EVALUATION OF THE *MALEZI BORA* COMMUNICATED MESSAGES ON UTILIZATION OF HEALTH SERVICES FOR CHILDREN LESS THAN FIVE YEARS OLD IN LUGARI SUB COUNTY, KENYA

BY

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DECLARATION

1. THE STUDENT

I, Charles Matanda Mabakha, do hereby declare that this thesis is my original work and has not been submitted for the award of a degree or diploma in any other University or College.

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DEDICATION

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ABSTRACT

The study to evaluate the *Malezi bora* communicated messages on utilization of health services for children less than 5 years old in Lugari Sub County was conducted in October, 2015.Lugari was chosen because it had an under five mortality rate of 64 deaths per 1000 live births which was higher than the national average of 52 deaths per 1000 live births and children had low access to health services. The objectives of the study in Lugari were; evaluation of the influence of *Malezi bora* messages on practices of caregivers with children under five years old, description of the outputs of *Malezi bora* interventions for 2007, 2010 and 2014 and determination of the perception of health workers on the *Malezi bora* strategy. The study used quantitative and qualitative designs to achieve study objectives. The study randomly interviewed 105 caregivers (Fisher's formula used) using a questionnaire, 30 health workers (2 per health facility) selected from 15 randomly selected health facilities were interviewed using a questionnaire and a monitoring checklist. One focus group discussion with caregivers was conducted using a discussion guide. The study results reveal that caregivers were influenced by the *Malezi bora* messages with a significant association between hearing of *Malezi bora* messages and seeking child health services at health facilities (X2=9.018, P=.003).The results reveal increased utilization of child health services in Lugari Sub County during *Malezi bora* months of May and November for 2007, 2010 and 2014 except for immunization services. The results reveal that 65% of the health workers have focused and positive attitudes to the *Malezi bora* Initiative. '*Malezi bora is now a household name and I can mention many messages but what I can say in a summarized way is that the Malezi bora messages are for the holistic care for the children and help prevent many diseases'* caregiver in FGD at Lumakanda Hospital stated. The study concludes that; communication of *Malezi bora* messages influenced caregivers' positive actions for health care of their children and increased uptake of child health services were higher for the *Malezi bora* months. The study concludes that health workers are supportive of the child health strategy in Lugari Sub County. The study recommends the sustenance of the communication of *Malezi bora* messages, focus more on immunization intervention with behavior change communication and mobilize resources for the overall survival, growth and development of children under five years old in Lugari Sub County of Kakamega County.

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ABBREVIATIONS/ACRONYMS

ARC	American Red Cross
BCG	Bacillus Calmette - Guerin Vaccine
CHD	Child Health Days (*Malezi bora*)
CHV	Community Health Volunteer
CORE	Child Survival Collaborations and Resources Group
DHIS	District Health Information System
EPI	Expanded Programme of Immunization
FIC	Fully Immunized Child
IMCI	Integrated Management of Childhood Illness
IMR	Infant Mortality Rate
IPT	Intermittent Preventive Treatment
ITN	Insecticide Treated Nets
KNBS	Kenya National Bureau of Statistics
LLINs	Long Lasting Insecticide Nets
MDG	Millennium Development Goals
MNCH	Maternal and Newborn Child Health
MOPHS	Ministry of public health and sanitation
NGO	Non- Governmental Organization
NIDs	National Immunization Days
OPV	Oral Polio Vaccine

PENTA	Five individual vaccines conjugated in one, given in one shot and protects infants against five major infections ; diphtheria, tetanus, pertussis, hepatitis B and Haemophilus influenzae type b (Hib).
SNIDs	Sub-National Immunization Days
SPSS	Statistical Products for Service Solutions
UNICEF	United Children's Education Fund
WASH	Water, sanitation and hygiene
WHO	World Health Organization

OPERATIONAL DEFINITIONS OF TERMS

Advocacy : The act of pleading or arguing in favor of commitment and resources for sustained quality interventions in collaboration with all sectors and stakeholders.

Behaviour Change Communication : Any transformation or modification of human behaviour that promote positive health practices.

Child Health Days : Regular, semi-annual, events designed to deliver key child health and nutrition interventions to children under 5 years old.

Excellent : Highest approval rating of the *Malezi bora* Initiative

Immunization : The process or procedure of rendering an individual protected from specific disease causing organisms through vaccination.

