC services at community level (Programme for Appropriate Technology in Health [PATH], 2003), with supervisory visits helping to reduce the feeling of isolation that often accompanies community health work (Bhattacharyya, 2001). To be effective, supervisory visits should be regular and based on a common understanding of their purpose (Bhattacharyya, 2001). In addition, effective supervision – which has a marked impact on service delivery – requires strong leadership and management commitment (Southern Nation Nationality People Republic [SNNPR] Health Bureau, 2002).

In this study, HEWs in uncertified Kebele B repeatedly referred to an absence of support from the district in implementing the programme. This may have been because, compared to Kebele A, Kebele B is located further from the district capital, where the district office does not have adequate resources to meet transport and *per diem* expenses. According to the head of the health centre, manpower shortages and lack of access to affordable transport prevented the centre from providing the necessary support – especially to kebeles located some distance away. Many studies have emphasised the extent to which the success of CHW programmes hinge on regular and reliable support and supervision, reiterating the significance of support and supervision in enabling CHWs to meet expectations regarding their numerous responsibilities (Lehmann and Sanders, 2007; WHO, 2007; Ntopi, 2010; Perez et al., 2009; Abebe et al., 2008). Ethiopia's HEP is no exception.

Furthermore, as Habtamu (2007) pointed out political commitment is among the most important prerequisite for a successful implementation of any strategy or development endeavor. Although political commitment starts from a policy formulation and strategy design, its refined action in translating the policy into practice remains imperative. Several policies fail to bring change and achieve intended results, due to failure in implementation both in particulars and time frame. Thus, such political nominees have an indispensable role in exercising new initiatives and

practices in health; and with their full understanding, commitment, and leadership at the grass root level. However it is observed that there is different level of commitment/engagement of the leaders in the two Kebeles in the implementation of the program.

5.3 Stakeholder perceptions of the role of ‘model households’

The study confirmed that stakeholder perceptions of the benefits of the ‘model households’ approach, consensus among participants on its desired outcomes, ongoing interaction on each element, and the influence of context all impact upon the success of the implementation process. These perceptions were articulated during FGDs and interviews conducted throughout the research process, when it became evident that ‘model households’ are seen to play a variety of roles in implementing the HEP.

As stakeholders and role players, HEWs play a number of roles in implementing the ‘model households’ approach. Not only do they participate in the training of ‘model households’ and assist them in implementing what they have learned; they also support ‘model households’ with their promotive and preventive activities, reporting to the health post when an epidemic breaks out in their kebele (Teweldbrhan, 2005; MOH, 2007). Participants in the successfully implementing Kebele A commented that ‘model households’ have led the way in improving personal hygiene and environmental sanitation by training neighbours in the techniques they have learned. Occasionally, they even use their own resources in assisting those who cannot afford to build toilets. HEWs confirmed that the presence of certified ‘model households’ in a kebele facilitates programme implementation. They serve as good example to other members of the community, encouraging them to visit the health post and health centre when they become ill.

6 CONCLUSION AND RECOMMENDATIONS

The study explores a range of factors possibly contributing towards the contrasting uptake and success of the ‘model families’ approach in implementing the HEP in two kebeles with similar socio-economic profiles and located in the same district. It could contribute towards building a body of knowledge about the approach, which seems to be lacking at present. The high burden of disease and the urgent need to meet MDGs has drawn attention to the importance of disease prevention and the promotion of health-seeking behaviour. In this regard, the ‘model households’ approach to HEP implementation is generally considered not only to be innovative, but also to

hold the key to effective delivery on government's promise to improve the health status of all Ethiopians. Sadly, however, little thought appears to have been given to identifying the resources and strategies needed to assist 'model households' to diffuse the innovative techniques they learn during training (MOH, 2009).

Interestingly, the study findings appear to suggest that – despite the fact that both kebeles selected for the research have similar socio-economic and cultural profiles, are located in the same district, have access to health posts, and are served by HEWs who received the same levels of training – they exhibit significantly different success rates in implementing the 'model families' approach. The most obvious explanation for this is the disparity between the two kebeles in respect of community consultation and participation, stark differences in the quality of relationships between HEWs and the heads of their 'model households', and the availability of supervision and support for HEWs.

Thus, as Ethiopia strives to implement PHC at grassroots level (MOH, 2007) by way of its HEP, and as the up-scaling of the 'model household' approach continues with this in mind, the study appears to suggest that improvements could be made to the process of implementing the approach by addressing the following:

- the shortage of appropriately skilled personnel with access to transport, which would allow the district health office and health centre to provide adequate levels of support to HEWs at each health post in its jurisdiction and, by implication, to the 'model households' themselves;
- gaps in the communication skills of HEWs, which would improve their own understanding of training techniques, as well as their ability to transfer practical skills to members of their communities; and
- low levels of awareness of the rationale behind the 'model families' approach and lack of commitment to the active participation of community members in the programme.

