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Effect of 1000 days message disseminated through TV and radio on Maternal and Child Feeding practice, Mekelle City, Tigray region, Ethiopia.

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Acronyms

DALY- Disability Adjusted Life Years

DMI –Development Media International

EBF-Exclusive Breast Feeding

EDHS-Ethiopian Demographics Health Survey

GDP-Gross Domestic Product

HSTP-Health Sector Transformation Plan

IEC - Information, Education, and Communication

IYCF-Infant and Young Child Feeding

NNP-National Nutrition Program

RMNCH - Reproductive, Maternal, Newborn and Child Health

SBCC-Social Behavioral Change Communication

WHO-World Health Organization

Abstract

Background: Undernutrition is one of the major public health challenges in Ethiopia. Poor nutritional and hygiene practice major contributors to the problem. Focusing on the crucial period from conception to the child 2nd birthday which is the 1000 days is the best time to tackle the burden of undernutrition.It ensures a good nutrition, healthy growth that has lasting benefit throughout life. One of the strategies is awareness creation using mass media which is tailored to the context of the target audiences. Addressing nutritional through behavioral communication have been done so far hence most of the messages aren't consistent and doesn't bring satisfactory change.

Objective: To assess the effect of 1000days message disseminated through TV /Radio on maternal and child feeding practice among mothers of childfren under two years.

Method: This study was carried out in Mekelle city, Tigray region. It used Post - only community-based cross-sectional design using mixed method. A total of 602 mothers of under two children were selected using systematical random sampling. Additionally, 10 mothers of under two children's and 3 key informants were interviewed. Quantitative data were analyzed using STATA version 14.Multiple linear regression analysis was done to identify predictors of feeding practice at 95%CI and P< 0.05 was used to determine the statistically significant association. Qualitative data was entered into open code version 4.02 for analysis then analyzed using content analysis.

Result: 47.3% of respondents reported they had been exposed to 1000 days spots. Exposure to Tv spots was found to be high than radio. The top key message mostly recalled was exclusive breastfeeding. The model was explained by age of the child (β= 0.156, p<0.00195%CI 0.0128 to0.0399), exposure to the spots (β=0.113, p=0.003 95% CI 0.0556 to 0.4066),those who watched television at least once a week (β=0.182,p=0.010 95% CI 0.0217 to1.1854), Tigray ethnicity (β=0.109, p=0.008 95%CI 0.1429 to 0.9307) and those who are widowed (β= -0.109 p=0.005 95%CI -2.8129 to -0.5003) significantly predict maternal and child feeding practice by 12.77%. The spots were highly liked, especially its message. Gap has been found in conducting need assessment, pretesting, selecting appropriate messenger in the design of message which results in low quality of the spots.

Conclusion: Although the media have done a significant contribution in feeding practice, there is still more to be done with respect to affecting behavior change. Identifying the crucial behavioral determinants for feeding practice in 1000 days may be an important first step in planning effective large-scale promotion programmes.

1. Introduction

1.1 Background

Undernutrition refers to a state resulting from a relative or absolute deficiency of one or more essential nutrients. It encompasses wasting, stunting, underweight, and deficiencies in vitamins and minerals (1).

It is a vicious cycle that mostly affected women and children. It results from a complex interaction of household, environmental, socio-economic and cultural influence. It is recognized that an underlying cause of undernutrition is inappropriate feeding practices and care (2).

Undernutrition, including fetal growth restriction, suboptimum breastfeeding, stunting, wasting, and deficiencies of vitamin A and zinc, cause 45% of child deaths, resulting in 3·1 million deaths annually and also roughly 20% (nearly 1 million) of all annual maternal deaths (3).In Ethiopia, it contributes to an estimated 270,000 deaths (4). It remains one of the most serious but least addressed problems which leads to death and other complication.

A strong multi-channel social and behavior change strategy that address optimal maternal and child nutrition of practices help to prevent before it happens (5). The best time to intervene is the first 1000 days of life that is from preconception to the first two years of a child. This period is a unique window of opportunity to shape healthier and more prosperous futures (6).

Currently, Ethiopia is working to address maternal and child undernutrition as a priority area agenda for the national nutrition program focusing on the first 1000 days of life as the best time to intervene. Among activities promotion incorporate local media outlets, pertinent bodies and the public at large is implement in order to enhance role in deeping awareness (7).

One of the tools that often used to communicate health messages is mass media. Mass media is one of the major sources of information which is a cost-effective and scalable way of increasing health outcomes, in creating awareness and encouraging healthy and health-seeking behaviors across the large population (8).

1000 days mass media campaign was launched in 2009 E.C. The main objective of the campaign was awareness creation using multiple channels. Among those TV and radio are the channels used to disseminate the key message. The TV/radio spots were developed by FMOH technical group and partner support in the production of the spots. The spots were aired for 6

months in national and regional mass media in three languages in Amharic, Oromiffa, and Tigrigna. The spot was transmitted 3 times per week and 2 times per day through TV and daily through the week in radio. There were four spots with different key messages on the 1000 days nutritional behavior (9).

1.2 Statement of the problem

If nutrition specific intervention including promotion of optimum breastfeeding, complementary feeding, and responsive feeding practices are scale-up may save lives and cost .It has been estimated that 221,000 lives would be saved with the delivery of an infant and young child nutrition package, including breastfeeding and complementary feeding promotion (10).

Education is an important first step to raise awareness, but this is insufficient to change behavior by itself. Motivational messages tailored to the context of the recipient addressing their beliefs, their situation and their views of the future through repeated, multiple contact points and channels are most effective in changing behavior (11).

Ethiopia has made considerable progress in addressing the health and nutritional needs of its population. Previously works have been done on the behavioral communication but still, it is not satisfactory. The national strategies for health promotion and communication identify gaps on greater mass media involvement and multi-sector involvement for the promotion of health addressing social determinants of health this due to the inconsistency of health message, insufficient use of evidence and formative assessment in development and production of IEC/SBCC (12).

Many organizations and regions produce health communication materials tailored to their programs and local audiences and also there is a gap in skill and know-how about SBCC. Due to this fact, quality gaps are seen in most of the BCC materials being developed and distributed communicating health matters. This has resulted in miscommunication of different health messages, wastage of resources and investments in activities and materials that have a little behavioral impact. Workshop conducted in Ethiopia led by the MOH and Health Case teams, consultative and brings experts, SBCC partners for developing message harmonization guide on RMNCH, it was obtained that different MoH units/case teams and partners are developing and disseminating health messages. Most often these messages are not consistent, which can reduce the effect or even cause confusion (13).

Good nutrition in the first 1,000days sets the base for health, development, and even prosperity of the next generation. Because of the important message in bringing the desired behavioral change. The study will assess the effect of the first 1000 days of life message that is disseminated through TV / Radio.

1.3 Significant of the study

The noticeable part that communication plays have pressed effective health communication to a new level of importance. So the information which will be obtained from this research will provide critical insights into the role of the media in public health interventions. Since it is an ongoing program, the findings of this study will inform the regional health Bureau as well as the Federal MoH to strengthen their communication production in line with the 1000 days messages. It would also help to inform and strengthen designs of future media interventions in other public health areas in order to bring behavior change.

Since there is no consistency in the development of materials in Ethiopia the study will also try to show the material development approaches.

2. Literature review

2.1 Undernutrition in the First 1000 days of life

Undernutrition is one of the most challenging public health issues. According to the WHO, lower-income countries are mostly affected by undernutrition of all forms. In 2016, more than ½ and more than 1/3 of all stunted children under5 lived in Asia and Africa respectively. In the other hand, more than 2/3 of all wasted children under 5 lived in Asia and more than ¼ lived in Africa (14).

Even if there is an improvement in the past decades still it is a major public health issue in Ethiopia. The prevalence of stunting, wasting, and underweight was 38.4%, 9.9%, 23.6% respectively. And also 23% of women age 15-49 are thin with BMI < 18.5. More than half of children age 6-59 months (57%) and 24% of women age 15-49 are anemic (15).

Tigray region is one of the regions most affected regions due to undernutrition in all age groups of the population (15). According to the regional report, 4.2% of children age 0-24 month and 3.8% 25-59 month respectively affected by moderate malnutrition. About 7% of children under two and 4.2% of children 25-59 month affected by severe malnutrition(16).

Studies show that chronically malnourished children can become locked in a cycle of recurring illnesses and more likely to be shorter adults and to give birth to low birth weight offspring (17,18). This represents the impact of undernutrition the follow the life cycle so in order to halt this the best period to intervene is the first 1000day of life which is critical for the child growth and cognitive development (2).

In order to reduce this advancement in the multi-sectoral approach was highlighted as the way forward. The first 1000 days is a platform to address all behaviors (health, nutrition, and hygiene) among parents and caregiver. Poor nutrition, infections and psychosocial care related to WASH can cause life-long and irreversible damage, with consequences at the individual, community, and national level (19). Based on the 1000 days partners report for improving the nutrition for women and children during 1000 days different intervention is being implemented in different countries worldwide .while much remain to be done, the launch between September 2010 – June 2013 has brought progress in mobilization and investment design to improve the nutritional status of women and children during the 1,000 day window(20).

2.2 Components of the first 1000 days of life

The first 1,000 days of life include 270 days during pregnancy, 365 days in the first year, and 365 days in the second year of life (3).

Pregnancy

To support the fetal growth and production of breast nutrient requirements are high during pregnancy and lactation(18). Maternal undernutrition contributes to fetal growth restriction and increases the risk of deaths(6). Studies done in four regions of Ethiopia on the maternal nutrition showed that most women are not aware of eating an extra meal because they perceived pregnancy as normal (21).

Breastfeeding

Breastfeeding is the best practice which provides infants with a critical source of nutrients, vitamins, and minerals. In Ethiopia, 95% of children breastfeed but EBF isn't common. According to EDHS 2016, 58 % infant are EBF which is below the recommended level and also the timely initiation of breastfeeding practice is low (15,22). Different factors are an attribute for not Suboptimal Breastfeeding such as lack of awareness, misconception, traditional belief (23).

Complementary feeding

Only 7% of children 6-23 month feed in accordance with IYCF recommendation and only 5% were feed foods from all recommended 4 food groups which result in a decline in nutritional status (15). Different factors are a barriers as it is indicated by the WHO framework which includes immediate, underlying and basic causes such as inadequate dietary intake, or exposure to infectious diseases, household food insecurity, inadequate maternal and child care, inadequate health services and an unhealthy environment(such as lack of sanitation and safe drinking water facilities) and socio-cultural factors such as early marriage, poverty, gender bias (24,25).

Water, sanitation, and hygiene promotion are one of intervention area. The Lancet series that looked at the impact of hygiene interventions concluded that it could contribute to a 2-3% reduction in stunting (2).

We can address the issue of micronutrient deficiencies, by supplementation, fortification, dietary intake, and education. It may result from an insufficient dietary intake and absorption. The

greatest concern lies with deficiencies in Vitamin A, Iron, Folate, iodine, and zinc. Evidence shows that deficiencies of vitamin A and zinc along with suboptimum breastfeeding is a cause of 3.1 million child deaths annually (26). Women who are pregnant or breastfeeding are more likely to be anemic 29% for both groups than those who are neither pregnant nor breastfeeding 21%. In Ethiopia consumption of foods rich in vitamin A or iron remains low among 6-23 month which is 38% and 22% respectively (15).

2.3 1000 day media campaign

Worldwide different nutritional activities are being implemented in the first 1000days of life. Also in Ethiopia, the main activity planned in the HSTP I was 1000 days nutrition promotion due to limited awareness nutrition among decision makers, managers, health workers, NNP implementing sectors, and the community at large (27).

1000 days program is taken as flagship for the Ministry of health. For the promotion of 1000 day nutrition, a media campaign was launched in 2009E.C.Awareness creation using multiple channels creation was the main objective. The awareness campaign will address issues related to optimal maternal, infant and young child nutrition in the first 1000 days of life. The primary audiences are pregnant women and children 0- 24 month and husbands were a secondary audience. Bus stickers, brochures, poster, TV, and radio spots were among the channels that have been used. The TV and radio spot thematic areas were developed by the FMOH technical group (adolescent, maternal and child), RHB and partners support in the production (9).

The TV and radio spots were aired in the national and regional mass media in three languages Amharic, Oromiffa, and Tigrigna for 6 months. The TV and radio spots were 4 in number each last in 1 second. An artist famously known by “Azaleche “was the messenger and she was assigned as an ambassador for the campaign .The TV spot aired 3 times per week and two times per day and daily on the radio. All of the spots have a different key message in the 1000 days of life. Spot 1 has a key message on what 1000 day means, important of optimal feeding practice in this period. Spot 2 has a key message on supplementation of iron and deworming during pregnancy, importance of rest and extra meal during pregnancy .spot 3 key message was early initiation of breastfeeding within 1 hour, importance of colostrum, exclusive breastfeeding , avoid pre-lacteal feeding .spot 4 timely initiation complementary feeding ,frequency(3 meal and

2 snacks per a day) and diversity of the food(diversity of 4 food groups) ,continuation of breastfeeding as needed up to 2 years ,husband support , and WASH .

2.4 Material development and production of Health communication

Health communication is "the art and technique of informing, influencing, and motivating an individual, institutional, and public audiences about important health issues ". It is not a single process rather it's cyclic. We have to develop communication by following communication strategies based on the understanding of the needs and perception of the intended audience (28).

In order to achieve the goal that we intended it is important to distinguish between behaviors, behavioral categories, and goals. The most effective behavior change communications will be those directed at changing specific behaviors rather than behavioral categories or goals(29). Sustainable Sanitation & Hygiene for All programme show different challenges that inhibit to communicate the target behavior. Such as Most of the time the promotion is material-centered rather than behaviour-centred,address too many behaviours and audiences at a time, limited capacity within local line agencies i.e. even if the hygiene messages are defined centrally, there can be a loss of quality due to limited understanding on the part of local line agency staff and gender stereotype (30).

The audience, message, source, and channel are cardinal elements of a health communication activity. Quality of message is a message that is designed based on key steps in strategic behavioral change communication programming (31).

A Systematic review of A 10-Year Retrospective research in health mass media campaigns show that there is a limited number of formalized message design which still needs of much work .we can achieve impact if and only if principles of effective design are carefully followed (32).

Well-designed message moves target audiences along a communications continuum from awareness to action. To attain this the message should be simple, easy to recall, repetitive and attention-getting which focus on the health issue and the recommended actions relevant, complete, and culturally appropriate to the target audience (33). Evidence suggests that social

norm and practice will be improved if the appropriate message is delivered through a combination of communication channels mass media (29).

A study on the scope and practice of behavior change communication to improve IYCF in low- and middle-income countries show that formative research was their part of the programs development plan among all the participants because they emphasized that it help them in designing message in the local culture and value (34).

In addition, if the message development is guided by theory it will be more beneficiary because it provides a way of understanding behaviors and informs the message focus. The different program was a success by incorporating the theories in the development of message (35).

Based on the finding of a qualitative a case study in Ethiopia on mass media message evaluation for the prevention of HIV /AIDS designing of messages analysis, input and pretesting were insufficient. Most of the messages were said to be inappropriate and lack sustainability due to the inadequate training of journalists, lack of resources and absence of media networking were identified to be constraints to improved mass media coverage on HIV/AIDS (36).

A study in Jimma that assesses production, distribution of printed IEC materials and utilization showed that the materials did not produce in line with the underlying principles of IEC material development. Even the materials didn't arrive when needed. The reason given for not using are unavailability, lack of appropriate material, and time-consuming (37).

2.5 Message exposure

Behavioral change intervention cannot be effective unless the target audiences are exposed, attends to and comprehends its message. Adequate exposure with enough frequency to be recalled is a key component of intervention success.

The study was done in Tanzania that evaluates “Love me, Parents” national SBCC campaign aimed at increasing improving the maternal outcome show that most of them reported hearing the message out of them16.5% reporting daily exposure. From those exposed 83.3% the source of the message was radio. This is due to the frequency of the message aired on the radio were high i.e.4 to 12 spot day in 19 national and regional radio station .it also found that exposure is significantly associated with the place of residence, education and household item (38).

A study in Bangladesh shows there was an association between improvements in IYCF practices and high levels of exposure to TV spots on IYCF. The exposure was limited by ownership but they use mobile TV to show for those who can't access (39).

2.6 Recall of message

Recall of the message is one determinate which is associated with the quality of the message transmitted. A qualitative study in Bangladesh shows that those who view TV spot were more likely to recall the behavioral message because the message was clear and required little interpretation on the part of viewers (40).

Message efficiency and effectiveness can also be improved, if the message content form, style, and channel are tailored to the attributes and abilities of subgroup (35).A study in Guatemala that evaluates the recall and dissemination of family planning law show that most of the person exposed to the message recall the key message. Among the channel radio was an effective channel to recall the message next to the poster. This was due to the project developed the message based on the formative research and test, reaches the low literacy rate of the audience, uses friendly images to create material and adapts the law into a simple and short sentence to provide the key message to the audience (41).

2.7 Effectiveness of Message in changing Behavior

By assuring the 7cs of effective communication, we can assess perceived message. It has been proven that message that is more likely to perceive as effective the more judged as realistic and the more likely brings changes in beliefs, attitudes, intention, and behavior (42).

People may make decisions whether to adopt healthful behaviors that are promoted if they trust the messenger, message, and channel. If the messengers are trusted or high profile personalities, they can help to overcome barriers, address social norms that conflict with the desired behavior and model the desired behavior. To make the message more credible, it should be factual or emotional that states the benefits to the audience and why it outweighs any barrier to adopting the behavior. (40).

An evaluation study was done in Vietnamese that shows an effect of TV spot in scale-up exclusive breastfeeding revealed that the TV spot changes the exclusive breastfeeding from 26 to 48. Exposure to TV spot alone accounted for 138,000 additional babies' breastfeed. The result is due to it reaches a large number of people, credibility of the source of information, use the sweet

voice of children to make the spot emotionally appeal, follow a proven process and sort out barriers and behavioral determinants (43).

The result of a quasi-experimental study on scripted message delivered by nurse and radio in changing beliefs, attitudes, social norms, intentions, and behaviors related to IYCF in Mexico show there was a significant improvement in beliefs, attitudes, and behaviors regarding IYCF.it suggested that scripted messages that concordant with maternal knowledge, include culturally appropriate advice, and focus on foods already purchased for family consumption may be a feasible alternative to counseling for improving IYCF(44).

The combination of media and messages can strengthen the effects of communication. Based on the theory hierarchy of communication effect that even if 80% of the priority audience is exposed to a message, only a proportion of them may actually understand the message. The proportion of the audience who approve, intend to act and actually acts will be smaller compared to exposed. The overall communication effect can be effective by increasing exposure, understanding, approval, intention to act and encouraging actual action (29).

2.8 Role of media

Media can be defined as a means for channeling information, education, and entertainment (45). In order to use media as a tool for changing behavior .while planning we have to consider; nature of the audience, the purpose of transmitting media, feasibility or practicability, acceptability and availability of media**.** Media preference affected by socio-demographic characteristics (29).

Even its sources for health information the exposure to mass media is low in Ethiopia. According to 2016, EDHS Exposure to mass media is nearly 3 in 4 (74%) Women and 62% men have no access to radio, TV (15). Study that analyzes the EDHS data to show the impact of mass media in reproductive behavior, found mass media have minimal effect on the reproductive health indicator and also socio-demographic characteristics bring variation in exposure this is due to lack of clear, defined behavioral objective and theories of change, absence of audience segmentation, lack of tailored health communication message, lack of adequate knowledge and skill of preparing health communication (46).

Evidently, Mass media serves as a source of information and agenda setting for creating awareness and change behavior. As DMI reported, in developing countries many mass media campaign are delivered to change health and health-seeking behavior and also healthcare outcome. A different campaign run by DMI show that there was an increase in uptake of basic intervention and in the knowledge that will lead to health-seeking behavior. The success behind it was, there were scales, precede by research process to ensure the message is transmitted through the right channel and also used robust evaluation design to measure its impact (45).

Mass media is one of the popular and effective tool for health promotion and behavioral change globally. A global systematic review found that exposure to mass media campaigns help to reduce population use of tobacco, alcohol and drugs; promote cancer screening and reduce birth and HIV infection rates (8).

It is cost-effective and reaches a large number of population. From the experience of alive and thrive, mass communication activities represented on average 27% of total program costs, much less than the expenditure for scaling up interpersonal counseling. It will also create opportunities that the community talking each other about the practice that was aired for those who are not exposed this will bring the applicability of the behavior (47).

The media has a role in nutrition in making a positive difference by advocating the importance of good nutrition and correct health and nutrition behavior. A systematic review, focused on mass media interventions for child survival-related behaviors in low- and middle-income countries, concluded that “media-centric” campaigns can positively impact a wide range of child health behaviors including nutrition so if it is targeted and well-executed, can have effects not only on knowledge, beliefs, and attitudes but also on behaviors (48).

Lancet series show that if comprehensive saturated mass media intervention implemented it reduce child mortality by 10-20% at cost per DALY which is 1 million lives of children under five should be saved(49). also, RCT study was done in Burkina Faso that aim to test the cost per life saved of mass intervention which was broadcast for 3 years in radio to affect a range of behaviors including exclusive breastfeeding, WASH. The intervention employ saturation + approach .it predict that more than 13000 under five children could be averted each year through a national mass media campaign (50).

A study done by alive and thrive in Tigray and SNNPR show that media plays a powerful role in reinforcing IYCF messages & practices. The number of complementary feeding practice spot heard were associated with 3.1 and 2.9 greater odds of minimum dietary diversity and minimum acceptable diet compare to no recall of complementary feeding message on the radio (51).

2.9 Conceptual Framework

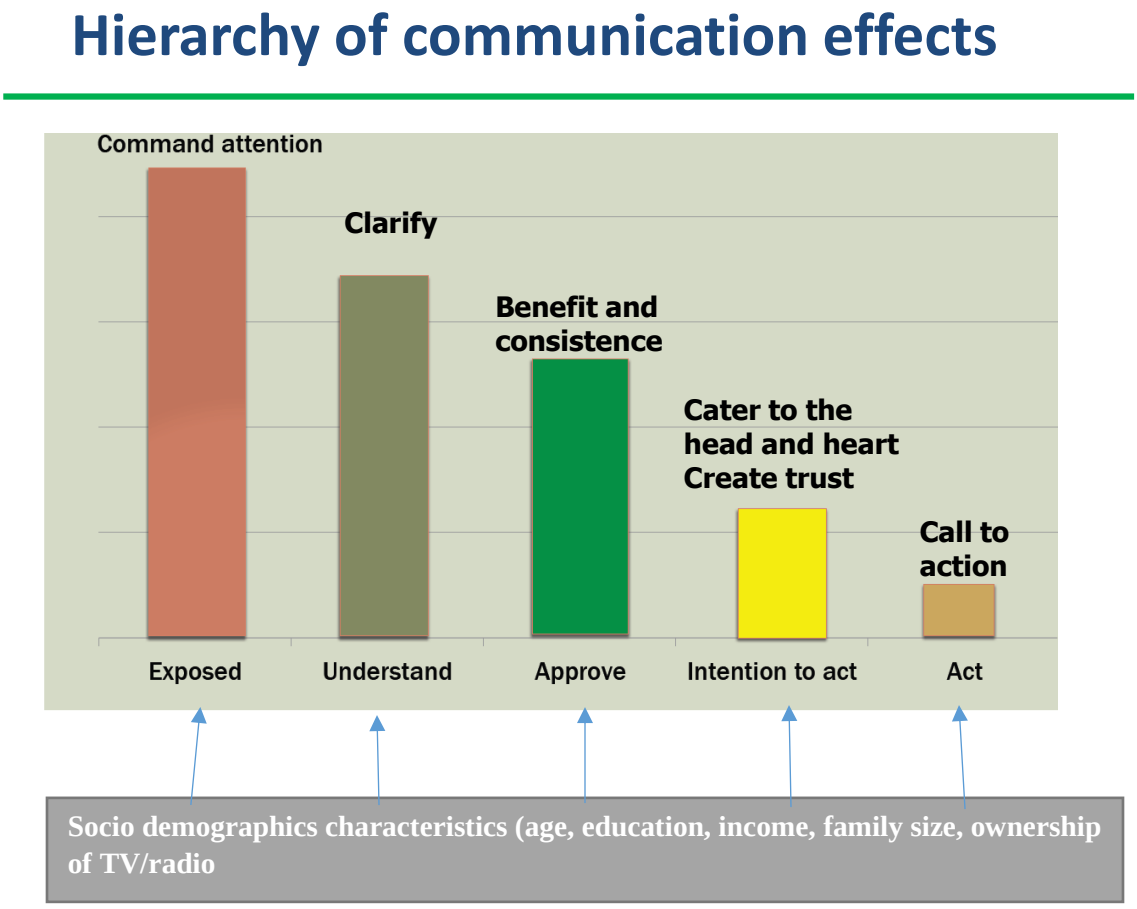

Figure 1: Theory of Hierarchy of Communication Effects

3. Objective

3.1 General objective

- To assess the effect of 1000 days nutritional message disseminated through TV/Radio on maternal and child feeding practice among mothers of children under two years in Mekelle city, Tigray Region, Ethiopia 2018.