***Malezi bora* :** The Kenyan Brand for Child Health Days for the country wide accelerated routine child health and maternal services held in the month of May and November each year. The interventions for children include; immunizations, vitamin A supplementation, deworming, growth monitoring and treatment of sick children.

Satisfaction : Fulfillment of expectations

Social mobilization: Is the act of activating civil society to generate support for all those in need of services, through sustainable community ownership and participation.

Sub County: Decentralized units through which County governments of Kenya provide functions and services, this coincide with the constituencies created under article 89 of the Constitution of Kenya.

Vaccine: A biological preparation used as a preventive inoculation that confers immunity against a specific disease.

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CHAPTER ONE: INTRODUCTION

1.1 Background Information

The concept of Child Health Days was initiated to address child survival and development of children in developing countries as opposed to developed countries where child survival is guaranteed (Lopez *et al.*, 2006).

Kenya through the Ministry of Health in 2007 initiated country-wide child health days (CHDs) initiative and branded it as '*Malezi bora*' (a Kiswahili word which means holistic health for the child). The *Malezi bora* (CHDs) initiative in Kenya was to strengthen the routine child health services offered at health facilities. The key driver in the *Malezi bora* (CHDs) initiative was increased multi-communication to care caregivers about taking their children under five years for routine health services (MOPHS, 2007). The increased communication is conducted countrywide every year 2 weeks prior to the *Malezi bora* (CHDs) months of May and November. The gaps to be addressed in this study as reviewed from the Kenya Demographic Health Survey, 2014 include; low access and utilization of child health services, missed opportunities for children visiting health facilities and low immunization coverage. This study provides insights into the influence of the *Malezi bora* messages communicated during the Kenya child health days, the outputs of *Malezi bora* interventions and the perception of the health managers over the *Malezi bora* strategy for children less than five years old in Lugari Sub County, Kenya.

Lugari Sub County was selected as the study site because it has many challenges facing the health sector. Some of the challenges include inaccessibility of medical services by the majority of the people due to high costs, inadequate or poorly equipped health facilities, staff shortage and poor maintenance of the health facilities

(Lugari district development plan, 2008-12). Lugari Sub County has high under five child mortality with low access to care (KNBS, 2014).

The first objective of this research was to determine the influence of *Malezi bora* communicated messages on practices of care givers with children under five years old in Lugari Sub County. In reviewing the relevant literature, South Asia which adopted child health days in 1999, the influence of communicated messages only succeeded in enhancing public awareness, but failed in going beyond awareness, to stimulate positive changes in practices toward creating lasting social change (UNICEF, 2005). During the first *Malezi bora* event in Kenya in 2007, it was observed that the number of children brought to the health facilities increased when compared with same period in 2006 and therefore caregivers responded to the communication messages to take their children for routine health services (MOPHS, 2007).

The second objective described the outputs of *Malezi bora* interventions for 2007, 2010 and 2014.The third objective was to determine the perception of health workers on the *Malezi bora* initiative. Very few studies were cited during the review and Ryman, in his studies on perception in Kenya, Mali, Ethiopia, and Cameroon addressed the issues from the context of communities and did not explore on issues related to workers performance and perception (Ryman et al., 2012). This study will therefore address perception from the context of health workers who provide the services.

1.2 Statement of the Problem

Lugari Sub County has infant mortality rate of 40 deaths per 1000 live births and under five mortality rate of 64 deaths per 1000 live births both of which are higher than the national rates (KNBS, 2014).Children have low access to health services and

hence underutilization of the routine child health services available at the health facilities and national surveys still show underutilization of child health services (KNBS, 2014).

1.3 Justification of the Study

The *Malezi bora* communicated messages under CHDs initiative integrate many known public health interventions that offer services to children in a holistic manner in Kenya. Lugari Sub County has been implementing the *Malezi bora* (CHDs) interventions since 2007 without evidence based performance indicators and has poor child health indicators.

1.4 Study Objectives

1.4.1 Broad Objective

To evaluate *Malezi bora* communicated messages on utilization of health services for children less than five years old in Lugari Sub County, Kenya.

1.4.2 Specific Objectives

1. To evaluate the influence of *Malezi bora* messages on practices of care givers with children under five years old in Lugari Sub County, Kenya.
2. To describe the outputs of *Malezi bora* interventions (for 2007,2010 and 2014) in Lugari Sub County, Kenya.
3. To determine the perception of district health managers and health workers on the *Malezi bora* strategy in Lugari Sub County, Kenya.