Based on insights acquired during the research process into the challenges facing the 'model families' approach, but also into its potential, it is recommended that more rigorous measures should be adopted to ensure that key stakeholders understand the various challenges implicit in implementing the programme, as well as factors that facilitate this. To increase CP, information should be structured and communicated in a manner that is relevant to the situation in which the

target audience finds itself, and at a level that is comprehensible. Improved awareness among kebele leaders of the benefits of the approach would assist in placing it higher on their agenda. Churches could play a role in raising awareness in this regard.



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Appendices

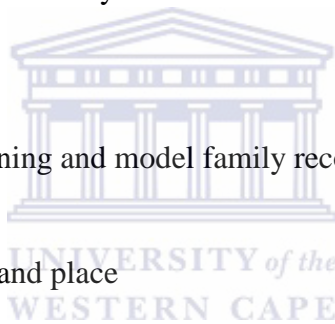
Appendix A: In-depth interview guide for model families

Demographic information collected on study participants

1. Number of family member_____
2. Household structure: male-headed_____ female-headed_____
3. Educational status of mother: illiterate_____primary_____ psecondary_____ college and above_____

In-depth interview

4. Please, can you tell me the process of introducing the model families programme in your community?
5. How were you selected as a model family?
 - Who selected you?
 - What were the criteria?
6. What do you think about the training and model family recognition (certification)? Probe for:
 - Length of the training
 - Arranging convenient time and place
 - Importance
 - Practicality
 - Continuity
 - Role as a model
7. Please describe your experiences of being a model family. What are your successes in implementing model family packages? What factors contribute to this success?
8. Please describe your role and the activities you perform in the implementation of HEP?
9. What kinds of challenge do you face for being recognised (certified) as a model family? Probe for:
 - Cultural challenge
 - Economical challenge
 - Knowledge-related challenge



- Availability or accessibility of the services
- Other forms of challenge

10. In your opinion, what possible strategies do you think will help to address the challenges experienced by model families in the implementation of the HEP?



Appendix B: Focus group discussion guide for community representative

1. Let's start with your educational background and marital status as head of the house
2. Would you please describe the process of introducing the model family programme in your community?
3. How are the model families selected?
 - Who selected them?
 - What are the criteria?
4. Let's discuss the training and recognition (certification) of model families? How do you see it in relation to:
 - Length of the training
 - Arranging convenient time and place
 - Importance
 - Practicality
 - Continuity
 - Role as a model
5. What are the successes in implementing model families approach? What factors contribute to this?
6. Let's discuss the challenges that model families face in being recognised (certified) as model families? (Probe) How do you think the following factors affect the programme:
 - Cultural challenge
 - Economic challenge
 - Knowledge related challenge
 - Availability or accessibility of the services
 - Other forms of challenge
7. In your opinion, what possible strategies can be used to address the challenges experienced by model families in implementing the HEP?



Appendix C: In-depth interview guide for health extension workers

1. Let's start with your marital status as head of the house
2. Can you tell me the process of introducing the model family programme in your kebele?
3. Would you tell me the roles and activities of model families?
4. How do you select model families? Probe for:
 - Criteria used for selection
 - Who will be involved, if anyone
5. What are your views regarding the training and recognition (certification) of model families?
Probe for:
 - Length of the training
 - Arranging convenient time and place
 - Importance
 - Practicality
 - Continuity
6. What are the successes in implementing model family packages in your kebele? What factors contribute to this success?
7. What kinds of challenges do model families face in being recognised (certified)? Probe for:
 - Cultural challenge
 - Economic challenge
 - Knowledge-related challenge
 - Availability or accessibility of the services
 - Other forms of challenge
8. What kind of challenges do you experience in implementing the HEP?
9. Can you tell me possible strategies to address the challenges experienced by model families in implementing the HEP?



Appendix D: In-depth interview guide for district officials

1. Let's start with your educational background and marital status as head of the house
2. Would you tell me the process of introducing the model family program in the district?
3. How were model families selected? Probe for:
 - Criteria used for selection
 - Who will be involved in the selection, if anyone
4. How do you assess the training and recognition (certification) of model families? Probe for:
 - Length of the training
 - Arranging convenient time and place
 - Importance
 - Practicality
 - Continuity
5. What are the successes in implementing model family packages in your district? What factors contribute to this success?
6. What kinds of challenge do the model families experience in the process for being recognised (certified)? Probe for:
 - Cultural challenge
 - Economic challenge
 - Knowledge-related challenge
 - Availability or accessibility of the services
 - Other forms of challenge
7. Would you tell me about the support structure that is employed in your district?
8. Would you tell me about the challenges you experience in supporting the health post/health centre?
9. Would you tell me about possible strategies that help to address the challenges experienced by model families in the implementation of the HEP?