3.2 Specific objective

- To assess the message exposure among mothers of children under two years
- To assess recall of 1000 days message among mothers of children under two years
- To assess the maternal and child feeding practice recommended in the 1000 days among mothers of children under two years
- To explore the material development process and quality of 1000 days spots

4. Methodology

4.1 Study area and Period

The study was conducted in Mekelle City, Tigray region. Mekelle is located at 783 Kilometers from Addis Ababa (Capital city of Ethiopia) in the northern part of Ethiopia. The 2009 Census results show that the total population of the city was 215,546 people. Women made up 51.4 percent of Mekelle's population and men represented 48.6 percent. Children under the age of 5 made up 12 percent of the population(52).

The city administrative has 7 sub-city or sub locations, 35 kebele's and 105 ketena's in Mekelle city. The main sub-locations are Ayder, Kedamay Weyane, Hadnet, Quiha, Adi-haqi, Hawelti, and Semien. There are 11 public health institutions (one referral, one general hospital, and nine health centers) and 4 general hospitals and 38 clinics that are owned by private sectors.

Data collection took place from March – April, 2018, by the trained data collector.

4.2 Study design

Post only community based cross-sectional study was conducted by using a quantitative method supported by qualitative.

4.3 Population

4.3.1 Source population

For the quantitative, all mother who has under two children in Mekelle city

4.3.2 Study population

For quantitative study

- Mothers with children of under two children who reside in the two selected subcity

For the qualitative study,

- Mothers of under two children and
- Individuals who participated in 1000 days material development from Federal and Regional office.

4.3.3 Eligibility criteria

4.3.3.1 Inclusion criteria

All Mothers with children of under two children in the household during the data collection period.

4.3.3.2 Exclusion criteria

Those who were ill during the data collection period such as diarrhea, loss of appetite due to other illness because it may hinder the feeding practice.

4.4 Sample size determination

4.4.1 Quantitative study

The total sample of participants to be embraced by this study is determined using single proportion population formula. Sample size

$$n = \frac{z^2_{\alpha/2}\, p(1-p)}{d^2}$$

Z = is value for standard normal deviate corresponding to 95%Significance level (= 1.96).

P= (since local datum for the value of P was not available, it was taken to be 50% (P=0.5) to allow maximum sample size.

D =Margin error, set at ± 0.05

n= sample size

$$n = \frac{1.96^2 \times 0.5 \times (1-0.5)}{(0.05)^2} = 384$$

A design effect of 1.5 was used and 5% non-response rate added to the sample size. Therefore a total of 605 participants was taken as final sample size .needed involved in this study.

4.4.2 Qualitative study

Three participants for the key informant interview was involved from the Federal ministry of health, Regional health bureau who are participated in the material development. Two from Federal and 1 from Regional were selected. 10 mothers of under two children were participated in the in-depth interview.

4.5 Sampling procedures

For the quantitative study, a multistage sampling technique was used to select the study participants. First of all, 2 sub-cities (Ayder and Hawelti) were selected using simple random sampling method from 7 sub-city. All the kebeles in the 2 sub-city were included to obtain the desired sample size (Figure 1).

A community health management information system (CHMIS) list has been used for the health post to get a list of the target group in the selected kebele. An estimated 4,387 households with the eligible children of under two were found in the selected kebeles. The sample size was proportionally allocated to the selected kebeles based on the total number of eligible households found in each kebele.

Finally, mothers with children of under two were selected using systematic random sampling technique. The total number of household in the list was divided by the allocated sample size to get the sampling interval (k) which is 7. Therefore every 7th households were selected to reach the desired sample size.

When there were no under two children in the identified household, the next household was used as the sampling unit. Whenever there is more than one mother with under two children in the same household, one mother was selected by lottery method.

The participants for the qualitative study were selected purposely from the 2 sub-cities.

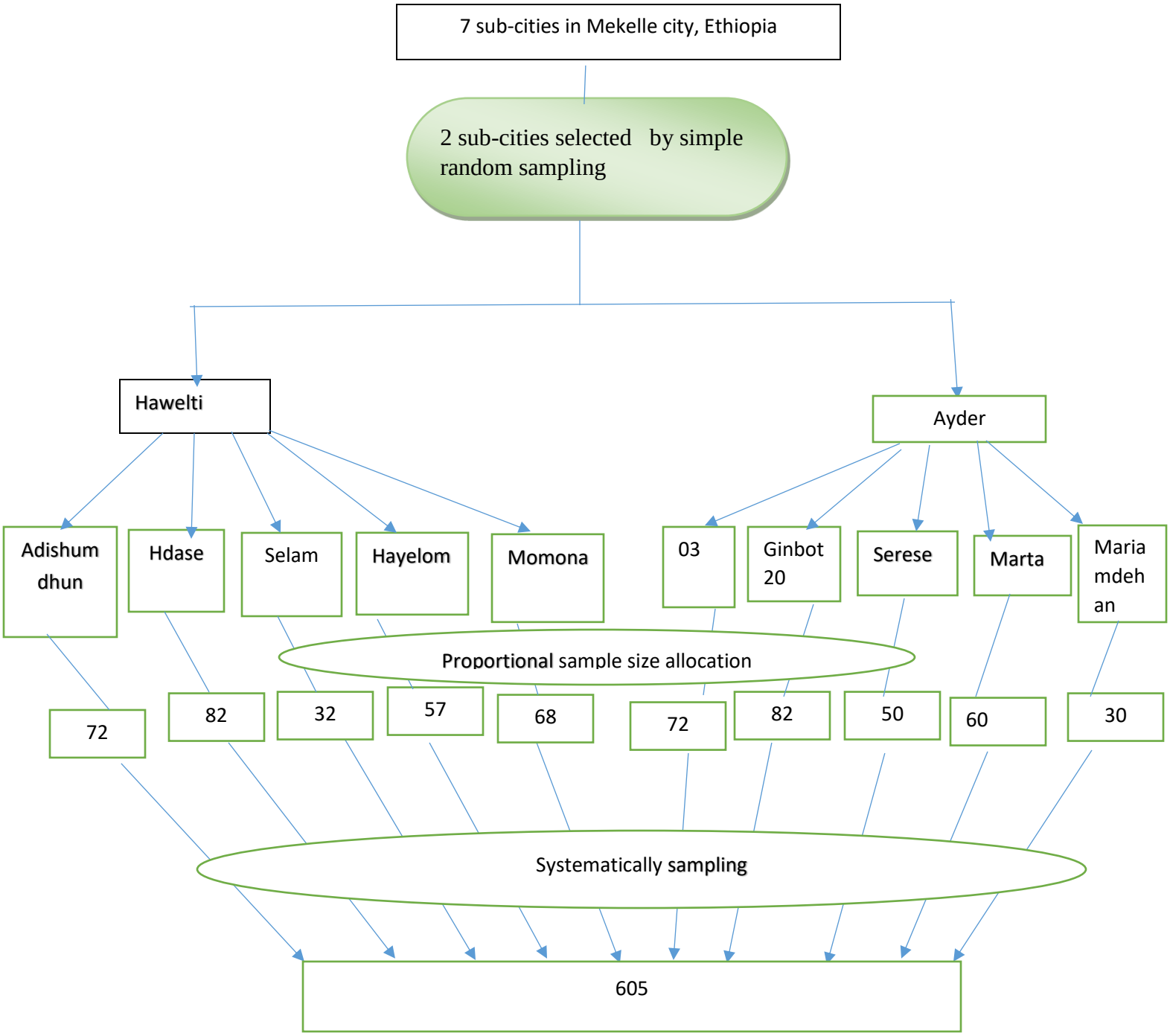

Figure 2: Schematic presentation of sampling technique, Mekelle city, Northern Ethiopia, 2018

4.6 Data collection procedure

4.6.1 Data collection instrument

For the quantitative data, a structured interviewer-administered questionnaire was adapted from campaign evaluation literature and WHO IYCF indicators to collect data on socio-demographics, exposure, recall, attitude, intention and feeding practice such as timely initiation of breastfeeding, exclusive breastfeeding, the introduction of solid food, minimum dietary diversity, minimum meal frequency, extra meal during pregnancy, Fe and deworming supplementation during pregnancy respectively. The questionnaire was initially prepared in English then translated into local language (Tigrigna).

Pre-testing of the questioner was conducted on 5% of the sample mothers of children under two. However, they weren't included in the actual data collection. After pre-testing, some modification some modification was done to improve understandability of the questionnaire. Certain fluid common to that area, which previously was not in the questionnaire, was also added.

To collect data on the qualitative interview guide and the checklist was used. Two interview guides were used to for in-depth interview with mothers of under two and a key informant interview. The in-depth interview guide was used to explore the concept and materials were understood, attractive, acceptable and persuasive. Also, the key informant guide was used to explore the process of the material development in the 1000 days campaign. The interview guide was prepared in English then translated to Tigrigna for the in-depth interview and to Amharic for key informant interview.

The checklist was used to score the quality of material using clear communication index score developed by CDC. The Clear Communication Index provides a set of research-based criteria to develop and assess public communication products. It includes 20 items in four major part (53). Based on this the material was assessed in these 7 areas: main message and call to action, language, information design, state of the Science, behavioral recommendations, numbers, and risk.

4.6.2 Data collectors

Experienced three females and three male data collectors who were fluent in local language were recruited and trained for two days.

4.6.3 Data collection procedure

Quantitative data

Face to face interview was conducted using structured interviewer-administered questionnaire by trained data collectors. The aim of the study was first explained to the mothers and informed consent was obtained prior to data collection. Information on child characteristics (age and sex), health status and maternal demographic and socioeconomic characteristics (age, educational status, marital status, occupation, income…) was collected.

It also evaluates the media campaign using principles based on a hierarchy of effect which verifies that behavior change is a multi-stage process in which certain condition must occur prior to the actual change. First, the level of campaign exposure among the target audience was determined. Then it tries to ascertain, recall the key message. Then it assessed the feeding practice recommended in the first 1000days. Finally, it queried attitudes and intention toward feeding practice recommended in the 1000 days.

Qualitative data

All the interviews except two key informant interviews were conducted by the PI and other facilitator graduate from journalism and had prior experience in qualitative data collection using interview guide.

Three interviews conducted with individuals who participate in the material and message development of 1000 days to explore the process of the material development in the 1000 days campaign. Two of them were from the Federal ministry of health and one from regional. All the interview were conducted in Amharic. And lasted about 40 minutes. All interviews were recorded and then transcribed verbatim later translated into English for analysis.

Ten in-depth interviews conducted with the mothers of under two years of age in order to explore the concept and materials were understood, attractive, acceptable and persuasive. All the interview were conducted in Tigrigna using the interview guide. The same procedure was

followed prior to the interview. The duration of interview varied between 30 to 45 min.The interviews were recorded and transcribed then translated into English for analysis.

4.7 Measurement of variables

The variables were measured as follow:

Feeding practice

The main dependent variable is feeding practice appropriate to age. This measured by asking mothers about each recommended behavior.

- Early initiation of breastfeeding, extra meal during pregnancy, Fe during pregnancy was assessed using historic recall.
- Exclusive breastfeeding, Introduction of solid, semi-solid food, Minimum dietary diversity, Minimum meal frequency was assessed using 24 hrs. recall which is recommended by WHO(54).

The overall feeding practice in this study was the composite calculated from the infant feeding practice (early initiation of breastfeeding,exclusive breastfeeding, introduction of solid, semi-solid food, minimum dietary diversity, minimum meal frequency and continuation of BF up to 2 year) and Maternal feeding practice (extra meal during pregnancy, Fe during pregnancy).

For those infants who aged 0-5 month, the feeding practice of early initiation of breastfeeding, exclusive breastfeeding, an extra meal during pregnancy and received Fe during pregnancy was considered.

For those who aged 6-8 month the feeding practice of introduction of solid, semi-solid food, minimum dietary diversity, minimum meal frequency, early initiation of breastfeeding, extra meal during pregnancy and received Fe during pregnancy were considered.

For those who aged 9-19 month the feeding practice of minimum dietary diversity, minimum meal frequency, early initiation of breastfeeding, an extra meal during pregnancy and received Fe during pregnancy were considered

For those who aged 20-23 month the feeding practice of minimum dietary diversity, minimum meal frequency and continuation of BF up to 2 years, early initiation of breastfeeding, an extra meal during pregnancy and received Fe during pregnancy were considered.

Exposure

Exposure to the spots was assessed by an aided recall measure in which describing the spots verbally without further prompting that is by asking the question "Do you heard or seen any information about 1000 days"

- Respondents who recalled or recognized the spot then asked how they had heard about the spot i.e. the source.
- Then a question on frequency of exposure was asked: Questions asked to estimate of how often they had seen or heard the spot in TV/Radio or other.

Recall of the message

To assess message recall unprompted and prompted a measure of recall were used. For the confirmation of exposure to the key message respondents who exposed to the spot were subsequently asked. a set of question about the main message, they could recall from what they heard.

Attitude

Attitudes reflect individuals' beliefs about the positive and negative consequences of performing a given behavior, in this case, feeding practice recommended in the first 1000 days of life.

Attitudes towards feeding practice in 1000 days were measured using five Likert scale type items. The response for each of items were scored from 1 for "strongly agree" to 5 "strongly disagree". The score was reversed for positive items.The composite score ranges from 5 to 25. The sum score of the five items was computed to determine mother's attitude towards feeding practice. From composite value, the higher the score the more the positive attitude toward feeding practice. In this study measure of attitudes towards feeding, practice yielded a Cronbach alpha of 0.749.

Intention

The intention is a measure of the likelihood that person will engage in specific behaviour . A total of 5 Likert scale items were used to assess feeding practice intention. The response for each of items was scored from 1 for "strongly agree" to 5 "strongly disagree". The composite score ranges from 5 to 25. The sum score of the five items was computed to determine intention. From

composite value, the higher the score the more intended to practice. A measure of intention yielded Cronbach's alpha of 0.689.

Quality of the spot

It was measured using clear communication index score .a spot which scores 89 and below was consider as poor and a spot that scores above 89 was considered as it has a good quality.

4.8 Study variables

4.8.1 Dependent variable

Maternal and child Feeding Practice

4.8.2 Independent variable

Exposure to the spots

Recall of key message

Attitude

Intention

Socio-demographic variables; age, educational status, occupation, ownership of TV/radio.

4.9 Operational definition

1000 days message: message on maternal nutrition during pregnancy nutrition, breastfeeding, complementary feeding, supplementation of micronutrients and husband role.

Message Exposure: see/hear 1000 days message for the past 12month via TV/Radio.

Message recall: remember the key message of 1000 days they hear /see.

Attitude toward feeding practice: the mother’s stance about the importance of the recommended feeding practice.

Intention to feeding practice: Mother’s motivation to exert effort to carry out recommend feeding practice.

Early initiation of breastfeeding: Proportion of children born in the last 24 months who were put to the breast within one hour of birth.

Exclusive breastfeeding under six months: Proportion of infants 0-5 months old who were fed exclusively with breastmilk in the past 24 hours.

Introduction of complementary foods: Proportion of infants who initiated solid, semi-solid or soft foods at 6-8months during 24 hrs.

Dietary diversity: Proportion of children 6-23 months of age who receive foods from 4 or more food groups.

Meal frequency: Proportion of breastfed and non-breastfed children 6-23 months of age, who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more).

Extra meal during pregnancy: took addition meal than the usual (Breakfast, lunch and dinner) during the recent pregnancy

Fe received during pregnancy: took Fe tab at least 90 tab during the recent pregnancy.

Appropriate feeding practice for age: feeding practice that conforms WHO recommendation in respect to their age

Quality of spot: a spot that scores above 90 based on clear communication index score in order to easily understand and use by the audience(53).

4.10 Data analysis procedure

The quantitative data was checked for its completeness and entered into SPSS version 20 after coding and cleaning it export to STATA version 14 for analysis. Data analysis was started with descriptive analysis such as frequency, percentage, mean and standard deviation, and to see relationships among the variables chi-square, t-test and One-way ANOVA was used for the appropriate variable. Tables and graphs were used to present the data.

Simple linear regression analysis was done to assess the association between all independent variables with feeding practice after checking of normality test. All variables at a p-value less than 0.25 in simple linear regression analysis were entered to multiple linear regressions to identify the independent predictors of feeding practice. Unstandardized coefficients (B) and R^2 values were used to interpret effects and variability in the dependent variable respectively. The

significant independent predictor was declared at 95% confidence interval and P-value of less than 0.05 as cut off point.

The qualitative data from the interviews were analyzed using content analysis. First, each interview was transcribed verbatim by listening to the voice records this done by the data collector and translated into English by cross-checking with the notes and voice records by the principal investigator. Then it was imported to open code version 4.02 software for analysis. Meaning unit relevant to the objective were highlighted . Then categories were developed by considering each paragraph of the transcript in an attempt to summarise what respondents were saying in relation to the objective.The categories for the in-depth interview were comprehension, appealing, the source of information, relevance, resonance, and call to action. The categories for key informant interview were 1000 days communication approach, message design, monitoring, and dissemination. Then the result was supported by quotations.

4.11 Data quality control

Data quality was assured throughout the data collection process. The questionnaire and interview guide were initially in English then translated into Tigrigna by an individual who has good ability in reading and writing of the two languages. And it was translated back to English by another individual so as to ensure its consistency. Two days training was given for data collectors on techniques of interview and data collection process. The questionnaire was pretested to ensure their understandability by taking 5% of sample volunteer mothers in the community which was not included in actual data collection. All the collected data were reviewed daily by the principal investigator for its completeness, accuracy, and clarity carefully. Any error, ambiguity or incompleteness encountered was addressed on the same day before starting next day activities. The principal investigator also rechecks the completeness and consistency before transferring it into computer software.

For the qualitative data to keep the quality recording, note making, checking and rechecking method for the representatives of data and fit between coding categories and data was used.

4.12 Ethical consideration

Ethical approval was obtained from the Research and Ethics Committee of School of Public Health, Addis Ababa University. Letter of cooperation was written to Tigray Regional Health Bureau. Both oral and written informed consent was obtained from each study participant after

thoroughly explaining the purpose, benefits, risks and privacy issues of the study and also their right to a decision of participating in the study. It was also clearly stated to the participants that the information they provide was for research purposes and strictly confidentially.In addition, All Participants was informed about the rights to withdraw from the interview at any time. All the information collected from the study participant was made confidential. For those who have not seen or heard about 1000 days of nutritional behavior, the interviewer communicates them the key messages of the 1000 days.

4.13 Dissemination of results

The final result of the study will be submitted to Addis Ababa University School of Public health, Federal Ministry of Health and Tigray Regional Health Bureau. And also effort will be made to disseminate the result through Presentation and publication of result in a scientific journal.

5. Result

5.1 Quantitative study result

5.1.1 Demographic and socio-economic characteristics of respondents

From the total 605 proposed study respondents, complete response was obtained from 594 respondents making the response rate of 98.1%.

Three hundred seven (51.7%) participant children were female and 48.3% were male. The mean (SD) age of participant children was 9.57(SD ± 6.067) months for both sexes. The mean (SD) age of mother was 28.7(SD ± 5.101. The highest proportion (65.2%) of respondents was in the age group of 25-34.Majority of the mothers were married (91.1%). Regarding religion, 481 (81%) were orthodox. Nearly all of the study participants were Tigray by ethnicity 567(95.5%). Among mothers participated in this study, 177(29.8%) had attained secondary education. In total, 282(47.5%) of the mothers were a housewive. The mean income was 3394.92 ETB with SD of 2631.704.

Majority of respondent 91.9% have functional TV and 8.1% didn't .onthe other hand, radio 37.5% have radio and 62.5% didn't have. Regarding the source of information, for 81.6% respondents TV were the most common source of information followed by HEW(81.5%). Community level source of health information includes family, freiends&relatives (38.6%), community events(8.2%)and HDA(23.1%). Exposure to radio for health information was (29%). Obtaining health information from printed media was low 8.1%. Information from mobile text and internet was also very low at 4.7% respectively.

Table 1: Demographic and socio-economic characteristics of the respondents Mekelle city, Ethiopia 2018.

Variables		Frequency n=594	Percentage %
Age of the child	0-5	192	32.3
	6-8	79	13.3
	9-11	81	13.6
	12-17	176	29.6
	18-23	66	11.1
Sex of the child	Female	307	51.7
	Male	287	48.3
Age of mother	15-24	121	20
	25-34	387	65.2
	35-49	86	14.5
Marital status	Single	19	3.2
	Married	543	91.1
	Divorced	19	3.2
	Widowed	13	2.5
Religion	Orthodox	481	81
	Catholic	71	12
	Protestant	27	4.5
	Muslim	15	2.5
Ethnicity	Tigray	567	95.5
	Other *	27	4.6
Educational status	Illetrate	61	10.3
	Read and write	20	3.4
	Primary	119	20
	Secondary	177	29.8
	Techinical/Vocational	102	17.2

	Higher	115	19.4
Occupational status	Housewife	282	47.5
	Govt employee	136	22.9
	Merchant	113	19
	Other**	63	10.6
Functional TV	Yes	546	91.9
	No	48	8.1
Functional radio	Yes	223	37.5
	No	371	62.5
Source of information	TV	485	81.6
	Health extension worker	484	81.5
	Other health professionals	458	77.1
	Family/Friends/Relatives	229	38.6
	Radio	172	29
	Health development army	137	23.1
	Community conversation	59	9.9
	Community event	49	8.2
	Printed material ***	48	8.1
	Other****	29	4.7

***(Amhara ,Afar)* , ***(Daily lobour,student,farmer,private employee)*

**** (Poster/Leaflets, Newspaper or magazine,),***** (Mobile text, internet)*

5.1.2 Exposure to the 1000 day TV/radio spots

The media preference of the respondent shows that TV was the most preferred form of media (82.9%) followed by radio(10.3%), other(6.8%) including printed material and internet.

Overall Tv viewership was found to be high 83.4% respondent watch television on a daily basis. Radio, on the other hand, was reported very low with only 10.8% of respondents listen to it on a daily basis, two hundred sixty 43.8% respondent didn't listen at all. Tv ownership (546) and regular TV viewing (501) were higher than radio ownership(223) and regular listening (64).