1.5 Research Questions

1. Does *Malezi bora* communicated messages influence care seeking practices of caregivers with children under five years old in Lugari Sub County?

2. Is there significant difference between intervention outputs for the Child health months and other months?
3. Are district health managers and health workers in Lugari Sub County supportive of the *Malezi bora* implementation?

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Literature pertaining to this study was reviewed according to the objectives of the study using both primary and secondary sources. This covered the influence of *Malezi bora* (CHDs) messages on practices of care givers with children under five years old in countries with experience in conducting child health days. Description of the outputs of *Malezi bora* interventions and perception of health workers on the *Malezi bora* (CHDs) initiative. The reviews also covered the conceptual framework of the *Malezi bora* (CHDs) initiative. Communication of health messages as an evidence based strategy to promote health among populations falls under public health and communication discipline (Schneider et al., 2008).In 2012, the world recommitted to child survival through a global movement to end preventable child deaths under the rallying call 'A Promise Renewed' and one of the key strategic shifts of the call to action was to increase scale and sustain demand and supply of the high impact interventions for child survival, growth and development (http://www.apromiserenewed.org).

The purpose of *Malezi bora* (CHDs) communicated messages in Kenya was mainly; to increase awareness on availability of child and maternal health services at health facilities, to create demand and utilization of routine child and maternal health services and to create awareness on child health and nutrition weeks. The strategies involved use of Mass media, dialogue meetings with community members, Road shows, door to door visits, Interpersonal communication, Vernacular stations and Printed Information. The information, education, communication materials circulated

included; T- shirts, posters with specific messages, flip chart for health workers, brochure on child, maternal health and Job aid for health workers (MOPHS, 2007).

2.2 Influence of *Malezi bora* Messages on Practices of Caregivers

In a recent systematic review of communication interventions in health, that included child survival conducted by Wakefield et al., (2010), examined peer-reviewed studies from 1998 to 2009 concluded that there was substantive cumulative evidence that communication interventions directly or indirectly produce positive changes across large population segments. In 2012 Liu and others suggested that Child survival strategies ought to direct resources toward the leading causes of child mortality, indirectly suggesting interventions that target populations.

In respect to communication messages for child health days, this study found scanty literature on communication messages during child health days. However between 2006 and 2008 in United States Antidrug communication messages (advertising) was shown to be an effective way to dissuade eighth-grade adolescent girls from initiating marijuana use (Christopher et al., 2010).

Previous studies on communication suggest that individuals become highly aware but with low behavior change due to the heavy reliance on information, education and communication (IEC) with very little community participation. The Ghana experience in home based management of malaria is an example where 71% of mothers were able to recall how to administer anti-malarial drugs correctly but at home, only 14.6% gave the correct drug, at the correct dosage for the correct duration (Aba, 2015).

2.3 Description of the Outputs of Child Health Interventions for 2007, 2010 and 2014

UNICEF introduced Child Health Days events (CHDs) in 1999 designed to deliver major child health and nutrition interventions to children under 5 years of age as a way of increasing utilization of health services. South Eastern Asian Countries were the first to adopt this strategy (UNICEF, 2005). Several countries in the African region also adopted the strategy.

The achievements in Zambia for the child health days of 2004 included; Household ITN coverage rose from 28.9 % (pre-campaign) to 85% (post campaign), 97.1 percent of the ITNs were observed in the households that received them and 60 percent of children under 5 years old were reported to have slept under the net the previous night and the percentage change in household net ownership increased by 343 percent (The CORE Group, 2004). In 2008 child health days in Malawi boosted vitamin A coverage from less than 10 per cent in 2005 to over 80 per cent in 2007. Overall immunization coverage, reached 70 per cent. The campaign in November 2007 reached 81per cent of the country's children polio vaccination and 80 per cent with Vitamin A supplementation for Malawi (UNICEF, Malawi, 2008).

Malawi conducted annual child health weeks in which Vitamin A supplementation, de-worming of children and treatment of bed-nets was conducted for communities and using the Child Health Days, Malawi was able to reach 97.7% of eligible children (UNICEF, 2006). The study in Lugari Sub County was to find out whether it is a success story as evidenced from Ghana, Zambia and Malawi.