Appendix E: In-depth interview guide for head of health centre

1. Let's start with your educational background and marital status as head of the house
2. Would you tell me the process of introducing the model family programme in the district?
3. How were the model families selected? Probe for:
 - Criteria used for selection
 - Who will be involved in the selection, if anyone
4. How do you assess the training and recognition (certification) of model families? Probe for:
 - Length of the training
 - Arranging convenient time and place
 - Importance
 - Practicality
 - Continuity
5. What are the successes in implementing model family packages in your district? What factors contribute to this success?
6. What kinds of challenge do model families experience in the process for being recognised (certified)? Probe for:
 - Cultural challenge
 - Economic challenge
 - Knowledge-related challenge
 - Availability or accessibility of the services
 - Other forms of challenge
7. Would you tell me about the support structure that is employed in your district?
8. Would you tell me about challenges you experience in supporting the health post?
9. Would you tell me about possible strategies that would help to address the challenges experienced by model families in implementing the HEP?





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CONSENT FORM

Title of Research Project: Exploring the implementation of model families approach as a strategy to diffuse desirable health practices in the community: the case of Yelmana-Denssa District -Ethiopia

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way.

Participant's name.....Participant's signature.....

Witness.....Date.....

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the study coordinator:

Study Coordinator's Name: Akinaw Solomon Assefa

University of the Western Cape

Amhara Health Bureau P.O. Box 495, Bahir-Dar

Telephone: +251-918704852Cell:,Fax: 0582201715, Email: sassefa@yahoo.com



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FOCUS GROUP CONFIDENTIALITY BINDING FORM

Title of Research Project: Exploring the implementation of model families approach as a strategy to diffuse desirable health practices in the community: the case of Yelmana-Denssa District -Ethiopia

The study has been described to me in language that I understand and I freely and voluntarily agree to participate. My questions about the study have been answered. I understand that my identity will not be disclosed and that I may withdraw from the study without giving a reason at any time and this will not negatively affect me in any way. I agree to be audio-taped during my participation in the study. I also agree not to disclose any information that was discussed during the group discussions.

Participant's name.....Participant's signature.....

Witness.....,Witness signature.....

Date.....

Should you have any questions regarding this study or wish to report any problems you have experienced related to the study, please contact the researcher.

Researcher: Akinaw Solomon Assefa

Amhara Health Bureau P. O. Box 495, Bahir-Dar

Telephone number, +251-918704852cell, Fax 0582201715, Email sassefa24@yahoo.com



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INFORMATION SHEET

Project Title Exploring the implementation of model families approach as a strategy to diffuse desirable health practices in the community: the case of Yelmana-Denssa District Ethiopia.

This is a research project being conducted by Akinaw, Solomon at the University of the Western Cape. I am inviting you to participate in this research project because you have good experience in implementing health extension program. The purpose of this research project is exploring the implementation of model families approach as a strategy to defusing strategy of desirable health practices in the community: the case of Yilmana-Denessa District-Ethiopia and inform the design of appropriate interventions for more efficient service delivery.

You will be asked regarding the implementation of a model household approach as a strategy to primary health care service. A semi-structured in-depth interview and FGDs will be used. I will ask permission from you to use voice recorder, and notes will be taken during the interview process.

___ I agree to be audio taped during my participation in this study.

___ I do not agree to be audiotapes during my participation in this study.

I will do my best to keep your personal information confidential. To help protect your confidentiality, I will use code for naming and after the research will complete the recorded data and documents of information/data/ will be burn. If I write a report or article about this research project, your identity will be protected to the maximum extent possible.

In accordance with legal requirements and/or professional standards and some social and emotional risks from participating in this research study, I will disclose to the appropriate individuals and/or authorities information that comes to my attention potential harm to you or others.

There are no direct benefits to you, however, information you provide will help to shed light on factors that influence implementation of the model families.

Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.

This research is being conducted by Akinaw Solomon Assefa from Amhara regional State Health Bureau at the University of the Western Cape. If you have any questions about the research study, please contacts

Akinaw Solomon Assefa at: P.O.Box 495, Telephone number, +251-918704852cell

Fax 0582201715, Email sassefa24@yahoo.com

Should you have any questions regarding this study and your rights as a research participant or if you wish to report any problems you have experienced related to the study, please contact:

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