Exposure to the campaign is a necessary indicator of campaign success. If there was no or very low levels of exposure to the campaign, we cannot expect the campaign to have had an effect on behavioral outcomes. In this study, From the total of respondents, 281 (47.3%) have been

exposed and the rest 313(52.7%) answered they never had exposure to the spots within twelve months prior to the interview. From those who have been exposed,280 (88.1%)respondent seen from Tv, 38(11.9%) from the radio. Those who reported seeing the spot indicated that they had seen it for an average of 6 times. The minimum exposure was 1 and maximum of 20. The corresponding mean for hearing the radio spot was 3. And also the least exposure was 1 and maximum of 10. Besides 242(86.1%) respondents reported that the time was convenient for them.

Chi-square test was conducted to see the association between exposure to the spot and ownership of Tv and radio. Exposure to the spot have significant association with ownership of Tv (X^2=38.99 p<0.001)and also significantly associated with ownership of radio Tv (X^2=25.077 p<0.001).

The exposure level among respondent who reported regular access to TV and radio, It was found that among respondents who watched TV on a regular basis, 53.9%were exposed to the spots. The exposure level among regular radio listener was 50%. The Exposure level was also found to be high among the age group of 25-34 than others .

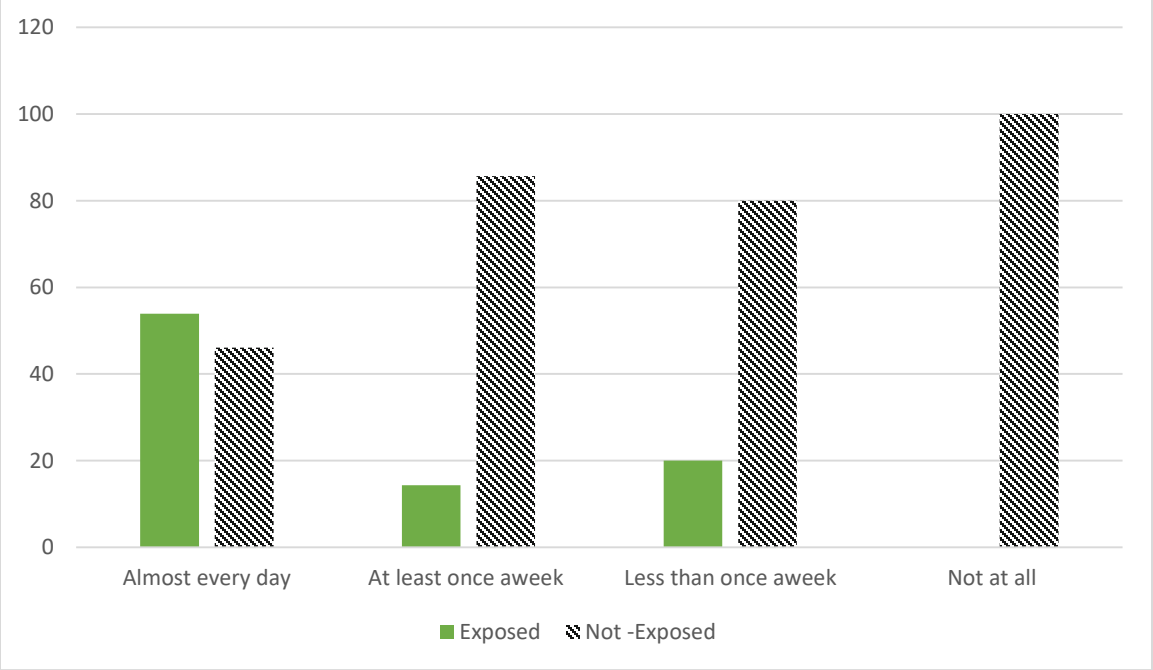

Figure 3: Exposure of the spot and TV viewership among respondents in Mekelle city, Ethiopia, 2018

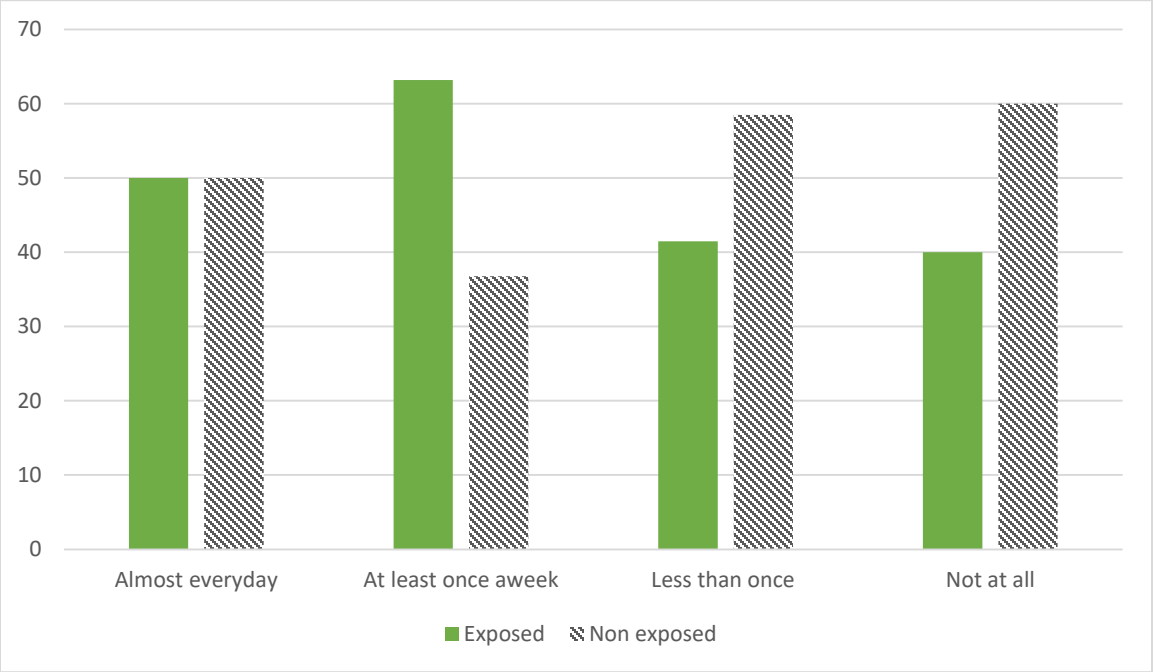

Figure 4: Exposure of the spot and radio listenership among respondents in Mekelle city, Ethiopia, 2018

5.1.3 Recall of key messages of the spots

It was measured using both promoted and unprompted recall measure. Respondents who were exposed to TV /Radio spots were able to recall at least 3 key messages. The mean recall was 8 with S.D of 3.007. The top key message mostly recalled was “Exclusive breastfeeding“ which is cited by 89.1 % of respondents who were exposed to the spot. This was followed by a recall of the key message “giving colostrum”.The least recalled key message by the respondent was “personal and environmental hygiene” (38.1%) and husband support (40.6%).

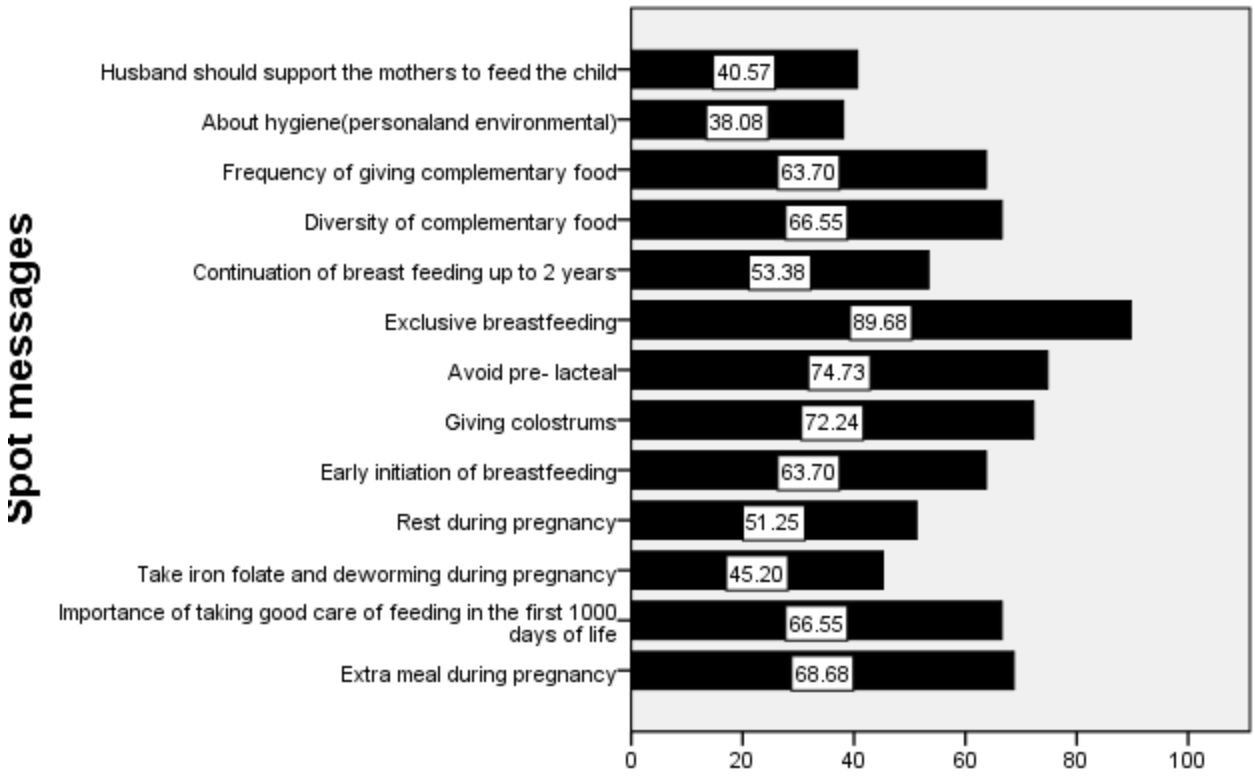

Figure 5: Recall of the Spot key message among respondents in Mekelle city, Ethiopia, 2018.

5.1.4 Attitude toward feeding practice

Most mothers (97.3%) reported that first milk (colostrum) is very nutritious to the baby. Very few(0.4%) mothers disagree that exclusive breastfeeding in the first six months will lead to improved child health status. more than half of mothers agree giving at least 4-5 meals (including 1-2 snacks) per day for a child is appropriate. In addition, 93.3% had a favorable attitude toward the importance of breastfeeding a child up to 2 years.

Table 2: Attitude of mothers toward feeding practice in Mekelle city, Ethiopia 2018

Attitude items	Strongly agree	Agree	Neutral	disagree	Strongly disagree	Item mean	SD
First milk (colostrum) is very nutritious to the baby.	324(54.5%)	254(42.8%)	12(2%)	4(0.7%)	0	4.51	0.576
Exclusive breastfeeding in the first six months will lead to improved child health status.	298(50%)	294(49.6%)	0	1(0.2%)	1(0.2%)	4.49	0.523
Giving at least 4-5 meals (including 1-2 snacks) per day for a child is appropriate.	329(55.4%)	253(42.6%)	9(1.5%)	2(.3%)	1(.2%)	4.53	0.566
Breastfeeding a child up to 2 years in addition to complementary feeding is important.	237(39.9%)	319(53.7%)	35(5.9%)	2(0.3%)	1(0.2%)	4.33	0.616
An extra meal during pregnancy is essential for fetal growth.	370(62.3%)	220(37.1%)	2(0.3%)	0	2(0.3%)	4.61	0.534
Overall mean score M= 22.47, SD±1.744 N= 594 ,reliability α=0.749							

There was a statistically significant difference in mean score of attitude toward feeding practice among different educational level as determined by one-way ANOVA (F (5,588)= 3.673,p = .003). A Tukey post hoc test revealed that attitude toward feeding practice score was statistically significantly lower among those who attain primary educational level (22.49±1.836), secondary educational level (22.56±1.799), technical (22.62±1.456) and higher (22.67±1.726) compared to those who read and write (21.25±2.049). But there was no statistically significant difference in mean score of attitude among different occupational category.

5.1.5 Intention of feeding practice

Almost all (86%) respondents stated their intention to breastfeed their child up to 2 years, 94.2% of them exclusively. 84.3% had the intention to give three meal and two snacks per day. More than half of women reported intending to feed their child from the four group of food. But 14.7% of mothers didn't intend to take extra meal during pregnancy (Table 3).

Table 3: Intention of the mother on feeding practice in Mekelle city, Ethiopia 2018

Intention item statements	Strongly agree	Agree	Neutral	disagree	Strongly disagree	Item mean	SD
I intend to exclusively breastfeed my child up to 6month.	253(42.6%)	331 (55.7%)	4 (0.7%)	0	6 (1%)	4.39	0.611
I intend to breastfeed my child up to 2years	256(43.1%)	255 (42.9%)	71 (12%)	12 (2%)	0	4.27	0.748
I intend to feed my child three meal and two snacks per day	239(40.2%)	262(44.1%)	43(7.2%)	50(8.4%)	0	4.16	0.887
I intend to feed my child from the four group of food.	212 (35.7%)	294(49.5%)	29(4.9%)	59(9.9%)	0	4.11	0.890
I intend to eat an extra meal while I am pregnant	241 (40.6)	266 (44.8%)	33(5.6%)	54(9.1%)	0	4.17	0.893
Overall mean score M= 21., SD±2.874 N= 594 ,reliability α=0.689							

One way ANOVA was conducted to see the difference in mean score of intention among different level of education and also occupational categories.But there is no significant difference in mean score of intention among them.

5.1.6 Maternal and child Feeding practice

This section assesses feeding practice with regards to the recommended behavior of the first 1000day such as extra meal during pregnancy, taking an iron tablet, timely initiation of breastfeeding, exclusively breastfeeding, colostrum, the introduction of complementary feeding, minimum meal frequency, meal diversity inappropriate to their age.

5.1.6.1 Infant and young feeding practice

Respondents were asked about how long after birth they first put their infant immediately to the breast, whether they gave colostrum and other liquids were provided to the infant prior to initiating breastfeeding, and through the first three days after birth.

Among mothers ever breastfeed their child, more than half of mothers 510(86.5%) initiated breastfeeding within 1 hour of birth, and 80(13.5%) started breastfeeding after 1 hrs. Initiation of breastfeeding within 1 hour was found to be high among those who weren't exposed to the spot compare to that of exposed. Though the frequency was high, the difference was not statistically significant (X^2=4.655, df =1, p=0.495).From those who were exposed 86.8% of mother had initated breast feeding within 1 hour after birth.

It was found that most mothers (96.5%) feed their newborn infants with colostrum. The remaining (3.5%) answered that they never fed their infant's colostrum.Colostrum feeding was higher among mothers who were not exposed to the spot 296(94.6%) than the exposed 277(98.6%).This difference is statistically significant at (x^2=6.974, df =1, p=0.008).from those who were exposed 98.6% of them had feed their newborn infant with colostrum.

About 64 (10.8%) of mothers reported that their babies had been fed on liquids other than breast milk prior to initiating breastfeeding. Instead, infants were offered other fluids, especially infant formula before mature milk was excreted. Infant formula, honey, and plain water had been commonly given pre-lacteal food. Pre-lacteal feeding practice was higher among the age group of 25-34 than the others .this difference is statistically significant (X^2=6.645, df =2, p=0.036). Pre-lacteal practice was found to be high among respondents in higher educational status, this difference was statistically significant (X^2=10.447, df =5, p=0.044) and also not giving pre-lacteal feeding was high among those who weren't exposed to the spot 274(87.5%) compare with

those who are exposed to the spot 256(91.1%).But this difference is statistically insignificant at (x^2=1.956, df =1, p=0.162).From those who were exposed 91.1% of them did not gave prelacteal foods.

Table 4: Early breastfeeding practice among exposed to non-exposed mothers in Mekelle city, Ethiopia 2018.

Variable	Exposed		Non exposed	
	N	%	N	%
Colostrum feeding				
Yes	277	98.6	296	94.6
No	4	1.4	17	5.4
Pre-lacteal				
Yes	25	8.9	39	12.5
No	256	91.1	274	87.5
Type of pre-lacteal feeding				
Infant formula	19	40.4	28	59.6
Milk other than breast milk	3	27.3	8	72.7
Plain water	2	33.3	4	66.7

More than half mothers 163 (84.9%) reported they exclusively breastfeed their child. the higher percentage that interrupts the practice of exclusive feeding practice was formula feed 11 (68.8%).

Exclusive breastfeeding practice was found to lower among the age group of 35-49. Exclusive breastfeeding among mother who exposed and non-exposed to the spots was 90% and 80.4% respectively. However, the difference of breastfeeding practices whether or not mothers were exposed to the spot is not statistically significant (X^2=3.442, df =5, p=0.064). From those who were exposed to the spot ,90% were practcing exclusive breast feeding the rest 10% were not.

Complementary feeding practices were measured using standards of the introduction of solid semi-solid or soft food, minimum dietary diversity, and meal frequency.

Among the mothers who were asked to recall the complementary feeding practice more than half of them 47(60.8%) were introduced solid, semi-solid or soft foods for their children in 6-8 months age and 32(39.2%) didn't introduce. Only 18 (4.4%) mothers introduced complementary feeding early before 6 months, 33(7.6%) mothers initiated late after 6 months and 30 (7.5%) mothers did not start complementary feeding at all. A total of 27(75%) mothers who were

exposed to the spot introduce solid, semi-solid or soft foods for their children in 6-8 months and 21 (48.7%) who weren't exposed to the spot introduce at 6-8 month.

The minimum meal frequency was assessed respective of their age group. As it is recommended the minimum meal frequency for breastfed was 2 times for infants 6–8 months, 3 times children 9–23 months and 4 times for non-breastfed children 6–23 months.

Those who received solid, semi-solid or soft foods prior to interview the minimum meal frequency was 2 times and maximum frequency consumed was 4 times for breastfeeding infant age of 6-8 month .8.7% of consumed 2 times, 52.2% 3 times and 39.1% 4 times per day. For the age group of 9-23 who breastfeed 52.5% consumed 4 times, 43.3% consumed 3 times and 4.2% consumed below the recommend meal frequency in their age group.

On the other hand, non-breastfed children 6–23 months of age who received solid, semi-solid or soft foods or milk were also assessed.36.4% of them consumed below the minimum meal frequency required for them and 63.6% were consumed the recommended meal frequency.

The study also assessed the food groups consumed by children 6–23months of age during the previous 24-hour period. Most of the children had met the minimum dietary diversity which is considered quite well. Grains, roots, and tubers were the dominant food groups consumed by most (94%) of the children. Vitamin A rich fruits and vegetables were the second most widely consumed food groups. Legumes and other fruits and vegetable were consumed by 73(19.8%) and 109(29.6%), of children 6-23 month. Consumption for eggs and dairy products was relatively low and that of flesh-based food was 14.4%.

From those who were exposed to the spot 21.1% of them recived food from 4 or more food group.and 21.9% of who were not exposed recived food from 4 or more food group. But this difference is statistically insignificant at (x^2=0.043, df =1, p=0.836)

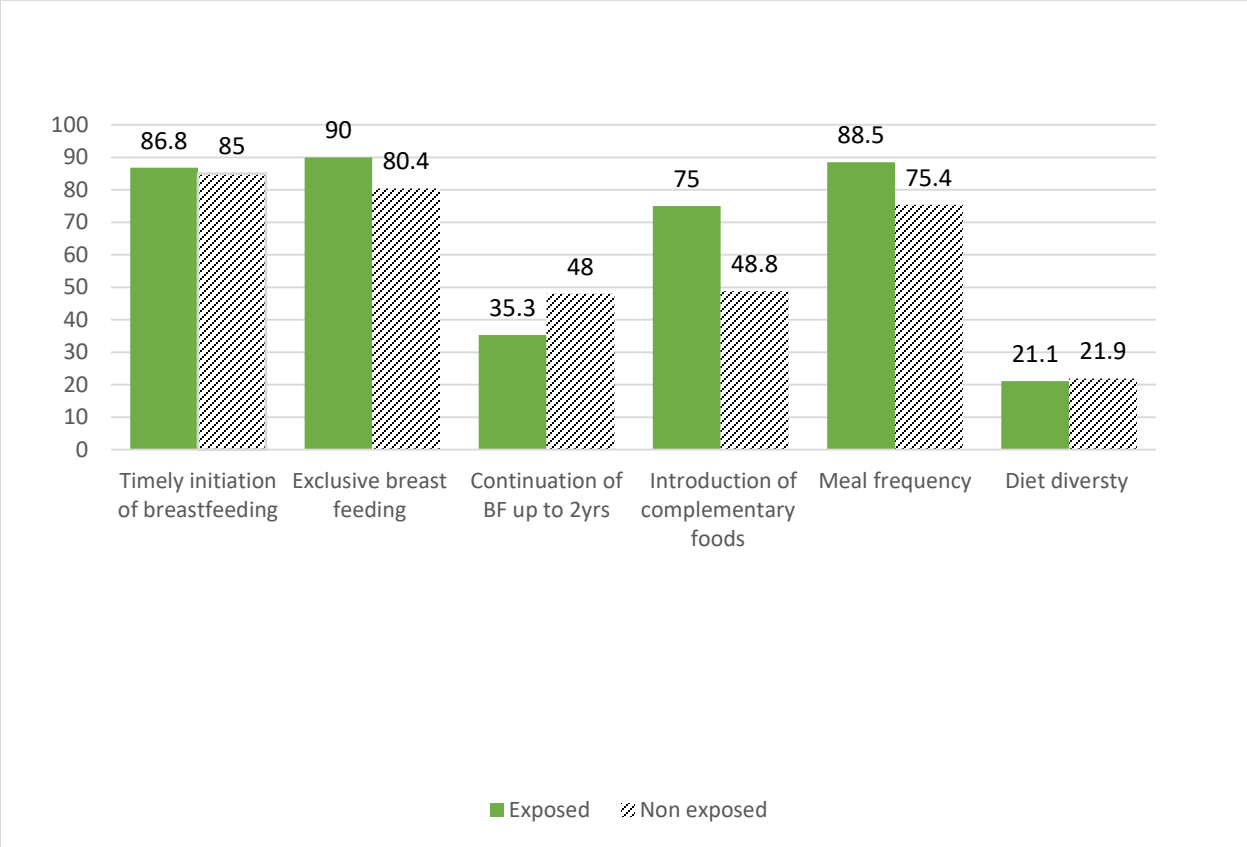

Figure 6: Appropriate IYCF among mothers exposed and non-exposed to the spots in Mekelle city, Ethiopia 2018.

5.1.6.2 Maternal Feeding practice during pregnancy

In this study, the feeding practice of mothers during their most recent pregnancy was also assessed. Changes in the quantity of food intake in pre-pregnancy and pregnancy diets vary among women. Majority of the respondents 431(72.5%) said they took an extra meal while they were pregnant and 163(27.5%) hadn't changed the quantity of food they ate at all.79.4% of respondents who were exposed to the spot ate an extra meal.

It is advisable pregnant women should take iron folate supplementation, eat iron-rich food and prevent intestinal worms to prevent anemia.

As of this study, it was found that majority of the respondents 88% took iron tablets during their most recent pregnancy. Among those who took iron tablets, 53.2% took iron tablets for 90 days or more, 26.8% took for 60-89 days and 20.1% took for less than 60 days.Only 19.2% of respondents took a deworming tablet.

There is statistically significant association between extra meal during pregnancy and exposure to the spot (X^2=12.386, p<0.001) whereas there is no significant association between Fe received during pregnancy and exposure.