During the first *Malezi bora* (CHDs) event in June 2007, it was observed that the number of children brought to the health facilities increased when compared with

same period in 2006. In October the health facilities in Kenya handled 766,490 children less than 5 years old. In November the *Malezi bora* (CHDs) month 1,029,901 under 5 children were handled. This increased attendance is an indication of increased demand for the services during the month of *Malezi bora* (CHDs*)*. In the case of Vitamin A, 207,229 children aged 6-59 months were handled in October and 538,884 during November 2007. For deworming of children aged 1-5 years, 144,793 in October and 410,531dewormed in November 2007.

The utilization of EPI services appear not to have been affected by the *Malezi bora* (CHDs) activities. The November 2007 data showed very little increase in coverage for Measles and Pentavalent 1 vaccines and a reduction in BCG and the OPV.11% more sick children less than 5 years old were brought for care at the health facilities in November more than in October 2007. The commonest reason for attendance at health facilities was malaria and acute respiratory illness. This finding is similar with the June 2007 *Malezi bora* (CHDs) results. The number of children handled in the month of October was 434,808 and 484,206 in November (MOPHS, 2007).The study in Lugari Sub County was to find out how it compares with the national performance and address the gaps identified in the *Malezi bora* (CHDs) National report on the low utilization of immunization services.

2.4 Health Managers and Health Workers Perception on Child Health Days

In a study conducted by Steadman Group in Uganda on Child Health Days during Sub-National Immunization Days (SNIDs) Communication Campaign in 2005, the health workers said that the health centers were located in the urban areas, which affected accessibility for the people who leave in the rural areas and the health centers

were not well equipped with drugs and inadequate manpower to handle increased clients or patients.

In a study to assess health workers perceptions in Kenya, Mali, Ethiopia, and Cameroon it was concluded that integration was generally well accepted by health workers since most integrated services were perceived positively by the communities. They cited the opportunity to receive multiple services at one visit, time and transportation cost savings, increased service utilization, maximized health worker efficiency, and reduced reporting requirements. Furthermore they also cited concerns that included labor intensive, inadequate staff to implement, inadequately trained staff, in addition to a number of more broad health system issues such as stock outs and wait times (Ryman et al.,2012).

In the Kenyan context, it was observed that during the *Malezi bora* (CHDs) weeks of 2007, 90% health workers were welcoming and friendly and only 3% appeared to be unfriendly and unwelcoming (MOPHS, 2007).

2.5 Conceptual Framework

The *Malezi bora* initiative depended on the assumption that advocacy and social mobilization created demand and therefore caregivers took action by taking the children for health services.