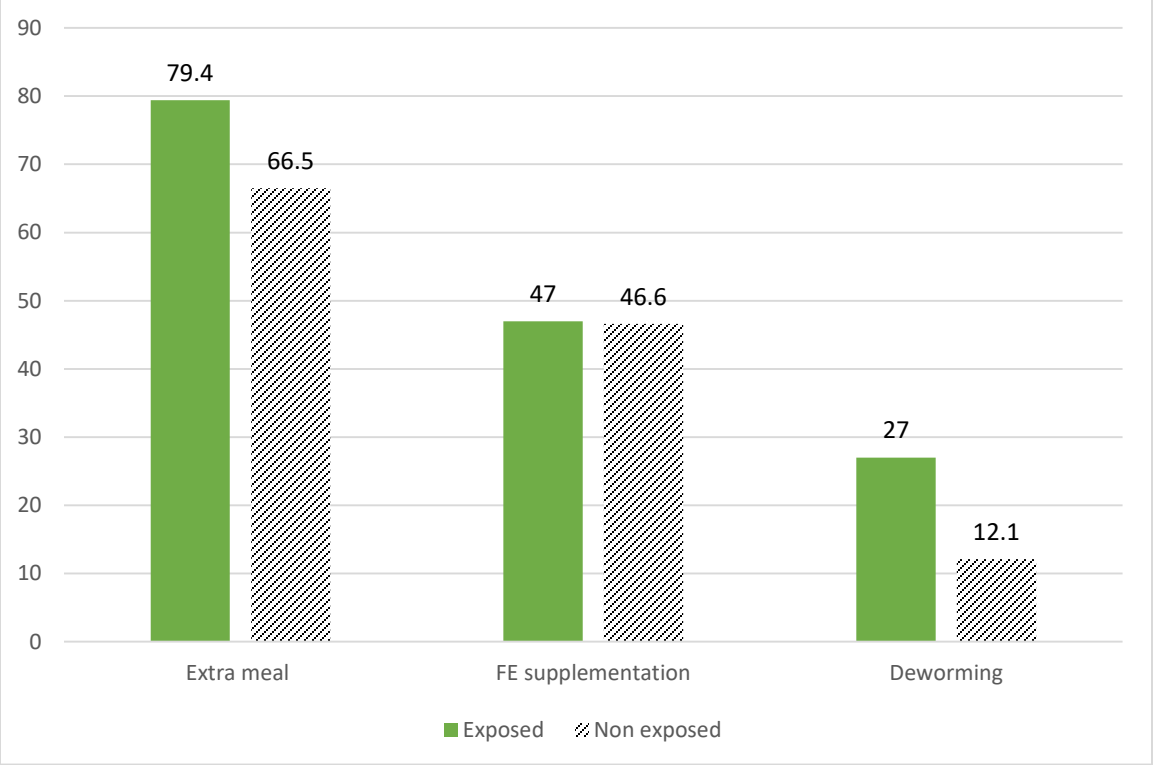

Figure 7: Appropriate maternal feeding practice among exposed and non -exposed in Mekelle City, Ethiopia 2018

5.1.7 Relationship between the hierarchy of communication (1000days spot) effects variables

Hierarchy of communication explains persuasion effects by identifying input and output. Among those who were exposed to the 1000 days spots almost all of them recall the key message.

Almost half (50.5%) of those who recalled have a favorable attitude toward maternal and child feeding practice and 38.7% of those who have favorable attitude was actually intended to act toward maternal and child feeding practice. Of those who intend to act, 27.7% of them fed appropriately during pregnancy and 43.6% fed their child appropriately.

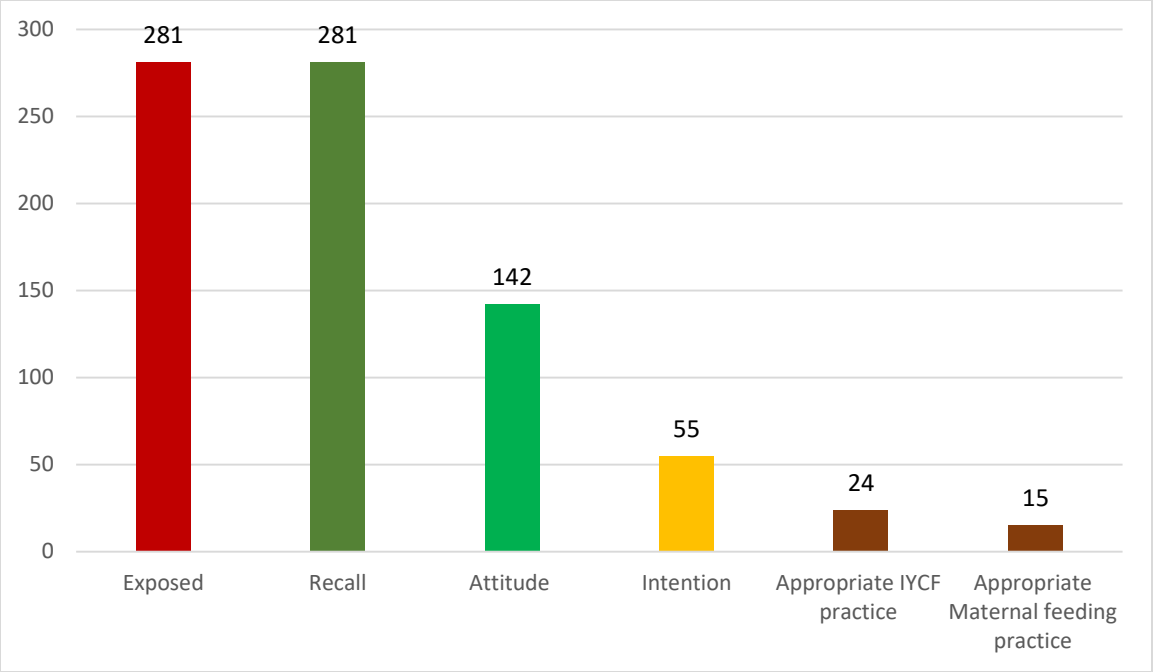

Figure 8: Hierarchical effect of 1000 days spots among mothers of under two children in Mekelle City, Ethiopia 2018.

As Shown in (Table 5) independent sample t-test was conducted to compare attitude score for those who exposed and not exposed to the spot. There was no significant difference in attitude score for exposed (M=22.6, SD=1.632) N=281 and not exposed (M=22.4, SD=1.839) N=313 condition t (592) =-1.062, p=0.289 at the 5% level of significance.

An independent samples t-test was conducted to compare the intention scores among exposed and non-exposed to the spot. There was a significant difference in score between the two groups of respondents, t (592) = 3.850, p < .0001, exposed group (M = 20.62, SD = 3.008) scoring higher than non-exposed (M = 21.53, SD = 2.682). The magnitude of the differences in the means (mean difference = 0.904, 95% CI :(0.446 to 1.363)).

An independent samples t-test was performed comparing the mean scores of maternal and child feeding practice appropriate to age and exposure to the spot. As predicted, those exposed to the spot (M =3.281, SD =1.066, N = 281) were more practice than the non-exposed (M = 3.003, SD = 0.9539, N = 313), t (592) = -3.332, p =0.001, two-tailed. The mean difference was -0.2779, and the 95% confidence interval around the difference between group means was (-0.4418 to 0.1141).

Table 5: An independent samples t-test on intention and attitude within exposed and Non-exposed group, Mekelle city, Ethiopia, 2018

Variables		N	M	SD	t-value	p-value	95%CI of the difference	
							Lower	Upper
Intention	Exposed	281	20.62	3.008	3.850	<0.001	0.446	1.363
	Non-exposed	313	21.53	2.682				
Attitude	Exposed	281	22.55	1.839	-1.062	0.289	-0434	0.129
	Non exposed	313	22.40	1.632				

N=number of respondents, M=mean, SD=standard deviation

As shown in Table 6 below, a Pearson correlation coefficient was computed to assess the relationship among exposure, recall, the frequency of exposure, attitude, intention and feeding practice.

Results of the Pearson correlation indicated that there was a significant positive correlation between recall and frequency of watching TV spot($r = 0.260, n=281, p<0.001$)and negatively correlated with intention($r = -0.141$, $n=281$ $p=0.018$).

There was significant positive correlation between attitude and frequency of watching Tv spot ($r=0.120$,$n=281$,$p=0.045$).But negative correlation between attitude and intention ($r= - 0.195$ $n=594$,$p<0.001$)

A positive correlation ($r = 0.16$) was found between feeding practice and recall of key message. This indicates that an increase in recall of key message is expected to cause an increase in feeding practice. However, with a p-value of 0.795, it is statistically insignificant.

A negative correlation($r = -0.015$) was found between feeding practice and attitude. Although this was not statistically significant enough with p-value of 0.718. Even if it was not statistically significant with p-value of 0.427 negative correlation ($r = -0.333$) was also found between intention and feeding practice intention.

Table 6*:* Partial correlations (Pearson's r) among the hierarchy of communication effects variables, Mekelle city, Ethiopia, 2018

	Recall	Frequency of watching Tv spot	Frequency of listening to the radio spot	Attitude	Intention	Feeding practice appropriate to the age
Recall	**1**					
Frequency of watching Tv spot	**0.260****	**1**				
Frequency of listening to the radio spot	**0.73**	**0.023**	**1**			
Attitude	**0.78**	**0.120***	**0.034**	**1**		
Intention	**-0.141***	**0.093**	**0.038**	**-0.195****	**1**	
Feeding practice appropriate to age	**0.16**	**0.008**	**-0.114**	**-0.015**	**-0.033**	**1**

** Correlation is significant at the 0.01 level *Correlation is significant at the 0.05 level

5.1.8 Predictors of feeding practice

In this study, simple and multivariable linear regression was used to predict the feeding practice appropriate to age. The socio-demographic variables and component of hierarchical effect model analyzed in bivariate.

Multivariable linear regression analysis was used to test predictor of feeding practice appropriate to age. The results of the regression indicated the predictors explained 12.77% of the variance (R^2 =12.77, F- change=4.20, p=0.001).

After conducting multivariable analysis , Age of the child (B= 0.026 , p<0.001 :95%CI 0.0128 to 0.0399), exposure to the spot (B=0.168, p=0.003 : 95%CI 0.0556 to 0.4066),those who watch Tv at least once a week (B= 0.604, p=0.010 :95%CI 0.0217 to1.1854) ,those who are Tigray in ethnicity (B=0.536 ,p=0.008 :95%CI 0.1429 to 0.9307) and those who are widowed (B= -1.656 p=0.005 95CI % -2.8129 to -0.5003) were statistically significant with feeding practice appropriate to age in the multiple linear regression.

As age of the child increased in one month the feeding practice increased by 0.026 .the effect of exposure to the spot on feeding practice increased by 0.231 times among exposed group compared to non exposed .the effect of watching tv on feeding practice increased by 0.604 times among those who watch Tv at least once a week compared to those who have not seen Tv at all.

But the effect of marital status on feeding practice will decrease by 1.656 times among widowed mothers compared to married mothers.

Table 7: Predictors of feeding practice appropriate to age on multiple linear regression analysis among mothers, in Mekelle City, Ethiopia, 2018

Variable		Unstandardized coefficient (B)	Standardized coefficient (β)	p-value	95%CI	
					Lower	Upper
Age of the child		0.026	0.156	<0.001*	0.0128	0.0399
Age of mother		0.006	0.033	0.435	-0.0110	0.0245
Marital status	Married (ref.)					
	Single	- 0.077	0.019	0.747	-0.5486	0.3939
	Divorced	0.524	0.022	0.825	-0.4131	0.5182
	Widowed	-1.656	-0.109	0.005*	-2.8129	-0.5003
Religion	Catholic(ref.)					
	Orthodox	0.240	0.092	0.372	-0.2874	0.7677
	Protestant	0.337	0.069	0.313	-0.3175	0.9905
	Muslim	0.345	0.110	0.233	-0.2241	0.9201
Educational status	Illiterate (ref.)					
	Read and write	0.297	0.052	0.260	-0.2197	0.8129
	Primary	-0.014	-0.005	0.913	-0.3356	0.3073
	Secondary	0.136	0.061	0.396	-0.1784	0.4504
	Technical	0.067	0.025	0.704	-0.2792	0.4131
	Higher	0.195	0.076	0.247	-0.1361	0.5277
Ethnicity	Tigray	0.536	0.109	0.008*	0.1429	0.9307
	Other (ref.)					
Functional TV	Yes(ref.)	-0.267	-0.071	0.221	-0.6962	0.1615
	No					
Frequency of watching Tv	Almost everyday	0.556	0.197	0.072	-0.0489	1.1593
	At least once a week	0.604	0.182	0.042*	0.0217	1.1854
	Less than once a week	0.535	0.067	0.176	-0.2411	1.3102
	Not at all(ref.)					
Exposure	Yes	0.231	0.113	0.010*	0.0556	0.4066
	No(ref.)					
Intention		-0.005	-0.014	0.727	-0.0338	0.0236

**statistically significant p<, 0.05 ref. Reference category*

R^2 = 0.1277 Adjusted R^2 =0.0973 p =0.0001 F- Change =4.20

5.2 Qualitative study result

5.2.1 Interview with mothers of under two children

In the section, the finding of the qualitative data analysis was presented in the major section of socio-demographic, Comprehension, the source of information, appealing call to action relevance, resonance and call to action

Socio-demographic Characteristics

Ten mothers were interviewed to get their opinions on the spot. All of them were biological mothers of children under two years old. They had at least one child in the age-group of 0-24 month(s). The respondents were in age group of 21-32. Majority of them reported that they were a housewife.

Source of information

All of them said that their main source of information is Health facility (during their ANC follow up, immunization and other visits, health extension worker during her home to home visit).and also radio and Tv were the sources of health information.

I get such information from HEW .she teaches us about feeding practice and also we will go to a health facility to see for food preparation demonstration (IDI 9: Mother of 6 month infant)

Comprehension

The aim here was to gauge if the message were easily comprehensible by the audience. Accordingly, all participants cited that the spot is trying to say something about the importance of feeding practice and thing to follow in order to maintain the child health.

It is about children health and feeding practice that we should follow for their physical and future mental health ……. In general it all about feeding practice that is recommended for the mother and child. (IDI 1: mother of 9 month child)

They cited the message that the spot wants to transmit was easy to understand. The information was not new for them and also presented by language which they used to make for them easier to understand.

Three participants mentioned that they didn't understand the word the first 1000 days. As they mentioned the reason

"…….it a bit confusing me because we often count by month, not by days……."(IDI 8: mother of 2 infant)

Appealing

All of them found the spot likable and interesting. When asked about what they liked and what stood out for them in the spot, most focused on the messaging of the spot and also there is a participant who mentioned the messenger. The participants like the messenger dressing style which is cultural.

….the way she dresses impressed you to look at because of it cultural… (IDI 10: mother of 1 year child)

And also one participant like the way she presents the message.

"I like it all …., the way she explains about how we take care of the children's and referee as "we" the responsibility of both parents that means mother and father, not as the only responsibility of the mothers." (IDI 3: mother of 8 month child)

The participant cited they know the messenger. Three participants mention that she is not that much popular in their community unless they watch "Betoch" drama.

All of them said that there is nothing that didn't stand out for them in any position.

Relevance

As all mentioned, all information in the spots was very significant. They also mentioned that people can easily get the health information staying in their home from TV /radio. There is no difference between what they heard in previous time. The only difference is the way it is presented i.e. it uses media to transmit the message.

Most of them mentioned that the message is directed to mothers.

"Mainly for mothers since she is the one next to her child. … Mothers should develop more information on pregnancy and more related issues and support them self's and their children's health." (IDI 3: mother of 8 month child)

Four of them mentioned it is directed to families as a whole. The reason they declared was all communities were responsible for the health of the child.

".....others may support her to doing that.it may be helping in deciding about feeding by telling her the right information, doing household works or may be financial…" (IDI 4: mother of 1 month infant)

Resonance

In an effort to check if the spot is in check with the local culture, participants were asked if there was anything that was out of the ordinary and did not relate to their culture and tradition. Accordingly, all the participants said that it reflects what it should be. In addition to the culture, they were asked about the usability of the language. Almost all of mentioned, the way she pronounced some word doesn't seem like Tigrigna. And also cited it confusing in understanding what she wants to say.

"It Tigrigna but when she pronounces it some word like"Lige" I couldn't understand .it seems she says a different thing." (IDI 6: mother of 9 month child)

The other thing that is mentioned by the respondents were; the pictures seen in the video spots. Two people said that even if the message that she transmits is important the food items seen in the video did not take poor people into consideration.

"....even in urban, there are peoples who cannot get their daily meal. Children who belong to this family may not get what is seen in the video so it better if it shows other option…. Our capability and living status is not always in the same status" (IDI 8: mother of 2 month infant)

Call to action

In this section, participants were asked guiding questions to see if the spot made them think or act in a different way, revealed from what they experience and also if they were encouraged to share what they listened to with others in their communities.

All of them revealed that the message prompts them to do proper feeding practice. Such as exclusively breastfeeding up to 6 months, to start adding food at 6 months, feed them five times per day including snack from a different type of food items and eat an extra meal during pregnancy and took Fe.

Accordingly, participants were of the view that there was not any new information as such except 1000days. As they mentioned the message was not new for them.

"...whoever see these whether they know or not, they can be noticed the benefit of proper feeding, also consequence in the child physical and mental growth.so it helps us to be alert to this issue even if we know..." (IDI 4: mother of 1 year and 2 month child)

New information that the respondents get from the spot was the naming of the first 1000days. as they mentioned even if the naming is new the practice that is recommended in this period wasn't new for them

"..Yes hearing that it called 1000 day is new but the practice wasn't new to me." (IDI 5: mother of 10 month child)

As they revealed knowledge was not the constraint for them, the only thing is negligence and financial constraints. The practice of eating/feeding an additional meal or snack for their child and during pregnancy was reported by some, but not all, respondents. Although they were aware of the idea of increasing their intake or eating foods from a different type. They eminent that the economic challenges they face prevented them from adopting these ideal practices.

"..Meat and fruits may not be accessible every day. I have to feed my child what is available. For me, if I didn't get meat I would do some other option like"Atemit, Miten".Everything is according to what you have. If you have, you will feed your child very well and if not children can't be fed well." (IDI 8: mother of 2 month infant)

Almost all of them cited doing all the recommended practice could ensure that their child will have happy and healthy future life.

"Of all raising a healthy child makes you feel happy…. it helps to keep our child alive and has a better life than we had before." (IDI 2:mother of 7 month child)

But all believed that the spot reminds community members to do the right thing to their children.

5.2.2 Key Informant Interview

In this section, the approach used to develop the spots were explore from the key informants who participated in the development of the material.

1000 day communication approaches

1000day was set as flagship for the Ministry of health which is a landmark from pregnancy up to 2 years. The 1000 days was also set as principle and approaches to addressing chronic nutritional impact in NNP II. As a campaign, it initially developed for addressing feeding practice recommended in the 1000days to the prevention of chronic malnutrition.

As a large-scale approach, it was a new initiative for us that was owned by the government even if the different small scale were done previously. We took a lesson. (KII: 3)

The main communication objective was to create awareness. It was generic for the whole even if the target audiences were primarily mothers who have two children and pregnant women.

"We thought when people see the spot they may ask the professional the meaning of 1000 days. Even all professionals weren't aware of the 1000days.we can indirectly reach others "(KII: 1)

"Even if the objective was awareness creation, if they see/hear repeatedly it may initiate them to change their behavior which is the end goal" (KII: 2)

As a segment of the campaign mass media was used as one approach to addressing large community. As a reference to reach large population it was developed both in radio and Tv spots. It was aired in the local media irrespective of their region. The Tv spot was aired five times per week and two times per day and radio spot every day for 6month. In addition to the spots, different communication material was developed like pocket reference i.e. job aid, flip chart, and posters.

They tried to select the prime time with the agreement of the media house. In case of TV, the prime time was (2:30-4:00 in local time after the news whereas for the radio as it was transmitted in Fana broadcasts the prime time were Fana 90 in the morning).

Message designing

Prior to executing 1000 day as a program, need assessment study was not carried for this specific program. As an input, different gaps were identified from different literature including EDHS and SURE project baseline assessment did on nutrition in the four regions.

The thematic area was developed by the technical working group. The technical groups encompass communication and nutritional experts from FMOH and partners. There was no any community involvement in the communication strategies. This was claimed to due to budget constraint and though the comment of experts from each region is enough.

"Community contribution is such an important contribution in designing. Presently it is considered to be incorporated in the second phase of 1000+ spots because we have learned so many things from this spot development" (KII:1)

They thought that the cultures of the community are not that much used in the production of the spot starting from the setting and messenger. It doesn't take the culture into consideration. This may have resulted in the poor communication of the message.

The primary target audience were pregnant women, mothers who have two children and fathers. It targets the four regions (Tigray, Amhara, Oromia, and SNNPR)

The main targets are the four agrarian regions but it may work for those Amharic speaker regions like Harari and dire dawa. Since it was developed in three languages Amharic, Oromiffa and Tigrigna it mainly targets them. (KII : 2)

In case of the audience's segmentation, there is no any segmentation as (urban and rural).

As they mentioned due to the coverage of TV in urban it can reach to urban mother correspondingly the radio spot may be reached by the rural as I told you we did not segment them by their residence when we think of developing the spot. (KII: 1)

The main thematic areas that they want to address the spot were feeding practice during pregnancy, initiation of breastfeeding, exclusively breastfeeding and complementary feeding. Entirely the spots have created brief developed with aid of communication experts from a partner. After the development of the script with the aid of UNICEF, the production was done. But In developing the communication, no communication theory was applied

The production was outsourced to media Promotion Company then the developed script was produced by a company that was hired by the UNICEF. Their role was to direct, select messengers together with the team and recording the spots with high-quality production.

The setting of the production of all the spots was in Suluta. It was reported the setting was selected due to the convenient distance from Addis Ababa. Once the company has produced the spot it would be evaluated by the technical group and others professional in the team. Technical comments were incorporated. But it was said there are comments that were not incorporated due to the fear of increased production cost and limited time.

All materials were not pretested prior to roll-out except the Amharic version. The pretest wasn't carried out in the appropriate location because the audiences that participate in the pre-test aren't the right group for the Amharic. But maybe it is an appropriate location for the Oromiffa version.

"We tried to pretest the Amharic version around suluta because of budget constraint and time. The production time took a long time almost 8 months to be aired " (KII: 1)

The main criteria to select the messenger were her previous experience in nutrition promotion Even if she is not native speaker she where a goodwill ambassador in the save the children project. Training was given to her.

so that due to two reason we select here these are budget constraints at that time we don't have enough budget to hire celebrities for each region so that the only choose hire her for all the language and mimic as if she spoke and branded her .and the other reason was telling her about nutrition will be easy because she was already working as goodwill ambassador in Save children. (KII: 1)

In this case, there was the communication gap between region level and federal level. As the regional, their part was signing agreements with the local media agency and giving comment in the already developed spot.

"It was developed at the federal level but sent to our region for an agreement since it should be transmitted in the local media .the comment that we gave them wasn't incorporate it was transmitted as it is."(KII : 3)

"The comment from the regional were tried to be incorporated but there is a comment that given for example about the messenger that we can't change as that time but the technical things were incorporated." (KII : 1)

Monitoring and dissemination

Based on the agreement the media house air the spots. But there is no formal monitoring mechanism to monitor the airing except informally the team sees whether it was aired or not and also PR monitor as it was aired then the agreement will be renewed by cross-checking. Even there is no evacuation plan at all.

There is a dissemination plan for a campaign which also incorporates the spots. The activities were not aligned as they plan .The most thing that was challenging was a budget limitation. The option that they took to cope up is hiring someone who works at low cost. This affects different activities due to this it took a long time for selecting the messenger who works in low costs

Starting from the script developing up to airing time it took a lot of time .for instance it took almost 1 year to develop the script writing and also added 8 months for the production and edition of the spot. (KII : 2)

5.2.3 Checklist result

In this section using checklist tried to assess the spots based on CDC clear index score sheet that is used to assess public communication materials. It have four parts that score out of 11,3,3,and 3.The total score was out of 100 ,material that score 89 or below show the material need improvement .As a result all the spots score below 89 which need improvement (Annex 13).

Spot 1(about the first 1000 days)

The calculation for the score was

Part A=9/11 , Part B=3/3, part C =1/3 Part D =2/3 TOTAL SCORE =15/19*1OO=78.9 .As it stated in the index if the total score is 89 or below, the material need improvement

Spot 2(about feeding practice during pregnancy)

The calculation for the score was

Part A=8/11 , Part B=3/3, part C =1/3 Part D =2/3 TOTAL SCORE =14/19*1OO=73.6.As it stated in the index if the total score is 89 or below, the material need improvement.

Spot 3(about complementary feeding)

The calculation for the score was

Part A=8/11 , Part B=3/3, part C =1/3 Part D =2/3 TOTAL SCORE =14/19*1OO=73.6 .As it stated in the index if the total score is 89 or below, the material need improvement.

Spot 4 (about Breastfeeding)

The calculation for the score was

Part A=8/11 , Part B=2/3, part C =1/3 Part D =2/3 TOTAL SCORE =13/19*1OO=68.42 .As it stated in the index if the total score is 89 or below, the material need improvement.

Part A

Main message and call to action

The main message that the spots want to transmit is the proper feeding practice that is recommended in the first 1000days of life. The spot displays the main message at the end of each spot. Position most critical information early in the Message only in the first spot. The meaning of 1000 days was not explained in the others 3 spots.

In all spots it tries to show visual that convey the main message. For instance, it tries to show when she feeds her child, visit health center for ANC follows up.All the four spots contain different message that the audience needs to do. The first spot was about the first 1000 day, the second about feeding practice, complementary feeding then the fourth spot talks about what women should do during her pregnancy period. Besides it also highlighted man as the one who helps his wife and takes better care of his baby.

It tries to show the feeding practice in first 1000 days in a child's life- right from pregnancy through to the first two years of a child. This period is important because it is very critical to a child's long-term mental and physical development.

In the spot, it's how different types of food groups that child should feed but It doesn't show another alternative that they used as an option if they aren't available in the home due to financial constraints

Language

The main message was presented in the active voice. The wording of some words was not used by the primary audiences as the audiences are mothers and father they didn't know wording like “Iron folate ".

The messenger was not wording the correct language that all of the targets use. The language wasn't harmonized that all of the audience found in that region can hear. They may not understand the words or phrases clearly resulting in inappropriate use of languages and misinformation. On the other hand, the messenger wasn't selected appropriately because she is not popular in that region. The messenger is the person in the message who delivers information, demonstrates the behavior.it helps to attract attention, Personalize, by modeling actions and consequences and make messages memorable. So that In the selecting messenger, we have to be reminded that person is credible source for our audience .celebrity spokesperson should be selected carefully, they should be directly associated with the message and practice desired health habits or popular on that local because they will use using similar language and appropriate approach, local people can easily win the acceptance of their community than strangers.

Information design

It doesn't use bulleted or number list in the spot that describes the list of the first 100days .using bulled or listed can help the reader to separate them.

The setting of the spot didn't characterize the local context of the region .as it doesn't segment the audience as urban and rural it should imitate the target audience who live in urban and rural. Otherwise, the mother who resides in rural may think the message wasn't for her. Because it doesn't reflect of her living style.

Part B

It includes feeding practice recommended in the first 1000 day such as timely initiation of breastfeeding, exclusively breastfeeding, complementary feeding and the like .at the end of every spot it tries to mention the importance of proper feeding practice in the first 1000day.

In the spots, it tries to show the complementary feeding practice. The food types that a child should feed .but the picture of the food types don't take consideration all the audience lifestyle. When one mother saw the spot even if she had access of getting the meat may think uncertainty i.e. the one she has mayn't seem like that seen on the spot so she may think the meat, she buys is not appropriate.

Part C

The spots didn’t use numbers at all .if they use numbers people may easily understand the extent of the problem for example about 1 in 8.

Part D

It tries to explain the nature of the problem .stating children at an early age will more likely to be affected. It also addresses the important and risk of proper feeding practice. But it didn't use numeric risk which is important to make the intended message more clearly about it.

6. Discussion

Currently, Ethiopia is working toward reduction of stunting to ensure this there is need to promote feeding practice recommended in the first 1000 days in addition to other intervention. This study was conducted to assess the effect of 1000 day mass media campaign on the feeding practice among mothers of under two years children in Mekelle city.

Mass media continues to be used widely to promote public health messages, raise awareness, changing the attitude and encouraging adoption of healthy behavior. Exposure is the critical first step to increasing awareness of the recommended practice that may influence an individual to adopt a particular behavior (or change a behavior). This will happen if target audience exposed well –coordinated and aligned behavior change communication from different channels such as mass media (32).

In this study, Exposure to 1000 days spot in the previous 12 months was 47.3 %. This was assessed by asking the mothers whether they had heard or seen the spot. Those who were exposed to the spot from TV and radio were 88.1% and 11.9% respectively. TV was one of the most reaching communication channels for the campaign.

The exposure was significantly associated with the ownership of TV /radio in the household. Since the access to radio and TV is very good in urban setting it could serve as a medium for providing health information to communities. This had also been seen in other behavioral change campaigns (38,39).

We can also maximize the reach by monitoring air times. One way of determining whether the intended audience was reached by the message is by increasing frequency. This has been used in different mass media campaign (50,55). Finding from this study, monitoring and evaluation mechanism for the spot wasn't applied. The monitoring mechanism spot was informally counted and evaluation wasn't planned at all.

Doing need assessment prior to the campaign helps to pick the issues that need to be dealt with in messages, to develop a tailored message and moreover assess the current beliefs, practices and also helps to avoid costly mistakes during design, production, and implementation. Our study found that need assessment prior to the development of the spot was not done. The reason might be the fact that behavior change communication has not been widely understood and implemented. Similarly, a study that assesses behavior change communication (BCC) practice

devoted to infant and young child feeding (IYCF) in low- and middle-income countries by practitioners in international development organizations have found low attention given to formative assessment(34). But doing formative assessment has been successful in the Alive and thrives IYCF projects (55).

Exposure to information does not guarantee attention to its contents. Just because a person watching television or listening radio doesn't mean that he or she grasps what specific information is presented. So assessing the target populations' ability to recall messages about the spot is an indicator of how widely the first 1000 day spots have penetrated the target audience.

A significant positive correlation was observed between recall of key message and frequency watching the TV spot. Repeated exposure to spots leads to increased awareness, knowledge, and behaviors. Study done in Burkina Faso found that increasing the frequency of the spot may have a positive impact on the exposure that by increasing the number of times of airtime the probability of exposure also increase. This may also have an effect on awareness (50). It has also been found in other studies (38,50,56,57).

Being familiar with the message may influence the probability to recall the message. The qualitative result also suggests this as it was reported that they recall the key messages easily because they are familiar.

Attitude and intention were mediated factors on the path toward engaging in the behavior. It is found there is no significant difference in attitude toward feeding practice among those who were exposed and not exposed to the spots. There should be formative research inorder to pick or choose issues that are most strategic in bringing about change. In this case, media is viewed as means of reaching a large number of the population rather as constructor and explainer of importance. The other reason may be the perception since it is highly selective according to the receiver's cognitions and values. The airing time of the spot may not be suitable for the mothers to give attention. In controversy, study in vieatname showed that exposure to mass media was associated with greater knowledge, intention, beliefs, social norms and self-efficacy about EBF than exposure to either or none of these interventions.This difference might be due to the presence of intervention integrated with mass media (58).

Even if there was no significant difference in attitude among exposure and non-exposed to the spot a positive correlation was found between attitude and frequency of watching Tv spot.

Hearing messages multiple times may influence behavior and determinant. Multiple exposures will give individuals more time to process the messages and learn about the ideas behind the behavior. This finding is similar to other mass media campaign evaluation (41,44,56,59).

In this study, attitude and intention have a negative correlation. As suggested by the Hierarchy of effect model, behavioral variables might have opposite effects on the steps involving reception of information (e.g., exposure, attention, comprehension, acquisition, memory) versus approval of or yielding to the information (60). Even if they have a good attitude there may be barriers that make it harder for them to intend to practice.

It was also found a significant difference among the exposed and non-exposed in intention to practice. It was also found in Nepal campaign which is high motivation level among target audiences post-exposure to the campaign, especially to get test (56). Since messages from Tv and radio are believed to be credible audiences might have an intention to practice what has been suggested.the other probability is that this might be that all data were self-reported, which may have inflated positive answers; those who were exposed to the spot would be motivated to report positive even if they did not intend to perform them consistently subject to social desirability bias.

From other mass media campaigns ,it has been found mass media is an effective way to persuade target audiences to adopt new behaviors or to remind them of critical information (45). From our analysis, the feeding practice appropriate to age has a positive statistically significant association with some socio-demographic characteristics such as the age of the child, the frequency of watching TV at least once a week and Ethnicity, however negatively associated with marital status.

In this study, feeding practice among those who watch Tv at least once a week will increase by 0.604 compared to those who don't watch Tv at all. Tv is one of the channels that used to disseminate health information. Those who were watched TV have a higher probability to be provided with the essential messages. This might help them to be awarded , develop intention and practice. Other studies also showed similar finding(51,57,58).

Regarding ethnicity, Tigray ethnicity has showed increase feeding practice appropriate to age by 0.536 than the others, this could be due to the reach of campaign messages in local languages. Using local language to ensure a deep understanding of content by priority audiences may be more effective (42). Feeding practice will decrease by 1.656 times among widowed mothers

compared to married mothers .It might be due to all the responsibility of the household that the mothers faced and low purchasing power since in our country most of the time husbands are the one expected to generated the income.

Exposure to the spots and appropriate feeding practice to age were significantly associated. This could be due to exposure to the spot in addition to preexisting knowledge drive them to perform the appropriate feeding practice .those who practice appropriately remember the spot and align with their pre-existing knowledge so that exposure to the spot is driving of behavior . from the qualitative study it was also revealed that the spot didn't add new information to them but it reminds to practice what they used to do. Different nutritional behavioral change has been proven mass media have an effect on the feeding practice(44,57,58,61).

Based on the clear index score the quality of the material score low which shows inadequate implementation plan for the campaign. The message needs to in a way to need and interest of audience which involves needing assessment and pretesting. Study done in jimma that assessed printed IEC materials development, production, distribution ,and utilization at different levels of health facilities found out the material development even the distribution and utilization were not aligned with the principle s of material development (37).

The qualitative data revealed that the food items seen in the spots don't take people with poor socioeconomic status into consideration. This may be due to lack of community participation and pre-testing of materials. Evidence suggests that mass media is most effective when it closely parallels the lived reality of target audiences (40). For this reason, it is essential to work with communities, local writers, actors, and artists to develop and produce mass media programming. We can sustain adoption of optimal feeding practice by disseminating the message that assists in overcoming barrier rather than disseminating basic knowledge.

Messenger is the person that convinced about the behavior. If the messenger was credible, equal (resemble the target audience) and attractive, he/she can add to the persuasive power of message (40). This has been successful in Nepal Maternal and child nutrition project(62). However, in 1000 days spots using her as messenger may have an effect on the reach of the spot. In addition language-wise, she wasn't a native speaker also the respondents mentioned she was not popular in that region. The problem in the pronunciation of some words was also found. This may hamper the credibility message and the effectiveness of the message.

In this study, it was also found that creative concepts, scripts, or script "briefs" were developed at the federal level then sent to the regional to receive feedback for the local context. Even if it was sent all the comment weren't incorporate due to the time and budget constraints. This also due to poor planning of the campaign and information gap. This gap has been seen in different communication campaigns in Ethiopia (36,37,46,63).

From the qualitative finding, it was reported the frequency airing of the spots per day and other activities were limited due to budget constraint. This may be due to the inadequate budget allocation for the program. It is also seen in other public health intervention most of the time less budget allocated for the promotion than other intervention(12). And also the cost of airtime was expensive which the same with that of beer advertisement or others which is also due to lack of supportive environment.

7. Strength and limitation

The strength of the study was using theory for the evaluation. It allowed the way through which change occurs or the point where change breakdown. It gave a clue on the effect of the 1000 day message in several steps along the communication process.

Limitation, the study relied on self-reported data. As a result, respondents may have reported that may be considered socially acceptable or healthy such as intention to feeding practice, this may introduce social desirability bias.

24 hr. Recall measure of feeding practice such as exclusive breast feeding may substantially over misclassify individuals' respondent who might have been in the opposite category if the interview takes place in another day.

Causality can't be confirmed due to the study design. And also, the study didn't use baseline thus unable to measure change before and after and also no comparison group. Contamination of communication that cannot be controlled in health communication.

8. Conclusion

In this study, the effect of the 1000 day spot has been verified using a hierarchy of effects model. Moreover, the relationship between the variables of the hierarchy-of-effects is also tested.

Martial status, the age of the child, ethnicity, the frequency of watching Tv and exposure to the spot were a predictor of feeding practice

Respondents were found to be more exposed to TV spots than radio spots. Mass media in a form of TV and radio are effective to persuade target audiences to adopt a behavior or remind them of critical information. The spots were highly liked, especially its message, and message comprehension was found to be high.

The material development didn't follow the approaches used to develop communication materials which result in poor quality of the materials. Gaps have been seen in the development of the material for the target audience i.e. there is no needs assessment, behavioural theory to develop message, community involvements,pre-test and selection of messenger.so that to deliver understandable and credible message, we have to consider source credibility, message clarity, fit the prior knowledge and duration of exposure.

Poor feeding practice, particularly insufficient breastfeeding and inadequate quantity and quality of complementary feeding, are at the root of poor nutrition among infants and young children in developing countries including Ethiopia. Although the media have done a significant contribution to feeding practice, there is still more to be done with respect to affecting behavior change. But this can happen only when we develop effective communication approached based on the proven principles.

9. Recommendation

Based on findings from the study the following recommendations have been through:

- Need assessment should be conducted prior to every program implementation in order to have cautious understanding determinants of the feeding practice in the first 1000 days and access to media in the mass media campaign.
- Since the reach highly depends upon the media exposure.so that future campaign should uptake more popular a channel that the audience preferred.
- Meanwhile, behavioral change intervention is an input for change there should be proper allocation of budget for implementation.
- It will be important to use the theory of behavioral change in order to create appropriate Message strategies as well as in choosing the right channel to place the messages
- Pretesting should be done for all campaign materials in .it helps to ensure which message are most relevant to target audience also ensure the comprehension of the message.
- The community must be involved in the development, implementation, and evaluation of mass media campaigns. Campaigns must be informed by communities' knowledge of "what works" in their communities.
- There should be a plan for ongoing monitoring and summative evaluation in order to ensure appropriate outcomes are attained.
- Since the study design couldn't show causality, in future studies using a strong design like quasi-experimental studies may be helpful to show the effect of the campaign and reverse causality.

Reference

1. WHO | Malnutrition [Internet]. WHO. World Health Organization; 2017 [cited 2017 Sep 24]. Available from: http://www.who.int/mediacentre/factsheets/malnutrition/en/#.WceAi6LNW_0.mendeley
2. Maternal and Child Nutrition study Group. Executive Summary of The Lancet Maternal and Child Nutrition Series. Lancet. 2013;12.
3. Black RE, Victora CG, Walker SP, Bhutta ZA, Christian P, de Onis M, et al. Maternal and child undernutrition and overweight in low-income and middle-income countries. Lancet. 2013 Aug;382(9890):427–51.
4. Coha. The Cost of hunger in Ethiopia:The Social and Economic Impacts of Child Undernutrition. 2013;
5. Kathryn G. Dewey and Khadija Begum. why stunting matters ,A&TTechinical Breif. (2).
6. Save the children. Nutrition in the First 1 , 000 Days:State of the World's Mothers report. 2012.
7. Federal Ministy of Health. Federal Democratic Republic of Ethiopia National Nutrition. 2016;(July).
8. Wakefield MA, Loken B, Hornik RC, Cunningham C, Thompson P, Owusu-Ofori S. Use of mass media campaigns to change health behaviour. Lancet (London, England). 2010 Oct 9;376(9748):1261–71.
9. FMOH. Nutrition case team annual report.
10. Bhutta ZA, Das JK, Rizvi A, Gaffey MF, Walker N, Horton S, et al. Evidence-based interventions for improvement of maternal and child nutrition: What can be done and at what cost? Lancet. 2013;382(9890):452–77.
11. Newson RS, Lion R, Crawford RJ, Curtis V, Elmadfa I, Feunekes GI, et al. Behaviour change for better health: nutrition, hygiene and sustainability. BMC Public Health. 2013;13(Suppl 1):S1.
12. Federal Ministy of Health. The National Health Promotion and Communication Strategy (NHPCS, 2016-2020). 2016. 80 p.
13. Federal Ministy of Health. Health Message Harmonization:Guide for Reproductive ,Maternal ,New born and Child Health.
14. UNICEF /WHO /World Bank. Levels and Trends in Child Malnutrtion: Key findings of the 2017 edition. 2017.
15. Central Statistical Agency. Ethiopia Demographic and Health Survey 2016. Addis Ababa, Ethiopia; 2016.
16. Tigray Reginal Health Bureau. Tigray 2007 HMIS. 2007.
17. Save the children. A Life Free From Hunger,Tackling child malnutrition. 2012;116.

18. Dean S V., Imam AM, Lassi ZS, Bhutta ZA. Importance of intervening in the preconception period to impact pregnancy outcomes. Nestle Nutr Inst Workshop Ser. 2013;74:63–73.

19. de Onis M, Branca F. Childhood stunting: a global perspective. Matern Child Nutr. 2016 May 1;12(S1):12–26.

20. 1000 days P. Change a Life , Change the Future;1 , 000 Days Partnership Progress Report. 2013.

21. USAID S ave the children. Maternal Diet and Nutrition Practices and their Determinant , Formative Research Findings and Recommendations for Social and Behavior Change Communication Programming in Amhara , Oromia , SNNP , and Tigray Regions. 2014;(April).

22. Legesse M, Demena M, Mesfin F, Haile D. Factors associated with colostrum avoidance among mothers of children aged less than 24 Months in Raya Kobo district, North-eastern Ethiopia: Community-based cross-sectional study. J Trop Pediatr. 2015;61(5):357–63.

23. Hazir T, Akram D-S, Nisar Y Bin, Kazmi N, Agho KE, Abbasi S, et al. Determinants of suboptimal breast-feeding practices in Pakistan. Public Health Nutr. 2013;16(04):659–72.

24. Semahegn A, Tesfaye G, Bogale A. Complementary feeding practice of mothers and associated factors in Hiwot Fana specialized hospital, eastern Ethiopia. Pan Afr Med J. 2014;18:1–11.

25. Chowdhury NB and R. Infant and Young Child Feeding. Infant Young Child Feed N342. 2016;(January):1–5.

26. Black RE, Allen LH, Bhutta ZA, Caulfield LE, de Onis M, Ezzati M, et al. Maternal and child undernutrition: global and regional exposures and health consequences. Lancet (London, England). 2008 Jan 19;371(9608):243–60.

27. Republic FD. Health sector transformation plan-I annual performance report EFY 2008 (2015/2016) 1. Vol. 2008. 2016.

28. National Center for Chronic Disease Prevention and Health Promotion. Making Health Communication Programs Work. 2013.

29. Benjamin V.Lozare , PHD, Douglas Storey , P.H.D and Micheal Bailey M. The Leadership in Strategic Health Communication:Making aDifference in Health Develpoment. 2016.

30. SNV. Behaviour Change Communication Guidelines WASH. 2016.

31. FMOH. Health promotion material development. 2016.

32. Noar SM. A 10-year retrospective of research in health mass media campaigns: Where do we go from here? J Health Commun. 2006;11(1):21–42.

33. World Health Organization 2017. WHO Strategic Communication Framework Purpose. 2017;56.

34. Pelto GH, Martin SL, Liere M Van, Fabrizio CS. The scope and practice of behaviour change communication to improve infant and young child feeding in low- and middle-income countries : results of a practitioner study in international development organizations. Matern Child Nutr. 2015;1–16.

35. Rronald E.Rice and Charels K. Atkin. Theory and Principles of Public Communiction Campaigns. In: Public Communiction Campaign. 4th ed. 2012. p. 3–19.

36. Sale W. Evaluation of MassMedia Message in the Prevention and Control OF HIV / AIDS. Addis Ababa University; 2004.

37. Birhanu Z, Godesso A, Jira C, Morankar S. Assessment of Production and Distribution of Printed Information Education Communication (IEC) Materials in Ethiopia and Utilization in the Case of Jimma Zone, Oromiya National Regional State. Ethiop J Health Sci. 2011;21(Suppl 1):77–83.

38. Kaufman MR, Harman JJ, Smelyanskaya M, Orkis J, Ainslie R. "Love me, parents!": impact evaluation of a national social and behavioral change communication campaign on maternal health outcomes in Tanzania. BMC Pregnancy Childbirth. 2017;17(1):305.

39. Sanghvi T, Haque R, Roy S, Afsana K, Seidel R, Islam S, et al. Achieving behaviour change at scale : Alive & Thrive ' s infant and young child feeding programme in Bangladesh. Matern Child Nutr. 2016;12(1):141–54.

40. Menon P, Nguyen PH, Saha KK, Khaled A, Kennedy A, Tran LM, et al. Impacts on Breastfeeding Practices of At-Scale Strategies That Combine Intensive Interpersonal Counseling, Mass Media, and Community Mobilization: Results of Cluster-Randomized Program Evaluations in Bangladesh and Viet Nam. PLoS Med. 2016;13(10):1–28.

41. Ministry of Health Guatemala, PASMO P. Evaluation of the Family Planning and Law Campaign | The Health COMpass [Internet]. [cited 2017 Oct 27]. Available from: http://www.thehealthcompass.org/project-examples/evaluation-family-planning-and-law-campaign

42. Fishbein M, Yzer MC. Using Theory to Design Effective Health Behavior Interventions. 2003.

43. Alive & Thrive. Strategic design of mass media: Promoting Breastfeeding in Vietnam. 2014.

44. Monterrosa EC, Frongillo EA, Gonz T, Villanueva MA, Thrasher JF, Rivera JA. Scripted Messages Delivered by Nurses and Radio Changed Beliefs , Attitudes , Intentions , and Behaviors Regarding Infant and Young Child Feeding in Mexico 1 – 3. 2013;(C).

45. International DM. Mass Media: The Evidence Base. Vol. 6069322. 2012.

46. Eshetu Gurmu and Dula Etana. The Impact of Mass Media on Women's Reproductive Health Behaviour in Ethiopia. 2015;1–4.

47. Thrive A. Mass Communication .Infant and young child feeding at scale. 2014.

48. Menon P, Nguyen PH, Saha KK, Khaled A, Sanghvi T, Baker J, et al. Combining

Intensive Counseling by Frontline Workers with a Nationwide Mass Media Campaign Has Large Differential Impacts on Complementary Feeding Practices but Not on Child Growth : Results of a Cluster-Randomized Program Evaluation in Bangladesh 1 – 3. J nutrtion. 2016;(2):1–10.