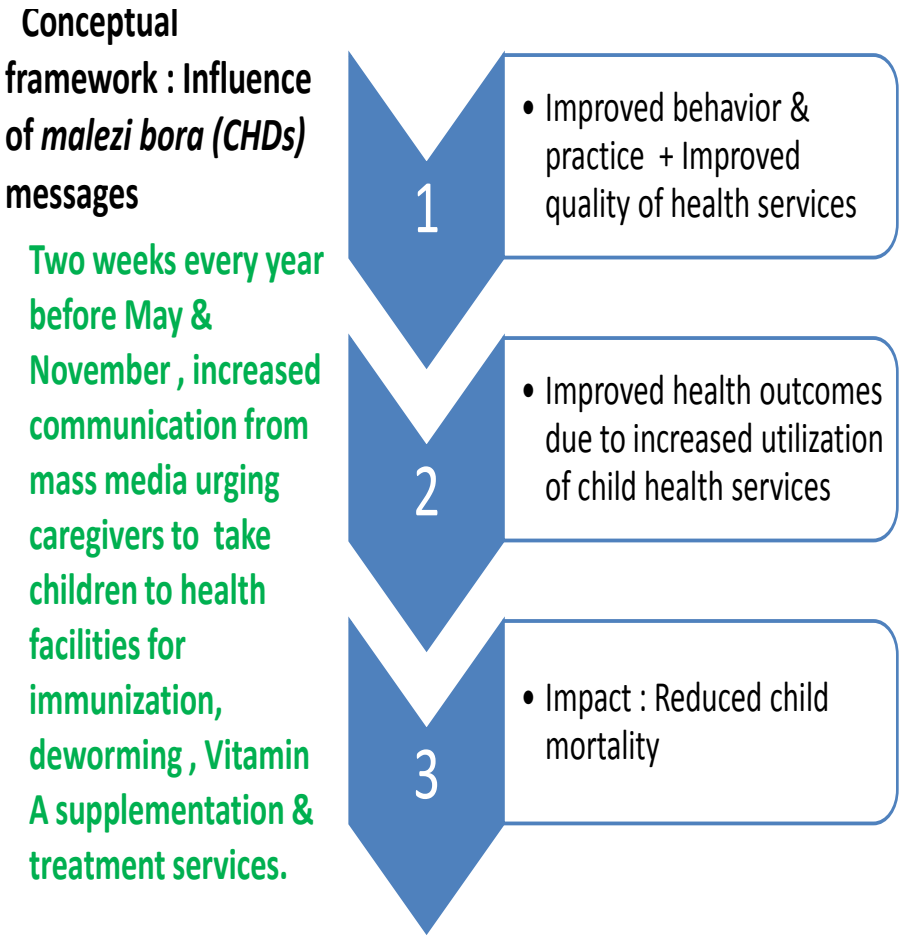

Figure 2.1 Researcher's conceptual frame work

CHAPTER THREE: MATERIALS AND METHOD

3.1Introduction

This chapter addresses the study area, study population, study design, sample size calculation and sampling procedure. The study covered data collection tools, data collection procedure, pretesting of tools, validity and reliability of data collection instruments. The study finally covered data analysis, ethical considerations and presentation of data collected.

3.2 Study Area

The study was conducted in Lugari Sub County in the month of October, 2015. Lugari Sub County borders Nandi County to the south, Bungoma County to the west, Uasin Gishu County to the east and Trans-Nzoia County to the north. Lugari Sub County lies between longitudes 34^0 28' and 35^0 East and between latitude $0^0$25´ and 1^0 North of the equator (map of Lugari Sub County is shown by appendix 11). Lugari Sub County had a population of 167,014 according to the 2009 census report but its current population is projected to be 203,991 (Kakamega County, 2013) with an under five population of approximately 35,699 and under one year population of approximately 7,344. The most prevalent diseases in the Sub County according to the District Health Information System (DHIS, 2016) are upper respiratory tract infections, malaria, diarrhea, diseases of the skin and intestinal worms.

3.3 Study Population

The study targeted 105 mothers of children less than five years old within the Sub County of Lugari, 30 health workers working in 15 randomly selected Public health facilities from a total of 18 health facilities. The study removed or omitted health

facilities from its initial sampling frame of 30 after discovering that they were not within Lugari Sub County.

Children under five years old in Lugari Sub County constituted the target population. Since the study evaluated the *Malezi bora* communicated messages on utilization of health services by these children; proxy study populations were used and involved Caregivers, Health facilities, Health workers and Health records. One focus group discussion which consisted of 10 caregivers (attending child welfare clinics) in Lumakanda Sub County Hospital was done,

3.3.1 Inclusion Criteria

Health workers of the 15 randomly selected health facilities in the sub-county and mothers/caregivers of children less than 5 years old on exit from the selected health facilities on the day of the interview. Administrative health records for the selected health facilities in Lugari Sub County.

3.3.2 Exclusion Criteria

Mothers with children aged more than five years old and health workers working in non selected health facilities in Lugari Sub County. Administrative health records for the non selected health facilities in Lugari Sub County.

3.4 Study Design

Cross-sectional study design with mixed methods. Quantitative and qualitative methods were use in order to achieve the aim of the study.

3.5 Sample Size Determination

The desired sample size for the mothers with children less than five years old was obtained by applying Fisher's formula and using the under five mortality rate 0.074

(P) with 95% confidence (Z = 1.96) and deviation (d=0.05). The sample size was therefore determined as follows:

$$n = \frac{Z^2P(1-P)}{d^2}$$

$$= \frac{1.96x1.96x\ 0.074x\ 0.926}{0.05\ x\ 0.05}$$

$$= \frac{0.263}{0.0025}$$

$$= 105$$

15 health facilities constituting 83% of all health facilities were randomly selected from the 18 facilities (sampling frame). 30 health workers from the selected health facilities were purposefully interviewed as key informants (2 per health facility).