49. Head R, Murray J, Sarrassat S, Snell W, Meda N, Ouedraogo M, et al. Viewpoint Can mass media interventions reduce child mortality ? Lancet. 2015;6736(14):1–4.

50. Murray J, Remes P, Ilboudo R, Belem M, Salouka S, Snell W, et al. The Saturation+ Approach to Behavior Change: Case Study of a Child Survival Radio Campaign in Burkina Faso. Glob Heal Sci Pract [Internet]. 2015;3(4):544–56. Available from: http://www.ncbi.nlm.nih.gov/pubmed/26681703%5Cnhttp://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=PMC4682581

51. Ali D Subandoro A, Bamezai A, Rawat R, Menon P. TM. Alive & Thrive Baseline Survey Report 2011: Ethiopia. 2011;

52. CSA. CSA Mekelle population data. 2009.

53. CDC. CDC Clear Communication index. 2014.

54. WHO. Indicators for assessing infant and young child feeding practices Definitions. 2007.

55. Sanghvi T, Jimerson A, Hajeebhoy N, Zewale M. Tailoring communication strategies to improve infant and young child feeding practices in different country settings. 2013;34(3):169–80.

56. FHI360. Reach and Recall study of PPTCT Campaign by NACO, India, September 2014, New Delhi: 2014.

57. Mashreky SR, Rahman F, Rahman A, Talab A, Rahman Z. Role of mass media in increasing knowledge and practices of mothers on IYCF : Findings from a community trial in rural Bangladesh. 2015;5(1):18–24.

58. Naugle DA. The Evaluation of a Mass Media Campaign to Promote Exclusive Breastfeeding in Vietnam. 2016.

59. Hampson K. Final Report : Her Farm Radio in Ethiopia , Malawi , Tanzania and. 2017;(June).

60. Bauman A, Bowles HR, Huhman M, Heitzler CD, Owen N, Smith BJ, et al. Testing a Hierarchy-of-Effects Model Pathways from Awareness to Outcomes in the VERB ™ Campaign. 2008;34:249–56.

61. Lamstein; S, Stillman; T, Booher; PK, Aakesson; A, Collaiezzi; B, Williams; T, Beall; K and AM. Evidence of Effective Approaches to Social and Behabiour Change Communication for preventing and Reducing Stunting and Anemia. Syst Lit Rev. 2014;(August):116.

62. USAID Nepal. Suaahara Radio Program Design Document. Vol. 1. 2014.

63. Kassaye F. Addis Ababa University school of Graduate Studies Health Communication in Ethiopia a case study of tackling. 2006.

Annexes

Annex 1: Subject information sheet

Addis Ababa University

School of public health

Hi, my……I am here on behalf of Yordanos Tadesse. I here to have an interview with you for the study that she is being conducted on the effect of 1000 days message which is disseminated through TV /radio in Mekelle City for the partial fulfillment of master in Health Promotion and Health Education in Addis Ababa University. The aim of this study is to assess the effect of the 1000days message .so it will provide critical insight into the role of mass media in nutritional and another public health issue.

Your participation in this study is voluntary .you may answer all the question or not answer the question you don't want and also you have a right to withdraw the interview at any time without giving reason .your identity or other personal information you give us in this study would be anonymous. There is no risk or harm for participating in the study .there is no direct benefit you derive from the study.

However, the study could provide valuable information that will help guide planners strength design of further media intervention in public health issue. The interview will take about 20 min.

If you need any further information or explanation regarding this study, you can have this address to contact

Name Yordanos Tadesse

Tel no – 0910991570

E-mail – yodatad @gmail.com

Do you have any questions?

Annex 2: Informed consent

Based on the understanding of the information I gave you, are you willing to participate in this study? A. Yes B. No

1. If yes, continue the interview. 2. If no, skip to the next participant by writing reasons for his/her refusal.

Informed consent Certified by:

Respondent's signature ----------Date----------

Interviewer: Name---------- Signature----------

Questionnaire number----------

Date of interview----------Time started----------Time Completed----------

The result of the interview:

1. Completed
2. Respondent not available
3. Refused
4. Partially completed

Checked by: Supervisor: Name _____ Signature_____

Annex 3: English version of Questionnaire

Section A: Identification

Code ……. Sub-city…… kebele name …….

Name of the interviewer…….. Name of respondent …….

Date of the interview …….

Time started ……..finished ……..

Section B-Babies biodata

I would like to begin by asking you questions about you and your baby background.

No	Question	**Categories**	
101	Name of the child		
102	Sex of the child	Female…….1 Male…….2	
103	Date of the birth (Day, Month, Year)		
104	Age of the child in month		

Section C: health status of the child

No	**Question**	**Categories**	**Skip**
201	Has (Name) been ill with any of the three (diarrhea, cough or fever) any time in the last 1 week?	Yes…….1 No……...2	If yes skip to 301 No stop the interview here

Section D– maternal and household socioeconomic and demographic characteristics

No	Questions	Categories	Skip
301	What is your relation to (NAME)	Biological mother……1 Care giver…….2	
302	Age (in years) ***IF RESPONDENT DOES NOT KNOW, ASK FOR YEAR AND ESTIMATE.***		
303.	Marital status	Single……..……1 Married…….……..2 Divorced…….……3 Widow…….……...4	

304.	What is your religion?	Orthodox……1 Catholic……..2 Protestant…..……..3 Muslim……4 Traditional…….....5 Other (specify)_____…..77	
305	What is your ethnicity?		
306.	What is the highest level of school you attended?	None……1 No formal education, Read and write…….……2 Primary……3 Secondary……4 Technical/vocational…….……..5 Higher(specify)_____…..6	
307.	What do you do for a living (occupational status) ***DO NOT READ OUT*** ***SINGLE RESPONSE*** ***IF MORE THAN ONE RESPONSE IS GIVEN, PROBE TO SELECT THE MOST CURRENT STATUS WHERE MOST OF HER INCOME IS DERIVED FROM.***	Government employee……1 Private employee…….2 Merchant……..3 Daily laborer……4 Farmer……..5 Housewife……6 Other (specify)_____……77	
308.	How much is your average household income in a month?		
309.	How many under two years' children do you have?		
310.	Do you have a functional TV?	Yes……1 No……..2	
311.	Do you have a functional radio?	Yes……1 No……..2	
312.	What is your preferred source for health information? ***CIRCLE ALL MENTIONED.*** ***DO NOT READ.***	RADIO……...1 TELEVISION……2 NEWSPAPER OR MAGAZINE……3 PAMPHLET/POSTER/LEAFLETS…..…4 COMMUNITY EVENT……....5 COMMUNITY CONVERSATION…….....6	

		HEALTH EXTENSION WORKER…..... 7 HEALTH DEVELOPMENT ARMY…..…8 OTHER HEALTH PROFESSIONALS……9 FAMILY/FRIENDS/RELATIVES…….....10 MOBILE TEXT……..11 OTHER (SPECIFY)_____…….77 DON'T KNOW……..99	

Section E. Exposure

No	Question	Categories		Skip
401	What media is more preferable to you?	TV……..…1 Radio…….……2 Printed materials……...3 Other (Specify)_____……77		
402	How often do you watch TV?	ALMOST EVERYDAY……..1 AT LEAST ONCE A WEEK……2 LESS THAN ONCE A WEEK……3 NOT AT ALL ……..……4		
403	How often do you listen to the radio?	ALMOST EVERYDAY……...1 AT LEAST ONCE A WEEK……..2 LESS THAN ONCE A WEEK……3 NOT AT ALL……..4		
404	In the past 12 months, have you seen any information about 1000 day's nutritional behavior?	Yes……..1 No……2		If no skip to question 601
405	From which media have you seen /heard the information?	TV……..1 Radio …….……2 Both……..……..3 Other (specify)_____…….77		
406	How often have you received the information from the source mentioned above? ***(Ask separately for radio /TV)***	TV _____	Radio _____	

407	Do you think the time was convenient for you?	Yes…….1 No……..2	

Section F. Recall of message

No	Question				Skip
501	If you heard/see, what was the main message? (Multiple answers are possible)	Extra meal during pregnancy ……1 Early initiation of breastfeeding…….2 Exclusive breastfeeding……..3 Timely initiation of complementary feeding…..4 Frequency of complementary feeding ……...…5 Diet diversity of complementary feeding…..….6 About hygiene(personal and environmental)……...7 Other (Specify)_____----------.77			
502	Did you see/hear	Yes	No	Don't know	
1	Importance of taking good care of feeding in the first 1000 days of life	1	2	99	
2	Extra meal during pregnancy	1	2	99	
3	Take iron folate and deworming during pregnancy	1	2	99	
4	Rest during pregnancy	1	2	99	
5	Early initiation of breastfeeding	1	2	99	
6	Giving colostrum	1	2	99	
7	Avoid pre- lacteals	1	2	99	
8	Exclusive breastfeeding	1	2	99	
9	Continuation of breast feeding up to 2 years	1	2	99	
10	Diversity of complementary food	1	2	99	
11	Frequency of giving complementary food	1	2	99	
12	About hygiene(personal and environmental)	1	2	99	
13	Husband support	1	2	99	

Section G – Feeding Practice of children under two years

No	Question		Skip
601	Is (NAME) ever breastfeed?	Yes……..…..1 No……2	If no Skip to question 605
602	How long after birth did you first put (NAME) to the breast?	Immediately(within 1hr)…..….1 Between 1-23 Hours……..…2 More than 23hour…….3 Don't know……..99	
603	was (NAME) feed with the first yellowish milk (Colostrum)?	Yes ……..1 No…….2 Don't know…….……99	
604	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	Yes ……..1 No…….2 Don't know…….……99	If no skip to question 606
605	What was given (NAME) to drink?	MILK (OTHER THAN BREAST MILK)……..……..1 PLAIN WATER……2 SUGAR OR GLUCOSE WATER……3 SUGAR-SALT-WATER SOLUTION…….4 FRUIT JUICE……..5 INFANT FORMULA……..6 TEA……..7 HONEY……8 FRESH BUTTER…….9 OTHER (SPECIFY)_____…77	
606	Are you still breastfeeding (NAME)? ***Ask if she is biological mother***	Yes…….1 No……..……2	If no skip to question 609
607	Was (NAME) breastfeed yesterday during day or night?	Yes ……1 No……..……2	

608	How many times did (NAME) breastfeed day and night?	No of times _____ Dont know ……99			
609	Next, I would like to ask you about some liquid that (NAME) may have had yesterday during the day or at night. Did (NAME) have any (item on the list)?Read the list of liquid starting with "Plain water"	Yes	No	Don't know	
1	Plain water	1	2	99	
2	Infant formula	1	2	99	
3	Animal milk	1	2	99	
4	Juice or juice drinks	1	2	99	
5	Broth	1	2	99	
6	Yogurt	1	2	99	
7	Thin porridge	1	2	99	
8	Tea or coffee with milk	1	2	99	
9	"Abake"				
	Any other water-based liquids	Specify_____			
Asking about when what, how often do (NAME) eat any solid, semi-solid, or soft foods					
610	At what age did you start giving complementary feeding?	……..			If the child is less than the age of 6 months skip to question 616
611	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night?	1. Yes 2. No			If no skip to question 616
612	what kind of food	Yes	No	Don't know	
1	Injera, porridge, bread, rice, noodles, or other foods made from grains, such as tef, oats, maize, barley, wheat, sorghum, millet or other grains	1	2	99	
2	Fortified baby food, like Fafa, Hilina, Cerilak, Cerifam,Habeney, Mother's Choice	1	2	99	
3	Pumpkin, carrots, squash, or sweet	1	2	99	

	potatoes that are yellow or orange inside				
4	White potatoes, white yams, bulla, kocho, manioc, cassava, or any other foods made from roots	1	2	99	
5	Any dark green leafy vegetables like kale, spinach or amaranth leaves	1	2	99	
6	Ripe mangoes, ripe papayas, or [insert other local vitamin A-rich fruits]	1	2	99	
7	Any other fruits or vegetables	1	2	99	
8	Liver, kidney, heart, or other organ meats	1	2	99	
9	Any meat, such as beef, pork, lamb, goat, chicken, or duck	1	2	99	
10	Eggs	1	2	99	
11	Fresh or dried fish, shellfish, or seafood	1	2	99	
12	Any foods made from beans, peas, lentils, nuts or seeds	1	2	99	
13	Cheese, yogurt, or other milk products	1	2	99	
14	Any oil, fats, or butter, or foods made with any of these	1	2	99	
15	Any sugar foods such as chocolates, sweets, candies, pastries, cakes, or biscuits	1	2	99	
16	Condiments for flavor, such as chilies, spices, herbs, or fish powder	1	2	99	
17	Foods made with red palm oil, red palm nut, or red palm nut pulp sauce	1	2	99	
18	Other foods	_____			
613	How many times did (NAME) eat solid, semisolid, or soft foods yesterday during the day or at night?	Number of times _____ Don't know…….99			

Now I will ask you about your feeding practice while you were pregnant

614	Did you take any extra meal while you were pregnant/lactating? ***(Ask if she is biological mother)***	Yes ……..1 No……2 Don't know …….99	Skip this section if biological mother is not available
615	During pregnancy, did you take any iron supplements?	Yes ……..1 No……2 Don't know …….99	If No skip to 619

616	How many times did you take an iron supplement?	A number of days or tablet_____ Don't know……..99	
617	During pregnancy, did you take a deworming tablet?	Yes ……..1 No……2	

Section H: Attitude

I will now read you a few statements. There is no wrong or right answer. Do you strongly disagree, disagree, agree or strongly agree with the following statements.

No	Question	Code	Skip
701	First milk (colostrum) is not very nutritious to the baby.	Strongly agree …….1 Agree ……...2 Neutral…….…3 Disagree……4 Strongly disagree…..…5	
702	Exclusive breastfeeding in the first six months will lead to improved child health status.	Strongly agree …….1 Agree ……...2 Neutral…….…3 Disagree……4 Strongly disagree…..…5	
703	Giving at least 4-5 meals (including 1-2 snacks) per day for a child is appropriate.	Strongly agree …….1 Agree ……...2 Neutral…….…3 Disagree……4 Strongly disagree…..…5	
704	Breastfeeding a child up to 2 years in addition to complementary feeding is not important.	Strongly agree …….1 Agree ……...2 Neutral…….…3 Disagree……4 Strongly disagree…..…5	
705	An extra meal during pregnancy is essential for fetal growth.	Strongly agree …….1 Agree ……...2 Neutral…….…3 Disagree……4 Strongly disagree…..…5	

Section I: Intention to act

I will now read you a few statements. There is no wrong or right answer. Do you strongly disagree, disagree, agree or strongly agree with the following statements.

No	Question	Code	Skip
801	I intend to exclusively breastfeed my child up to 6month.	Strongly agree …….1 Agree ……...2 Neutral……..3 Disagree……..…4 Strongly disagree……..…5	
802	I intend to breastfeed my child up to 2years	Strongly agree …….1 Agree ……...2 Neutral…….….3 Disagree……4 Strongly disagree……..…5	
803	I intend to feed my child three meal and two snacks per day	Strongly agree ……..…1 Agree ……..…..2 Neutral…….…..….3 Disagree……..…4 Strongly disagree……5	
804	I intend to feed my child from the four group of food.	Strongly agree ……..….1 Agree ……..…...2 Neutral……..….3 Disagree…….……4 Strongly disagree…..…….…5	
805	I intend to eat extra meal while I am pregnant	Strongly agree ……..….1 Agree ……...2 Neutral……..….3 Disagree……4 Strongly disagree…….....…5	

Thank you for participating

Annex 4: English version interview guide for key informant interview

Background Code _____

Date: _____ Name of Office_____

Sex: _____ Position /responsibility in the office: _____

Educational background _____Work experience _____

Introduction: Good morning/afternoon .My name is _____.I am MPH student of HP&HE in Addis Ababa University interested in learning more about material &message development. One of the purposes of the study is to explore the material and message development of the 1000 days nutritional behavior that is disseminated in the TV/Radio. I am here to discuss with you about the development process.

I am going to take notes so that I can remember all of your important comments, but your name or personal details won't be attached to anything you share with me. You can stop the interview at any time or skip any questions you do not want to answer. Do you have any questions for me? If No, Is it okay to continue?

901. What was the communication objective?

902. How was it done? Probe was there a need assessment?

903. Who is the target audience?

904. Was there community involvement in formulating strategies for addressing the nutritional message on 1000day?

905. was there professional involvement in developing the materials or messages? Specify those professionals having experience in the field and professionals in other fields.

906. Do you pretest the messages or materials? If yes how? If no why?

907. What were the criteria to select the messenger? Is actor trained on how to prepare/ transmit the message?

908. What is the process involved in preparation and production of the programs?

909. What challenges have been faced in communicating the message? What mechanisms have you employed to overcome those challenges?

910. How is the monitoring mechanism?

911. How do you disseminate? Is there a plan for it?

912. Do you have any additional thing you would like to add?

Thank you for participating

Annex 5: English version of In-depth interview with mothers under two

Code: _____

Date of Interview: _____Material: Radio / TV_____

Background:

District: _____Age:_____ Marital status: _____

No of children: _____Educational status: _____

Occupation: _____

Introduction: Good morning/afternoon. My name is _____. I am MPH student of HP&HE in Addis Ababa University. I am here to discuss with you on the TV / radio spot developed by the federal ministry of health. I would like to hear your honest opinions about the spot that I will show you.

There is no right or wrong answer to the questions I'm going to ask. Please keep in mind that your participation in this discussion is completely voluntary. If for any reason you wish to leave the discussion, you may do so.is okay to continue the discussion?

1001. What do you think it is about?

1002. To whom do you think this message is directed? Why?

1003. Is it easy to understand? If no why?

1004. Is there anything you like? If yes what aspect of it you like

1005. Is there anything you dislike? Why?

1006. Is there anything in the message that is difficult to believe?

1007. What do you think this message is asking you to do?

1008. What benefit do you think you can receive if you adopt the recommended behavior?

1009. What new/different information did you get?

1010. Would you share this new information with others? Why/why not?

1011. Do you think people in your community will think differently if they listen/see this spot? How?

1012. Is there any additional thing you would like to add?

Thank you for participating

Annex 6: CDC clear index score sheet checklist

Checklist for the assessing 1000 days spots

	Question	Score	
	PART A: Core	**Yes**	**No**
1	Does the material contain one main message?		
2.	Is the main message at the top, beginning, or front of the material?		
3.	Is the main message emphasized with visual cues?		
4.	Does the material contain at least one visual that conveys or supports the main message?		
5.	Does the material include one or more calls to action for the primary audience?		
6.	Do both the main message and the call to action use the active voice? If only the main message or only the call to action uses the active voice, answer		
7.	Does the material always use language the primary audience would use?		
8.	Does the material use bulleted or numbered lists?		
9.	Is the material organized into chunks with headings?		
10	Is the most important information the primary audience needs to be summarized in the first paragraph or section?		
11	Does the material explain what authoritative sources, such as subject matter experts and agency spokespersons, know and don't know about the topic?		
	Total __9_ / 11		
PART B: Behavioral Recommendations			
12	Does the material include one or more behavioral recommendations for the primary audience?		
13	Does the material explain why the behavioral recommendation(s) is important?		
14	Does the behavioral recommendation(s) include specific directions about how to perform the behavior?		
	Total ___3__ / 3		
Part C: Numbers			
15	Does the material always present numbers the primary audience uses?		

Annex 7: Tigrigna version of subject information sheet

ኣብ ኣዲስ ኣበባ ዩንቨርስቲ

ክፍሊ ትምህርቲ ማህበራዊ ጥዕና

ተሃተቲ ሓበሬታ ቐጊ

ሰላም ከመይ ኢኹም፤ ኣነ ሽመይ.....ዝተብሃልኹ ናይዚ መፅናዕቲ እዚ መካየዲት ዝኾነት ተምሃሪት ዮርዳኖስ ታደስ ብምውካል ዝመፃኹ እዩ። ተምሃሪት ዮርዳኖስ ታደሰ ኣብ ኣዲስ ኣበባ ዩንቨርስቲ ክፍሊ ትምህርቲ ማህበራዊ ጥዕና፤ ተምሃሪት ካልኣይ ዲግሪ ሄልዝ ፕሮሞሽንን ሄልዝ ኢዱኬሽንን እንትኾን ‹ንሓደ ህፃን ኣካላዊን ኣእምራዊን ዕብየት ወሰንቲ 1000 መዓልትታ”ብዝብል ብሬድየን ቴሌቪዝን ኣብ ኣብ ወረዳ ሳምረ ሳሓርቲ ዝቕልሑ መልእኽትታት ዘዕብሮ ለውጥታት ብዝምልከት ንካልኣይ ዲግሪ ከም መማልኢ ክኾና መፅናዕቲ ኣብ ምክያድ ትርከብ። በዚ ድማ ኣነ ኣብዚ ዝተረኽብኹሉ ቀንዲ ዕላማ ዮርዳኖስ ኣብ እተካይዶ መፅናዕቲ ብኣካል ተረኺበ ቃለ መሕትት ንምክያድ እዩ።

ቀንዲ ዕላማ እዚ መፅናዕቲ ኣብ ወረዳ ሰሓርቲ ሳምረ ብመራኽብቲ ሓፋሽ (ራድዮ ይኹን ቴሌቪዥርን) ወሰንቲ 1000 መዓልትታት ብዝል ዝቕላሕ መልእኽቲ ኣብቲ ነባሪ ማሕበረሰብ ዘሕደሮ ዕልዋ ብምፍታሽ ኣብ ስርዓት ኣመጋግባን ካለኦት ጉዳያት ጥዕናን ግደ መራኽብቲ ሓፋሽ ንምፍታሽ እዩ።

ብዚ ዝቐረበ መጠይቕ ዘድሊ ሓበሬታ ንምእካብ ኣብ ዝግበር ኽይዲ ንሰን ዝሀበኦ ኩሉ ዓይነት ሓበሬታ ኣብ ስናይ ፍቓደን ተደረኽ እዩ። ከምኡውን ካብ ሓተቲ ንዝቐርቡ ሕቶታት ንምምላስን፤ሓሳበን ቀይረን ኣብዚ ቓለ ምሕትት ዝህልወን ተሳትፎ ንምቁራፅ መሰለን ሕሉው እዩ። ዘጀረፃሉ ምክንያት ናይዚይምግላፅ መሰለን እዉን ሕሉው እዩ።

እዚ ቓለ መሕተት ነዚ መፅናዕቲ እዚ ጥራሕ ዝውዕል ብሙኻኑ ተሳተፍቲ እዚ መፃንዕቲ ዝኾና እንህቦ ሓበሬታ ኹሉ ኣብ ዝኾነ እዋን ሚስጢሩ ሕሉው ምኻኑ፣ ኣብ ዝህልወን ተሳትፍ ፍሉይ ተረባሕነት ከምዘይህልወንን ዝህበኦም መልስታት ምንም ዓነት ሳዕቤን ከምዘየስዕቡለንን ብትሕትና ክገልፅ ይፈቱ።

ኮይኑ ግና ውዕኢት እዚ መፅናዕቲ ዝተፈላለዩ ኣካላት ኣብ ጉዳያት ማሕበረሰብ ጥዕና ግደ መራኽብቲ ሓፋሽ እንታይ ክኸውን ኣለዎ ኣብ ዝብል ጉዳያት ትልምታትን ፖሊሲታትን ክሕንፅፅን ከዋድዱን ኣንፈት ዝሕብር እዩ ።
እዚ ቓለ መሕተት ኣስታት 20 ደቒቕ ዝወስድ እንትኾን እዚ መፅናዕቲ ብዝምልከት ንዝህሉ ዝኾነ ዓይነት ሕቶ፣ ሓበሬታ፣ይኹን መብራህርሂ በዚ ዝስዕብ ኣዳራሽ ምውካስ ዝከኣል ምኻኑ ክገልፅ ይደሊ።

ሽም፤መካየዲት እዚ መፅናዕቲ፡- ዮርዳኖስ ታደስ

ስልኪ ቁፅሪ — +251-9-10 99 15 70 (ኢ-ሜል) — yodatad @gmail.com

ዝኾነ ዓይነት ሕቶ ዶ ኣለወን?

Annex 8: Tigrigna version of subject informed consent

መረጋገፂ ሰነድ ፈቓድ፤-

በቲ ልዕል ክብል ዝቐረበለን ሓበሬታ መስረት ኣብዚ ቓለ መሕተት እዚ ንክሳተፉ ፍቓደኛ ድዩ?

A. እወ B. ኣይፋሉን

1. ዝህበኡ ምላሽ <u>እወ</u> ዝብል ተኾይኑ ናብ ሪጋ ቐፅሪ 2 ሕለፍ/ፊ፤ መልሰን <u>**ኣይፋሉን**</u> ዝብል እንተኾይኑ ድማ <u>ኣይፋሉን</u> ዝበላሉ ምኽንያት ብምግላፅ ንብ ዝቐፅል ተሓታቲት ስገር/ስገሪ

ኣብዚ ቃለ መሕትት መፅናዕቲ ብፍቓደን ዝሳተፉ ምኻነን ዘረጋግፅ ሕጋዊ ስምምዕ:

ክታም መላሲት(ተሓታቲት) ----------ዕለት----------

ሽም ሓታቲ:---------- ክታም ----------

ቐፅሪ(ኮድ) መጠይቐ ----------

ቓለ መሕተት ዝተኻየደሉዕለት----------ዝጀመረሉ ሰዓት----------ዝተፈፀመሉ ሰዓት----------

ውፃኢት ቓለ መሕተት:

1. ሙሉእ ብሙሉእ ተመሊሱ
2. ተሓታቲት ኣይተረኽበን/ትን
3. ተነፊጉ
4. መሊኡ ኣይተመለሰን

ዘረጋገፀ/ት ኣካል:

ሽም መተሓባበሪ _____ክታም_____

Annex 9: Tigrigna version questionnaire

ክፋል 1: መለለዪ ድህረ ባይታ

ኮድ ……. ክፍለከተማ …… ቁሸት/ጣቢያ ……

ሽም ሓታቲ ……

እዚ ቃለ መሕትት ዝተኻየደሉ ዕለት ……

ዝጀመረሉ ሰዓት ……..……..ዘተወደኣሉ ሰዓት……..

ክፋል 2- ድሕረ ባይታ እቲ/ታ ዕሽል ዝምልከት

ሰዒቡ ኣብ ድሕረ ባይታ ዓርሰንን ዕሸል ውላደንን ዝምልከት ሕቶ ክሓተን ይደሊ

ቁ.ሪ	ዝቐረቡ ሕቶታት	ዝርዝር መልሲ	
101.	ሽም ዕሽል ውላደን		
102.	ፆታ	ኣንስተይቲ……..1 ተባዕታይ……2	
103.	ዝተወለደሉ/ትሉ (ዕለት, ወርሒ, ዓም)	ዕለት(_____)ወርሒ(_____)ዓም(_____)	
104.	ዕድመ ዕሽል ብኣዋርሕ		

ክፋል 3 — ኩነታት ጥእና እቲ/ታ ዕሽል

ቁ.ሪ	ዝቐረቡ ሕቶታት	ዝርዝር መልሲ	
201	(ሽም) ኣብ ዝነ ግዜ ኣብ ዝሓለፈ ሓደ ሰሙን ውሽጢ ከም ሰኣል፣ረስኒ ወይድማ ውጽኣት ሕምም/ዋ ነይሩ/ራ?	እወ……1 ኣይፋሉ……..2	መልሰን ኣይፋሉን ዝብል እንተኾይኑ ናብ ሕቶ ቁ.ሪ 301 ዝለል/ሊ. መልሰን እወ ዝብል እንተኾይኑ ቓለ መሕተት ኣቑረጸ

ክፋል 4 — ኩነታት ማሕበረ -ኢኮኖሚያዊ ኣደን ስድራቤትን ዝምልከት

ቁ.ሪ.	ዝቐረቡ ሕቶታት	ዝርዝር መልሲ	ቀፅል/ሊ
301.	ምስቲ/ታ ብሽም ዝተገለፀ/ት ዕሽል ዝምድነአን እንታይ እዩ?	ኣዶ……..……..1 መፅበይት……2	
302.	ዕድመአን (ብዓመት እንትግለፅ) ***(መላሲት ዕድመአን ተዘይፈሊጠንኦ ዝተወለዳሉ ዓመት/ዘመን ብምሕታ ግምት ምውሳድ)***		
303.	ኩነታት ሓዳር	ዘይተመርዐወት……..1 በዓልቲ ሓዳር……2 ዝተፋተሐት……3 ሰበኣያ ዝሞታ……4	

304.	ሃይማኖት?	ኦርቶዶክስ ተዋህዶ……..……1 ካቶሊክ……..…2 ፕሮቴስታንት……3 ሙስሊም……..4 ክባቢያዊ እምነት……5 ካልእ (ይገለፅ)_____……77	
305.	ብሄር?		
306.	ናይ ትምሕርት ደረጃኪ?	ኣይተምሃርኩን……..…..1 ስሩዕ ትምህርቲ ኣይተማሃርኩን ግን ምንባብን ምፅሓፍን ……,……..2 ቀዳማይ ብርኪ……..……3 ካልኣይ ብርኪ……..……..4 ቴክኒክን ሞያን……5 ላእላዋይ ብርኪ……6	
307.	መተሓዳደሪ?(ኩነታት ስራሕን?) ***<u>ኣብ መማረፂ ዘለዎ ኣይተንበቡለን</u>*** ***<u>ካብ ሓደ ንላዕሊ ስራሕ እተሃሊይወን እቲ ሕዚ በዋናነት ናይ ገቢ ምንጪ</u>*** ***<u>ዝኾነ ብምጥያቐ ካብቲ ዝተዋሃበ ኣማራፂ ኣክበባ</u>***	ተቐፃሪት መንግስቲ ……..……1 ውልቀ ስራሕ……..……2 ነጋዲት ……..……3 መዓልታዊ ስራሕተኛ……..……4 ሕርሻ ……..……5 እመቤት ገዛ……..……6 ካልእ (ይገለፅ)_____……..…77	
308.	ማእኸላይ እቶተን ብወርሒ እንትዕቀን ክንደይ ይከውን?		
309.	በዝሒ ትሕቲ ኽልተ ዓመት ዝኾኖም ዕሻላት /ህፃውንቲ?		
310.	ኣብ ግልጋሎት ዝርከብ ቴሌቨዥን ኣለወን ዶ?	እወ……..1 ኣይፋሉ……...2	
311.	ኣብ ግልጋሎት ዝርከብ ራዲዮ ኣለወን ዶ?	እወ ……1 ኣይፋሉን……..2	
312.	ዝመርፀአ ፍልፍ ሓበራታ ጥዕና? ***<u>ዝተገለፅ ኩሉ ኣኽባ ኣይተንብባ</u>***	ራዲዮ……..…..1 ቴሌቨዥን……..…2 ጋዜጣ……...3 በረርቲ ፅሑፋትን ፕስተራትን……..…4 ማሕበራዊ ኣጋጣምታት ……..…5 ማሕረሰባዊ መይይጥ ……....6 ሰብ ሞያ ጥሙር ጥዕና ስድራ ቤት……7 ካለኦት ጉጅለ ሰራዊት ልምዓት……...8 ካልኦት ሰብ ሞያ ጥዕና……..9 ስድራ/መሓዙት/ ዘመድ ኣዝማድ……10 ብሞባይል ኣቢሉ ዝለኣኽ መልእኽቲ……...11 ካልእ (ይገለፅ)……..77 ኣይፈልጥን……..99	

ክፋል 4 - ተጆላዕነት

ቑ.ሪ.	ዝቐረቡ ሕቶታት	ዝርዝር መልሲ	ቀዕል/ሊ
401	ንዐአን ዝምቹ ሜላ መራኸቢ ሓፋሽ እንታይ እዩ?	ቴሌቭዥርን.....1 ራዲዮ.....2 ኣብ ሕትመት ዝወዓሉ ዕሑፋት.....3 ካልእ (ይገለፅ)_____...77	
402	ኣብ መዓዝ መዓዝ እዋናት ቴሌቭዥርን ይከታተላ?	ዳርጋ ኩሉ ግዜ.....1 እንተወሓደ ኣብ ሰሙን ሓደ ግዜ.....2 ኣብ ሰሙን ካብ ሓደ ግዜ ንታሕቲ.....3 ፈፂመ ኣይከታተልን.....4	
403	ኣብ መዓዝ መዓዝ እዋናት ራድዮ የዳምፃ?	ዳርጋ ኩሉ ግዜ.....1 እንተወሓደ ኣብ ሰሙን ሓደ ግዜ.....2 ኣብ ሰሙን ካብ ሓደ ግዜ ንታሕቲ.....3 ፈፂመ ኣየዳምፅን.....4	
404	ኣብ ዝሓለፉ 12 ኣዋርሕ ኣብ ከይዲ ኣመጋገባ ኣመልኪቱ 1000 መዓልትታት ዝብል ሓበሬታ ሰሚዐን/ሪአን ዶ ይፈልጣ? (እዋን ጥንሲ፣ጥው ምጥባብ፣ተወሰኽቲ ምግብታት ህፃናትን ሓለዋ ዕራትን)	እወ.....1 ኣይፋሉን.....2	መልሰን ኣይፋሉን ዝብል እንተኾይኑ ናብ ሕቶ ቑ.ሪ 601 ዝለል/ሊ
405	እዚ ሓበሬታ ካብ ኣየናይ ከይዲ መራኸቢ ሪአንኣ/ሰሚዐንኣ?	ካብ ቴሌቭዥርን.....1 ካብ ራዲዮ.....2 ካብ ክልቲኡ.....3 ካልእ (ይገለፅ)_____.....4	
406	እዚ ሓበሬታ ንኽንደይ ዝኣክል እዋናት ሪአንኣ/ሰሚዐንኣ? ***(ንቴሌቭዥንን ንራዲዮን ፈላሊ ኻ/ኺ ሕተት/ቲ)***	ቴሌቭዥርን | ራዲዮ	
407	ኩሎም ሓበሬታታት ኣብ ዝጥዕመኒ እዋን ይቃላሕ ኢለን ዶ ይኣምና?	እወ.....1 ኣይፋሉን.....2	

ክፋል 5- ዝመሓላለፍ መልእኽቲ ኣብ ምስተብሃል ዝተመርኮ ዙ ሕቶታት

ቁ.ሪ	ዝቐረቡ ሕቶታት	ዝርዝር መልሲ			ቀዕል/ሲ
501	ዝቐርቡ ሓበሬታ ሪአን/ሰሚዐን እንተ ነይረን ቀንዲ ትሕዝቶ እቲ መልእኽቲ እንታይ ዝብል ነይሩ? ***(ብርክት ዝበለ መልሲ ምምላስ ይከኣል እዩ)***	ኣብ እዋን ጥንሲ ኣብ ዝህሊ ተወሳኺ ማእዲ.....1 ኣብ ኣጀማምራ ቀልጢፍካ ጡው ምጥዋብ ዘድህበ.....2 ክሳብ 6 ወርሒ ጡብ ጥራሕ ኣብ ምጥባው ዝብል ዘድህበ.....3 ድሕሪ6ወርሒ ንህፃውንቲ ተወሳኺ መግቢ ኣብ ምጅማር ዘድህበ.....4 ኣብቀረብ ተደጋጋሚ(ንኽንደግዘ) ተወሳኺ መግቢ ዘድህበ.....5 ኣብከይዲቀረብ ዝተመጣጣኒ ተወሳኺ መግቢ ዘድህበ.....6 ኣብ ቀረብ ማይን ውልቀ ዕራትን ዘድህበ.....7 ካልእ (ይገለፅ)_____.....77			
502	ኣብዚ ጉዳይ ሪአን/ሰሚዕን ዶ ይፈልጣ?	እወ	ኣይፋሉን	ኣይፈልጥን	
1	ኣብ መዋእል ሂወት እተን ፈለምቲ 1000 መዓልትታ ረብሓ ጥንቓቐ ዝተመልአ ስርዓት ኣመጋግባን ክንክንን	1	2	99	
2	ቀረብ ተወሳኺ ማእዲ ኣብ እዋን ጥንሲ	1	2	99	
3	ኣወሳስዳ መድሓኒት ዋሕዲ ደምን ፀረ ታለገብቲ ሓሳኩን ኣብ እዋን ጥንሲ	1	2	99	
4	ኣብ እዋን ጥንሲ ዕረፍቲ ምግባር	1	2	99	
5	ቀልጢፍካ ጡብ ምጥዋው ምጅማር	1	2	99	
6	ልግዐ ምሃብ	1	2	99	
7	ካብ ፀባ ጡብ ኣዶ ወፃኢ ከሊእ ዘይምሃብ	1	2	99	
8	ክሳብ 6 ወርሒ ፀባ ጡብ ኣዶ ጥራሕ ምጥባው	1	2	99	
9	ፀባ ጡብ ኣዶ ኽሳብ ክለተ ዓመት ምጥባው	1	2	99	
10	ቀረብ ዓይነታት ተወሳኺ መግቢ				
11	በዝሒ እዋናት ቀረብ ዝተፈላለዩ ዓይነታት ተወሰኽቲ መግቢ	1	2	99	
12	ዕርየት ሓለዋ ውልቀን ከባቢን	1	2	99	
13	ኣብ ከይዲ ኣመጋግባ ዕሸላት ሰብዓይ ንበዓልቲ ገዝኡ ክሕግዝ ይግባእ	1	2	99	

ክፋል 6 - ልምዲ ስርዓተ ኣመጋገባ ትሕቲ 2 ዓመት ዝኾኖም ህፃውንቲ

ቁ.ሪ.	ዝቐረቡ ሕቶታት	ዝርዝር መልሲ	ቀፅል/ሊ
601	(ሽም) ጡብ ጠብዩ/ያ ይፈልጥ/ትፈልጥ ዶ?	እወ.....1 ኣይፋሉን.....2	ዝተውሃበ መልሲ ኣይፋሉን ዝብል እንተኾነ ናብ ሕቶቁ.ሪ 605 ዝለል/ሊ
602	(ሽም) ምስተወለደ/ት ኣብ ክንደይ እዋኑ/ና ምጥባብ ጀሚሩ/ራ	ሽዑ ንሽዑ (ኣብውሽጢ1ሰዓት).....1 ኣብ ውሽጢ 23 ሰዓታት (1-23 ሰዓት).....2 ድሕሪ 23 ሰዓታት.....3 ኣይፈልጦን.....99	
603	(ሽም) ልግዐ ጠብዩ/ኣ ዶ?	እወ.....1 ኣይፋሉን.....2 ኣይፈልጥን.....99	
604	(ሽም) ምስተወለደ/ደት ኣብ ዝነበራ ናይ መጀመርታ 3 መዓልትታት ካብ ጡብ ኣዶ ብተወሳኪ ካሊ ፈሳሲ ወሲዱ /ዳ ዶ?	እወ.....1 ኣይፋሉን.....2 ኣይፈልጥን.....99	መልሱ ኣይፋሉን ዝብል እንተኾይኑ ናብ ሕቶ ቁሪ 606 ሕለፍ/ፊ
605	(ሽም) እንታይ ዓይነት ፈሳሲ ወሲዱ/ኣ?	ፀባ (ፀባ ጡብ ኣዶ ዘይኾነ).....1 ማይ.....2 ሽኮር(ፋሳሲ ጉሉኮስ).....3 ሽኮር፣ጨውንማይን ዝተሓወሰ.....4 ፅሚቕ.....5 ንዕሸላት ዝዳሎ ፅባ.....6 ሻሂ.....7 መዓር.....8 ሓዱሽ ጠስሚ.....9 ካልኢ (ይገለፅ)_____.....77	
606	(ሽም) ኽሳብ ሓዚ ይጠቡ/ትጠቡ ዶ? ***<u>ወላዲቱ ኣዶ እቲ/ታ ዕሸል ምኻነን ኣረጋግፅ</u>***	እወ.....1 ኣይፋሉን.....2	
607	(ሽም) ትማሊ ቀትሪ ወይ ድማ ምሸትን ጡብ ጠቡዩ/ያ ዶ?	እወ.....1 ኣይፋሉን.....2 ኣይፈልጥን.....99	ዝቐርብ መልሲ ኣይፋሉን ዝብል እንተኾነ ናብ ሕቶ ቁ.ሪ.609 ሕለፍ/ፊ
608	(ሽም) ኣብ ዕለት (ለይትን ቐትርን ሓዊሱ) ክንደይ ግዜ ጠቡዩ/ያ?	ኽንደይ ግዜ_____ ኣይፈልጥን 99	

609	ብምቕላል ዝሓቶ ሕቶ (ሽም) ትማሊ መዓልቲ (ቀትሪ ይኹን ምሸት) ካብ እዞም ዝሰኣቡ መግቢ/ፈሳሲ ሂበንኡ/ኣ ዶ ነይረን?	እወ	ኣይፋሉን	ኣይፈልጥን	
	ማይ	1	2	99	
	ንዕሸላት ዝዳሎ ዕባ	1	2	99	
	ዕባ ላሕሚ	1	2	99	
	ዕማቕ	1	2	99	
	ሾርባ	1	2	99	
	ርጉኡ	1	2	99	
	ጋዓት	1	2	99	
	ሻሂይኹን ቡን ምስ ዓባ	1	2	99	
	አባእከ	1	2	99	
	ካላኦት ፈሳሲታት	ካልእ(ይገለፅ) ……..			
ሕዚ ድማ (ሽም) መዓዝ፣ እንታይ፣ንኽንደይ እዋን ዝኣክል ዝተፈላለዩ ዓይነታት መግቢ ይምገብ/ትምገብ ዝብሉ ሕቶታት ክልዕል					
610	ዕሸል ውላደን ኣብ ክንደይ ዕድሚኡ/ዓ ተወሳኺ መግቢ ክጅምር/ክትጅምር ገይረን?	_____ ብወርሒ			ዕድመ ውላደንትህቲ 6ወርሒ እንተኾነ ናብሕቶ616ሕለፍ/ፊ
611	(ሽም)ትማሊ ቀትሪ ወይደማ ምሸት ደረቕ ይኹን ልስሉስ መግቢ ክምገብ/ክትምገብ ገይረን ዶ ነይረን?	እወ……..1 ኣይፋሉን……..2			መልሱ ኣይፋለን ዝብል እንተኾይኑ ናብ ሕቶ ቁ.ሪ 616 ሕለፍ/ፊ
612	እንታይ ዓይነት ምግቢ?	እወ	ኣይፋሉን	ኣይፈልጥን	
1	እንጀራ፣ባኒ፣ሩዝ፣ጋዓት ወይም ካልኦት ከም ዕፉን ፣ጣፍ ፣ስገም ፣ዓረስ ዝኣመሰሉ ዘራኢቲ ተዳለወ መግብታት	1	2	99	
2	ካብ ሹቕ ዝርከቡ ንህፃውንቲ ዝተዳለወ ዓይናታት መግቢ ከም ፋፋ፣ሂሊና፣ሰሪላክ፣ሐበነይ፣ሰሪፋም ካለኦት ኣዶ መሪፃ ትገዝኡም ዓይነታት ምግብን	1	2	99	
3	ዱባ፣ካሮትዱባፈረንጂ/መቁር ዱባ/ውሽጦም ቢጫ ወይ ከዓ ናይ ኣራንሺ ሕብሪ ዘለዎም ምግብታት	1	2	99	
4	ድንሽ፣መቁርድንኹሳቫ(ሱሩ ተበላዓይ ዓይነት ተኽሊ)ዝኾነ ዓይነት ስሩ ዝብላዕ	1	2	99	
5	ኣሕምልቲ	1	2	99	

6	ዝበሰለ ማንነ ፣ዝበሰለ ፓፓየ ወይካዓ(ብ ቫይታሚን ኤ ትሕዝቶ ዘለዎም ፍረምረ)	1	2	99	
7	ዝኮነ ዓይነት ፍረምረ ወይ ካዓ ኣሕምልቲ	1	2	99	
8	ፀሊም ካብዲ፣ ኩሊት፣ ልቢ ወይ ካዓ ካሊእ ብልዕቲ ስጋ	1	2	99	
9	ዝኮነ ዓይነት ስጋ ከም ናይ ከፍቲ ስጋ፣ በጊዕ፣ ጠሊ ደርሆ	1	2	99	
10	እንቛቁሑ	1	2	99	
11	ትኩስ /ዝደረቀ ዓሳ ናይ ካሊእ ባሕሪ ምግቢ	1	2	99	
12	ዝኮነ ዓይነት ምግቢ ካብ ባሎንጋ ፣ዓይነት ዓተር ብርሽን ወይ ከዓ ፉል ንፕላንፕለት ሓዊሱ	1	2	99	
13	ርእጎ፣ኣጅቦንካልኡት ውዕኢት ፀባን	1	2	99	
14	ዝኮነ ዓይነት ዘይቲ፣ ስብሒ ተስሚ ወይ ካዓ ካብዞም ዝተገለፁ ዝተሰርሑ ምግቢ	1	2	99	
15	ካብ ሽኮር ዝስራሕ ከም፣ኬክ፣ቸኮሌት፣ብስኩት፣ከረሜላ ዝኣመሰሉ መግብታት	1	2	99	
16	ምግቢ መመቀርቲ ከም ጉዕ ቅመም ቆዕላመዕሊ ወይ ከዓ ናይ ዓሳ ፓውደር	1	2	99	
17	ካብ ዘይቲ ዶማ፣ ፉል	1	2	99	
18	ካልኢ ተሎ ይገለፅ	.....			
613	(ሽም) ትማሊ (ቀትሪ ይኹን ለይቲ) ደረቕ ይኹን ልስሉስ መግቢ ክንደይ ግዘ ተመጊቡ/ባ ነይሩ/ራ	ኽንደይ ግዘ_____ ኣይፈልጥን.....99			

ሕዚ ድማ ኣብ እዋን ጥንሲ ከይዲ ልምዲ ኣመጋግበኣን እንታይ ይመስል ከምዝነበረ ዘድህቡ ሕቶታት ክሓተን

614	*ኣብ እዋን ጥንሲ ካብመደበኛ ኣመጋግባኣን ብተወሳኺ ተወሳኺ መግቢ ይወስዳ ዶ ነይረን?*	እወ.....1 ኣይፋሉን.....2 ኣይፈልጥን.....99	ንኣዶ እቲ ህፃን ጥራይ ዝምልከት ሕቶ
615	ኣብ እዋን ጥንሲ ፈውሲኒት ዋሕዲ ደም ይወስዳ ዶ ነይረን?	እወ.....1 ኣይፋሉን.....2 ኣይፈልጥን.....99	
616	ኣብ እዋን ጥንሲ ክንደይ ዝኣክል ግዘ ፈውሲ ዋሕዲ ደም ወሲደን?	ኽንደይ ግዘ/ክኒን _____ ኣይፈልጥን.....99	
617	ኣብ እዋን ጥንሲ ፀረ ሓሳኩ ኣፋውስ ወሲደን ዶ ይፈልጣ?	እወ.....1 ኣይፋሉን.....2	