3.5.1 Sampling Procedure

A total of 15 health facilities were selected for the study. The sampling procedure is shown in Table 3.1.

Table 3.1: Sampling of Health Facilities

Facility type	**No. of HFs/sampling frame**	**Desired No.**	**Sampling interval for dispensaries**	**Total sampled**
Hospitals	2	2 (purposive)	N/A	2
Health Centres	1	1 (purposive)	N/A	1
Dispensaries	15	12 (Random)	N/A	12

Given the small number of hospitals and health centers in the study area, all were included in the study. Random sampling was applied for selection of 12 dispensaries from a list of 15 dispensaries as shown in Appendix 6. The sampling interval was 1(select 4 and skip 1, select 4 skip 1).

The researcher interviewed 2 health workers working in each of the selected health facilities. The health workers interviewed were the managers of the respective health facilities or the health workers present on the material day of the interview. Thirty health managers (2 per health facility) participated in the study.

Observation checklist/questionnaire (Appendix 2) and monitoring tool for health facilities (Appendix 4) were used to collect required information and data respectively.

The researcher also interviewed a total of 105 caregivers from the 15 health facilities randomly selected. Seven caregivers/mothers were interviewed on exit per health facility from the selected health facilities. The research assistants positioned themselves at the exit gate of the health facility and administered the exit

questionnaire (Appendix 3) to the first seven caregivers with children less than five years, one at time. One focus group discussion was conducted involving 10 mothers with children less than five years who had brought their children to the child welfare clinic at Lumakanda Sub County Hospital (purposefully chosen). The sister in charge of the maternal child health clinic selected the 10 mothers and a focus group discussion was done using the FGD guide (Appendix 5).

3.5.2 Measurement of Variables

In this study the dependent variables were; the utilization of child health services, perception of health workers on child health days and the decision of caregivers in seeking care for their children. The independent variables were mainly *Malezi bora* months (the months of May and November of years 2007, 2010 and 2014) and the non *Malezi bora* months (the months of April and October of years 2007, 2010 and 2014).

3.5.3 Measurement of Independent Variables

- *Malezi bora* Weeks (Months of May and November)
- Non *Malezi bora* Weeks (Months of April and October)
- Social mobilization activities (Plans, documentation of activities)
- Availability of information, education and communication materials on *Malezi bora* initiative (fliers, posters, t-shirts).

3.5.4 Measurement of Dependent Variables

- Utilization of immunization services
- Utilization of vitamin A services
- Perception of health workers on *Malezi bora*

- Decision of caregivers/mothers on seeking health care following *Malezi bora* messages.

3.6 Data Collection Tools

Quantitative and qualitative data was collected. Data collection tools were constructed to collect both quantitative and qualitative data. The observation checklist/questionnaire (Appendix 2) was used to collect qualitative data on information, education and communication messages in the 15 randomly selected health facilities. The exit interview schedule (Appendix 3) and health facility monitoring tool (Appendix 4) were used to collect quantitative data on utilization of health services by children less than five years old in all the 15 randomly selected health facilities. The focus group discussion schedule (Appendix 5) was used to collect qualitative data on *Malezi bora* for triangulation. The instruments were modified from the ones used by the Ministry of Health during *Malezi bora* supervision in the Counties.

3.7 Data Collection Procedure

The researcher and the 4 research assistants first visited Lumakanda district headquarters and met with the health managers at Lumakanda as an administrative and protocol matter before collecting data. Subsequently the 4 research assistants were paired and one pair visited 7 health facilities and the other pair visited 8 randomly selected health facilities and administered observation checklist (Appendix 2) to the health workers present during the day of survey. The paired research assistants then administered exit questionnaires (Appendix 3) to 7 caregivers / mothers with children less than five years per health facility. The research assistants also asked for records of reports for the *Malezi bora* months of May and November and *non Malezi bora* months of April and October for the years, 2007, 2010 and 2014

and recorded the information using monitoring tool for health facilities (Appendix 4). The three sets of years were picked because 2007 was the baseline year of the *Malezi bora* Initiative, 2010 third year of implementation and 2014 represented the 8th year of implementation. The researcher conducted 1 focus group discussion with 10 mothers who had brought their under five children to the welfare clinic and used the focus group discussion schedule (Appendix 5).

3.8 Pretesting of Tools

All the data collection tools were pretested and realigned for accuracy. The tools were pretested in Kimilili Sub County which had similar characteristics with Lugari Sub County.