ክፋል 7: ኣብ ኣመለኻኽታ ዝተደረኸ

ብምቅባል ድማ ቁሩብተይ ሕቶታት ክሓተን እየ ::ኣብዚ ዝምስለን መልሲ ክምልሳ ይኽእላ እየን፤ንዝህበኦም መልስታት ትኽክልን ጌጋን ዝበሃል መልስን የለን::ኮይኑ ግና ነቶም ዝቐርቡ ሓሳባት ***ኣዝየ ይሰማማዕ ፣ ይሰማማዕ፣ኣዝየ ኣይሰማማዕን*** *ከምኡ'ውን* ***ኣይሰማማዕን*** *ብምባል ምግላፅ ይከኣል እዩ::*			
ቁ.ሪ.	ዝቐርቡ ሕቶታት	ዝርዝር መልሲ.	ቀዕል/ሲ.
701	ልግዐ ጥቓሚ ምግቢ ኣይኮነን::	ኣዝየ ይስማማዕ .....1 ይስማማዕ.....2 ዝብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣዝየ ኣይስማማዕን.....5	
702	ኣብተን ፈላሞት 6 ኣዋርሕ ፀባ ጥቡ ኣዶ ጥራሕ ምጥባው ኣብ ጥዕና እቲ ዕሸል ለውጢ የስዕብ::	ኣዝየ ይስማማዕ .....1 ይስማማዕ.....2 ዝብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣዝየ ኣይስማማዕን.....5	
703	ኣብ መዓልቲ እንተወሓዳ ካብ 4-5 ግዘ መግቢ ክምገቡ ይግባእ (ብተወሳኺ ካብ 1 ክሳብ-2 ግዘ ጠዓሞት ሓዊሱ) ንዕሸል ህፃውንቲ ምውሃብ ግብእ እዩ::	ኣዝየ ይስማማዕ .....1 ይስማማዕ.....2 ዝብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣዝየ ኣይስማማዕን.....5	
704	ዕሸል ህፃውንቲ ክሳብ 2 ዓመቶም ካብ ዝወስድዎ መግቢ ብተወሳኺ ጡብ ምጥዋቡ ጥቓሚ ኣይኮነን::	ኣዝየ ይስማማዕ .....1 ይስማማዕ.....2 ዝብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣዝየ ኣይስማማዕን.....5	
705	ኣብ እዋን ጥንሲ ተወሳኪ ምምጋብ ንዕሸል ዕብየት ጥቓሚ እዩ::	ኣዝየ ይስማማዕ .....1 ይስማማዕ.....2 ዝብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣዝየ ኣይስማማዕን.....5	

ክፋል 8: ዕላማ እንፍዕሞ ምግባር

ቀጺሉም ዝስዕቡ ሕታታት ክንንብበለን እየ ::ክዛም ዝስዕቡ ሕቶታት ዝህበኡ መልሲ ትኽክልን ወይ ጌጋ ኣይኽውንን::ክይኑ ግና ንዝህበኡ መልሲ ኣገዛዊ ይሰማማዕ ፣ ይሰማማዕ ፣ኣገዛዊ ኣይሰማማዕን ክምኡ'ውን ኣይሰማማዕን ኢለን ክምልሳ ይኽእላ እዩ::

ቁ.ሪ.	ዝቐርቡ ሕቶተኛ	ገርገር መልሲ	ቀዕል/ሊ
801	ውላደይ 6 ኣዋርሕ ክሻብ ዝመልእ/ትመልእ ፀባ ጡብ ኣዶ ጥራሕ ንምሃብ ድልውቲ እየ::	ኣገዛዊ ይስማማዕ .....1 ይስማማዕ.....2 ገብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣገዛዊ ኣይስማማዕን.....5	
802	ውላደይ 2 ዓመት ክሳብ ዝመልኡ/ዝመልኣ ፀባ ጡበይ ከጥቡባ/ከጥቡቦ እየ::	ኣገዛዊ ይስማማዕ .....1 ይስማማዕ.....2 ገብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣገዛዊ ኣይስማማዕን.....5	
803	ንውላደይ ኣብ መዓልቲ 3 ማእድን ክልተ ግዜ ጠዓሞት ክቐርብ እየ::	ኣገዛዊ ይስማማዕ .....1 ይስማማዕ.....2 ገብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣገዛዊ ኣይስማማዕን.....5	
804	ንውላደይ ካብቶም 4 ምድብ ዓይነታት መግቢ ንምሃብ ድልውቲ እየ::	ኣገዛዊ ይስማማዕ .....1 ይስማማዕ.....2 ገብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣገዛዊ ኣይስማማዕን.....5	
805	ኣብ እዋን ጥንሲ ካብ መደበኛ ማእዲ ብተወሳኪ ተወሳኺ መግቢ ክምገብ ድልዋ እየ::	ኣገዛዊ ይስማማዕ .....1 ይስማማዕ.....2 ገብሎ የብለይን.....3 ኣይሰማማዕን.....4 ኣገዛዊ ኣይስማማዕን.....5	

ንዝነበረን ተሳትፎ ኣገዛዊ ከመስግን ይደሊ!

Annex 10: Amharic version of interview guide for in-depth interview with key informant

<u>አጠቃላይ መረጃ</u>

ቀን_____ ጾታ_____

የትምህርትደረጃ_____የስራ ድርሻ_____

የስራ ልምድ_____

መግቢያ:ጤና ይስጥልኝ።እኔ የሁለተኛ ዲግሪ Health education and promotion ተማሪ ነኝ። አሁን በጤና ተግባቦት መረጃ መሳሪያዎች አዘገጃጀት ላይ እየሰራሁ ነው።የጥናቴ አንዱ አላማ በመጀመሪያዎቹ 1000 ቀናት ላይ በራዲዮ እና በቴሌቪዥን የተሰራጨው መልዕክት እንዴት እንደተዘጋጀ ማየት ነው።አሁን እዚህ የተገኘሁት ስለተሰራጨው መልዕክት እንዴት እንደተዘጋጀ ለመወያየት ነው።

በቃለመጠይቁ ጊዜ ድምጽ መቅረጫ መሳሪያና ማስታወሻ እጠቀማለሁ።ነገር ግን ስም ወይም ማንነት የሚገልጹ ነገሮች ሚስጥርነቱ ተጠበቀ ነው። በማንናኛውም ሰአት ቃለ መጠይቁን ማቋረጥ ወይም መመለስ የማይፈልጉትን መተው ይችላሉ።ከእናንተ የማገኘው መረጃ ለጥናቱ ጠቃሚ ነው።መጠየቅ የምትፈልጉት ነገር አለ?ለመቀጠል ፍቃደኛ ናቹ?

901. የተግባቦቱ አላማ ምን ነበር?

902. እንዴት ነበር የተዘጋጀው? ከማዘጋጀታችሁ በፊት ዳሰሳ አድረጋችሁ ነበር?

903. ታላሚዎቹ እነማን ናቸው?

904. የ1000 ቀናት ስነምግብ መልዕክት የስትራቴጂ ማስፈጸሚያ ሲዘጋጅ የማህበረሰቡ ተሳትፎ ነበረበት? ካልነበረ ለምን?

905. የባለሙያዎች ተሳትፎስ ነበር? ምን አይነት ባለሙያዎችስ ነበር የተሳተፉት ከተቻለ ዝርዝር?

906. ሀሳቡ ወይም የመረጃው መሳሪያው ላይ ቅድመ ሙከራ ተካሂዶ ነበር?

907.መልዕክት የምታስተላልፈው (ማስታወቂያውን ምትሰራው ባለሙያ) የተመመረጠችው በምን መስፈርት ነው? ስልጠናስ ተሰጥቷት ነበር?

908. ለማዘጋጀት ምን አይነት ሂደት ነበር የተከተላችሁት?

909.የገጠማቹ ችግር ነበር ካለ እንዴት ፈታችሁት?

910 እንዴት ነበር የምትቆጣጠሩበት (ክትትል)?

911.እንዴት ነበር ያሰራጫችሁት? እቅድ ነበራቹ?

912.መጨመር የምትፈልጉት ሃሳብ አለ?

ስለተሳትፎዋቹ እናመሰግናለን

Annex 11: Tigrigna version of interview guide for in-depth interview with mother of under two children

ትሕቲ ኽልተ ዓመት ዕሸል ንዘለወን ኣደታት ዝቐረበ ዓሚቕ(ሰፊሕ) ቓለ መሕትት

ኮድ፡_____
መሳርሂ ሬድዮን /ተለቭዥንን : _____
ቃለ ምሕትት ዝተኻየደሉ ዕለት: _____
<u>ድሕረ ባይታ</u>
ወረዳ: _____ ዕድመ: _____
ኩነታት ሓዳር: _____ በዝሒ ዕያል: _____
ደረጃ ትምህርቲ: _____ ስራሕ: _____
መእተዊ: ሰላም ከመይ ኣለኽን፡፡ ሽመይ _____ኣባሃል፡፡ ኣብ ኣዲስ ኣበባ ዩንቨርስቲ "ብሄልዝ ፕሮሞሽንን ሄልዝ ኢዲኬሽን" ተመሃራት እያ ፡፡ ሎሚ ምሳኽን ብፌደራል ሚኒስትሪ ጥዕና እናተዳለዉ ኣብ ዝቐርቡ ናይ ሬድዮን ተለቭዥንን ሓሚርቲ ማስታወቅያታት ጥዕና(Spot)ንምምይያጥ እዩ፡፡ ኩቡራት ተሳተፍቲ ኣብቲ ቐሚለ ዘሰመዐክን/ዘርእየክን ማስታወቅያ ጥዕና ብዘይ ምንም ስክፍታ ግልፂ ኮይንኽን ዝተሰመዐክን ሓሳብ ንክተቕርባ ብትሕትና ይሓትት፡፡ ኣብዚ ንዘቕርቦም ኩሎም ሕቶታት ትኽክል ወይ ድማ ስሕተት ዝበሃል መልሲ የለን፡፡ ኣብዚ ከይዲ ምይይጥ ተሳታፊ ዝኾነ ሰብ ኣብ ሰናይ ድልየቱ ዝተመርኮሰ ምኻኑ ክፍለጥ ይግባእ፡፡ ኣብ ኽይዲ እዚ ምይይጥ ምስታፍ ኣይደልን ዝብል ሰብ ተሃልዩ ድማ ኣብ ዝመረፆ ሰዓት ጠጠው ንክብል እተደለዩ መሰሉ ሕሉው እዩ፡፡ እዚ ካብ በልና ኣብዚ ምይይጥ ተሳተፍቲ ንምኻን ድልዊ ድየን?

1001. እቲ ዝሰምዐኦ/ዝረአየኦ ማስታወቅያ ብዛዕባ እንታይ ዝተመልከተ ይመስለን?

1002. መልእኽቲ እዚማስታወቅያ ጥዕና ንመን ዝምልከት/ዝጥምት ይመስለን?

1003. መልእኽቱ ንምርድኡ ዝቐለለ ዶ ይመስለን?

1004. ካፍቲ ዝሰመዐኦ/ዝረአየኦ ዝፎተዮኦ መልእኽቲ ዶ ይህሊ?

1005. ካፍቲ ዝሰመዐኦ/ዝረአየኦ ዝፀለእኦ መልእኽቲ ዶ ይህሊ? ንምንታይ?

1006. ካፍቲ ዝቐረበ መልእኽቲ ንምእማን ዘፀገመለን ሓሳብ ዶ ይሕሊ?

1007. ኣፍቲ ዝቐረበ መልእኺቲ እንታይ ንክገብራ ዝሓትት ይመስለን?

1008.ዝቐረቡ ኩሎም መልእኽትታት ኣብ ግብሪ ተውዒለንኦም እንታይ ይርባሕ ኢለን ይሓስባ?

1009. ሓዱሽ ውይ ድማ ዝተፈለየ ሓበሬታ ረኺበ ዶ ይብላ?

1010.ተረኺበን እዚ ሓበሬታ ንኻለኦት ሰባት ዘካፍላ ዶ ይመስለን? ንምንታይ የካፍለኦም/ንምንታይ ኣየካፍለኦምን?

1011. ነባሪ እዚ ኽባቢ እዚ ምርኢት እንተዳሚፂ/እንተሪኡ በቲ ዝቐረበ ሓሳብ ዝቐየር ወይም ናይ ኣታሓሳስባ ለውጢ ዝገብር ዶ ይመስለ? ብኽመይ?

ንተሳትፎኩምን የቐንየለይ

Annex 12: Bivariate analysis to predict maternal and child feeding practice

Variables		B	p-value	95%CI		R^2
				Lower	Upper	
Age of the child	Age in month	0.026	0.000	0.0125	0.0394	0.0237
Sex	Male (ref)					0.0006
	Female	-0.049	0.556	-0.2146	0.1156	
Age of mother	Age in year	0.014	0.092	-0.0023	0.0308	0.0048
Marital status	Married(ref.)					0.0133
	Single	0.249	0.294	-0.2172	0.7171	
	Divorced	0.421	0.203	-0.2284	1.0715	
	Widowed	-1.228	0.053	-2.472	0.0156	
Religion	Catholic(ref.)					0.0028
	Orthodox	0.260	0.333	-0.2675	0.7878	
	Protestant	0.356	0.282	-0.2925	1.0063	
	Muslim	0.345	0.237	-0.2273	0.9165	
Ethnicity	Tigray	0.568	0.005	0.1743	0.9615	0.0134
	Other (ref.)					
Educational status	Illiterate(ref.)					0.0078
	Read and write	0.317	0.230	-0.2009	0.8353	
	Primary	-0.016	0.921	-0.3326	0.3007	
	Secondary	0.119	0.431	-0.1788	0.4183	
	Technical	0.095	0.568	-0.2308	0.4201	
	Higher	0.219	0.177	-0.0991	0.5379	
Occupation	Govt employee	0.018	0.910	-0.2893	0.3248	0.0007
	Housewife	-0.038	0.790	-0.3189	0.2426	
	Merchant	-0.053	0.745	-0.3693	0.2642	
	Other(ref.)					
Functional Tv	Yes	0.124	0.422	-0.1788	0.4265	0.0011
	No					
Functional radio	Yes	-0.043	0.618	-0.2137	0.1271	0.0004
	No					
Frequency of watching Tv	Almost everyday	0.602	0.010	0.1448	1.0593	0.0115
	At least once a week	0.625	0.017	0.1103	1.1382	
	Less than once a week	0.651	0.100	-0.1260	1.4261	
	Not at all(ref.)					
Frequency of listening radio	Almost everyday	-0.152	0.294	-0.4306	0.1306	0.0046
	At least once a week	-0.064	0.538	-0.2698	0.1408	
	Less than once a week	0.087	0.443	-0.1359	0.3105	
	Not at all(ref.)					

Exposure	Yes	0.277	0.001	0.1141	0.4417	0.0184
	No(ref.)					
The frequency of watching Tv spot		-0.003	0.891	-0.0404	0.0352	0.0001
The frequency of listening spot		-0.090	0.057	-0.1828	0.0026	0.0130
Attitude		-0.009	0.718	-0.0561	0.0387	0.0002
Intention		-0.012	0.427	-0.0403	0.0171	0.0011

Annex 12: CDC clear index score sheet result

Checklist for the assessing spot 1(about the first 1000 days)

	Question	Score	
	PART A: Core	**Yes**	**No**
1	Does the material contain one main message?	✓	
2.	Is the main message at the top, beginning, or front of the material?	✓	
3.	Is the main message emphasized with visual cues?	✓	
4.	Does the material contain at least one visual that conveys or supports the main message?	✓	
5.	Does the material include one or more calls to action for the primary audience?	✓	
6.	Do both the main message and the call to action use the active voice? If only the main message or only the call to action uses the active voice, answer	✓	
7.	Does the material always use language the primary audience would use?		✓
8.	Does the material use bulleted or numbered lists?		✓
9.	Is the material organized into chunks with headings?	✓	
10	Is the most important information the primary audience needs to be summarized in the first paragraph or section?	✓	
11	Does the material explain what authoritative sources, such as subject matter experts and agency spokespersons, know and don't know about the topic?	✓	
	Total __9_ / 11		
PART B: Behavioral Recommendations			
12	Does the material include one or more behavioral recommendations for the primary audience?	✓	
13	Does the material explain why the behavioral recommendation(s) is important?	✓	
14	Does the behavioral recommendation(s) include specific directions about how to perform the behavior?	✓	
	Total ___3__ / 3		
Part C: Numbers			
15	Does the material always present numbers the primary audience uses?		✓
16	Does the material always explain what the numbers mean?		✓
17	Does the audience have to conduct mathematical calculations?		✓
	Total ____1_ / 3		
Part D: Risk			
18	Does the material explain the nature of the risk?		✓
19	Does the material address both the risks and benefits of the recommended behavior		✓
20	If the material uses numeric probability to describe risk, is the probability also explained with words or a visual?		✓
	Total __2 / 3		

The calculation for the score was

Part A=9/11 , Part B=3/3, part C =1/3 Part D =2/3

TOTAL SCORE =15/19*1OO=78.9 .As it stated in the index if the total score is 89 or below, the material need improvement.

Checklist for the assessing spot *2 (feeding practice during pregnancy)*

	Question	Score	
	PART A: Core	**Yes**	**NO**
1	Does the material contain one main message?	✓	
2.	Is the main message at the top, beginning, or front of the material?	✓	
3.	Is the main message emphasized with visual cues?	✓	
4.	Does the material contain at least one visual that conveys or supports the main message?	✓	
5.	Does the material include one or more calls to action for the primary audience?	✓	
6.	Do both the main message and the call to action use the active voice? If only the main message or only the call to action uses the active voice, answer	✓	
7.	Does the material always use language the primary audience would use?		✓
8.	Does the material use bulleted or numbered lists?		✓
9.	Is the material organized into chunks with headings?		✓
10	Is the most important information the primary audience needs to be summarized in the first paragraph or section?	✓	
11	Does the material explain what authoritative sources, such as subject matter experts and agency spokespersons, know and don't know about the topic?	✓	
	Total __8__ / 11		
PART B: Behavioral Recommendations			
12	Does the material include one or more behavioral recommendations for the primary audience?	✓	
13	Does the material explain why the behavioral recommendation(s) is important?	✓	
14	Does the behavioral recommendation(s) include specific directions about how to perform the behavior?	✓	
	Total ___3__ / 3		
Part C: Numbers			
15	Does the material always present numbers the primary audience uses?		✓
16	Does the material always explain what the numbers mean?		✓
17	Does the audience have to conduct mathematical calculations?		✓
	Total ____1_ / 3		
Part D: Risk			
18	Does the material explain the nature of the risk?	✓	
19	Does the material address both the risks and benefits of the recommended behavior	✓	
20	If the material uses numeric probability to describe risk, is the probability also explained with words or a visual?		✓
	Total __2 / 3		

The calculation for the score was

Part A=8/11 , Part B=3/3, part C =1/3 Part D =2/3

TOTAL SCORE =14/19*1OO=73.6.As it stated in the index if the total score is 89 or below, the material need improvement.

Checklist for the assessing spot 3 (Breast feeding)

		Score	
	PART A: Core	**Yes**	**No**
1	Does the material contain one main message?	✓	
2.	Is the main message at the top, beginning, or front of the material?	✓	
3.	Is the main message emphasized with visual cues?	✓	
4.	Does the material contain at least one visual that conveys or supports the main message?	✓	
5.	Does the material include one or more calls to action for the primary audience?	✓	
6.	Do both the main message and the call to action use the active voice? If only the main message or only the call to action uses the active voice, answer	✓	
7.	Does the material always use language the primary audience would use?		✓
8.	Does the material use bulleted or numbered lists?		✓
9.	Is the material organized into chunks with headings?		✓
10	Is the most important information the primary audience needs to be summarized in the first paragraph or section?	✓	
11	Does the material explain what authoritative sources, such as subject matter experts and agency spokespersons, know and don't know about the topic?	✓	
	Total __8_ / 11		
PART B: Behavioral Recommendations			
12	Does the material include one or more behavioral recommendations for the primary audience?	✓	
13	Does the material explain why the behavioral recommendation(s) is important?	✓	
14	Does the behavioral recommendation(s) include specific directions about how to perform the behavior?		✓
	Total ___2__ / 3		
Part C: Numbers			
15	Does the material always present numbers the primary audience uses?		✓
16	Does the material always explain what the numbers mean?		✓
17	Does the audience have to conduct mathematical calculations?		✓
	Total ____1_ / 3		
Part D: Risk			
18	Does the material explain the nature of the risk?		✓
19	Does the material address both the risks and benefits of the recommended behavior		✓
20	If the material uses numeric probability to describe risk, is the probability also explained with words or a visual?		✓
	Total __2 / 3		

The calculation for the score was

Part A=8/11 , Part B=2/3, part C =1/3 Part D =2/3

TOTAL SCORE =13/19*1OO=68.42 .As it stated in the index if the total score is 89 or below, the material need improvement.

Checklist for the assessing the TV spot 4 (complementary feeding)

	Question	Score	
	PART A: Core	**Yes**	**No**
1	Does the material contain one main message?	✓	
2.	Is the main message at the top, beginning, or front of the material?	✓	
3.	Is the main message emphasized with visual cues?	✓	
4.	Does the material contain at least one visual that conveys or supports the main message?	✓	
5.	Does the material include one or more calls to action for the primary audience?	✓	
6.	Do both the main message and the call to action use the active voice? If only the main message or only the call to action uses the active voice, answer	✓	
7.	Does the material always use language the primary audience would use?		✓
8.	Does the material use bulleted or numbered lists?		✓
9.	Is the material organized into chunks with headings?	✓	
10	Is the most important information the primary audience needs to be summarized in the first paragraph or section?	✓	
11	Does the material explain what authoritative sources, such as subject matter experts and agency spokespersons, know and don't know about the topic?	✓	
	Total __8__ / 11		
PART B: Behavioral Recommendations			
12	Does the material include one or more behavioral recommendations for the primary audience?	✓	
13	Does the material explain why the behavioral recommendation(s) is important?	✓	
14	Does the behavioral recommendation(s) include specific directions about how to perform the behavior?	✓	
	Total ___3__ / 3		
Part C: Numbers			
15	Does the material always present numbers the primary audience uses?		✓
16	Does the material always explain what the numbers mean?		✓
17	Does the audience have to conduct mathematical calculations?		✓
	Total ____1_ / 3		
Part D: Risk			
18	Does the material explain the nature of the risk?	✓	
19	Does the material address both the risks and benefits of the recommended behavior	✓	
20	If the material uses numeric probability to describe risk, is the probability also explained with words or a visual?		✓
	Total __2 / 3		

The calculation for the score was

Part A=8/11 , Part B=3/3, part C =1/3 Part D =2/3

TOTAL SCORE =14/19*1OO=73.6 .As it stated in the index if the total score is 89 or below, the material need improvement.

Addis Ababa University

School of Public health

This is to certify that the thesis prepared by Yordanos Tadesse entitled as Effect of 1000 days message disseminated through TV and radio on Maternal and Child Feeding practice, Mekelle City, Tigray region, Ethiopia and Submitted to the School of Graduate Studies of Addis Ababa University, School of Public Health for the Partial Fulfillment of the Requirements for Masters of Public Health (MPH) in Health Promotion and Health Education complies with the regulation of the university and meets the accepted standards with respect to originality and quality

Signed by the Examining Committee:

	Name	Signature	Date
External Examiner	_____	_____	_____
Internal Examiner	_____	_____	_____
Advisor	_____	_____	_____
Chair of department or			
Graduate program coordinator	_____	_____	_____