3.9 Validity and Reliability

To ensure validity and reliability, quality was assured by appropriate training of research assistants, pretesting of tools, field supervision and review during data entry. A total of 4 research assistants were recruited to collect data. Two males and 2 females for gender balancing. They had completed secondary education and trained in a health or health-related discipline. This helped in understanding the context of the study. The research assistants were trained for 2 days on data collection and the interviewing techniques and ethics during and after data collection. To ensure standardized performance and achieve the required reliability and validity of the study, the interviewers were paired off and practiced out interviewing among themselves till the required objectivity was reached.

3.10 Data Analysis

Data obtained from all forms of interview and checklist was checked at the end of each day by the researcher and ensured that they were correctly completed. Data was

then cleaned, coded and entered into the computer using the SPSS software. Descriptive statistics was adopted using measures of central tendency at 95% confidence level. Quantitative data on utilization of child health services were summed up for the *Malezi bora* months of May and November and compared with the summations of the months of April and October (period before *Malezi bora* activities) for 2007, 2010 and 2014. Calculation of the percentage change was done to measure the change. Chi-Square test statistic was used to test associations of knowledge and decision to take children to health facilities by caregivers. Data was presented using frequency table, bar graphs and pie charts. Qualitative data was manually analyzed by first classifying major responses into themes and sub themes before summarizing.

3.11 Ethical Considerations

Ethical approval for the study was obtained from Maseno University Ethics Review Committee (MUERC). Authority to conduct this study was obtained from Maseno University's School of Graduate Studies and permission to carry out the study in the selected area was given by the District Medical Officers of Health for Lugari Sub County and Kakamega County Health Director. An informed consent (Appendix 1A and 1B) was sought from all eligible caregivers using English or Kiswahili language. This explained in detail the purpose of the study, benefits, confidentiality of information given, voluntary nature of participation and the option to withdraw from participation at will. It was further disclosed that the study had no harm to either the caregiver or the child. All participating caregivers were given priority service delivery at the facility.

CHAPTER FOUR: RESULTS

4.1Introduction

This chapter presents the results organized by study objectives. Objective one gives the results on the influence of *Malezi bora* messages on actions and practices of care givers with children under five years old. Objective two describes the intervention outputs on utilization of child health services (uptake) for 2007 the baseline year, 2010 three years after implementation of the initiative and 2014 eight years after implementation of *Malezi bora*. Objective three gives results on the perception of district health managers and health workers on the *Malezi bora* strategy. Tabular and graphical presentations of the variables have been shown.

4.2 The Influence of *Malezi bora* Messages on Practices of Caregivers with Children under Five Years Old (n=105)

4.2.1 Caregivers who had heard of *Malezi bora* Messages (n= 105)

The results show that 90.3% of caregivers had heard of *Malezi bora* messages and Table 4.2 depicts the results.

Table 4.1: Caregivers who had heard of *Malezi bora* messages

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	93	88.6	90.3	90.3
	No	10	9.5	9.7	100.0
	Total	103	98.1	100.0	
Missing	System	2	1.9		
Total		105	100.0		

4.2.2 The *Malezi bora* Messages Recalled by Caregivers (n=105)

The results reveal that the caregivers were able to recall 14 types of *Malezi bora* messages. The messages frequently recalled were on breastfeeding (66 respondents), immunization (62) and good nutrition (59). The other *Malezi bora* messages recalled are shown by Figure 4.2.

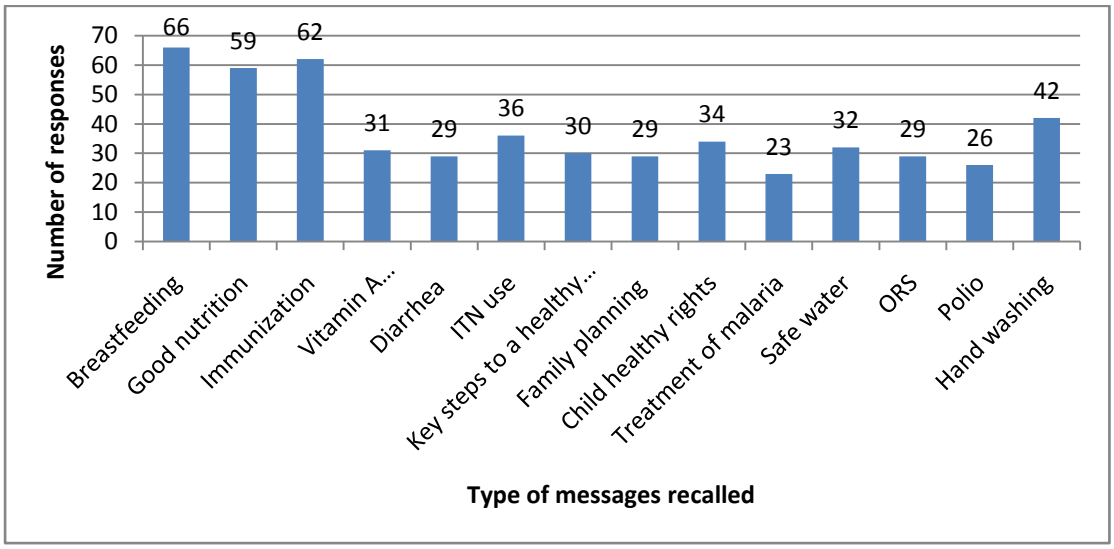

Figure 4.2: The *Malezi bora* Messages Recalled

There was a significant association between having heard of *Malezi bora* message and routine growth monitoring (p= .001) (Table 4.3) and seeking counseling (p= .003) (Table 4.4). Majority of care givers who reported to have heard *Malezi bora* message brought their children mainly for routine growth monitoring and counseling as opposed to caregivers who had reported not to have heard *Malezi bora* message.

Table 4.2 :Chi-Square Tests for Routine Growth Monitoring

	Value	**df**	**Asymp. Sig. (2-sided)**	**Exact Sig. (2-sided)**	**Exact Sig. (1-sided)**
Pearson Chi-Square	3.008	1	.001		
Continuity Correction[b]	1.765	1	.184		
Likelihood Ratio	5.090	1	.024		
Fisher's Exact Test				.114	.010
Linear-by-Linear Association	2.979	1	.084		
N of Valid Cases	103				

Table 4.3 :Chi-Square Tests for Caregivers Counseled

	Value	df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.017	1	.003		
Continuity Correction[b]	6.526	1	.011		
Likelihood Ratio	6.889	1	.009		
Fisher's Exact Test				.010	.010
Linear-by-Linear Association	8.929	1	.003		
N of Valid Cases	103				

4.2.3 Positive Health Actions Taken by Caregivers

A Chi square test was performed to assess the ability of having heard of *Malezi bora* message to predict positive action taken by care givers towards children under five years. There was a significant association between hearing of *Malezi bora* message and taking positive action/seeking services at health facility (X^2=9.018, P=.003). Tables 4.5 and 4.6 show the details.

Table 4.4: Caregiver Heard Message and Positive Decision Taken

			Services[a]								Total
			Weighed	Immunized	Vitamin A	Dewormed	Treated	ITN	Counseled	ORS	
Have you ever heard of *Malezi bora*	Yes	Count	71	32	28	21	37	6	12	4	90
	No	Count	10	5	3	3	3	1	5	1	10
Total		Count	81	37	31	24	40	7	17	5	100

Table 4.5: Chi-Square Tests for Children Weighed, Immunized, Dewormed & Treated

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	9.018	1	.003		
Continuity Correction[b]	6.809	1	.012		
Likelihood Ratio	6.744	1	.008		
Fisher's Exact Test				.021	.021
Linear-by-Linear Association	8.291	1	.003		
N of Valid Cases	103				

4.3 Description of Outputs of Child Health Interventions for 2007, 2010 and 2014

4.3.1 Utilization of Child Health Services (n= 15 Health Facilities)

Data was collected from 15 health facilities using Administrative records for the health facilities for 2007, 2010 and 2014 for the non *Malezi bora* months of April and October and *the Malezi bora* months of May and November. The study purposefully selected records every 3 years from 2007 the baseline year to facilitate the study observe trends.

4.3.2 Attendance of the Under Five Years at Health Facilities

The results as shown in figures 4.3 and 4.4 reveal that in 2007 and 2010 more children attended health facilities during the *Malezi bora* months than the Non *malezi* months

except in 2014 where 8074 children attended during the non *Malezi bora* months which was higher than the *Malezi bora* months.

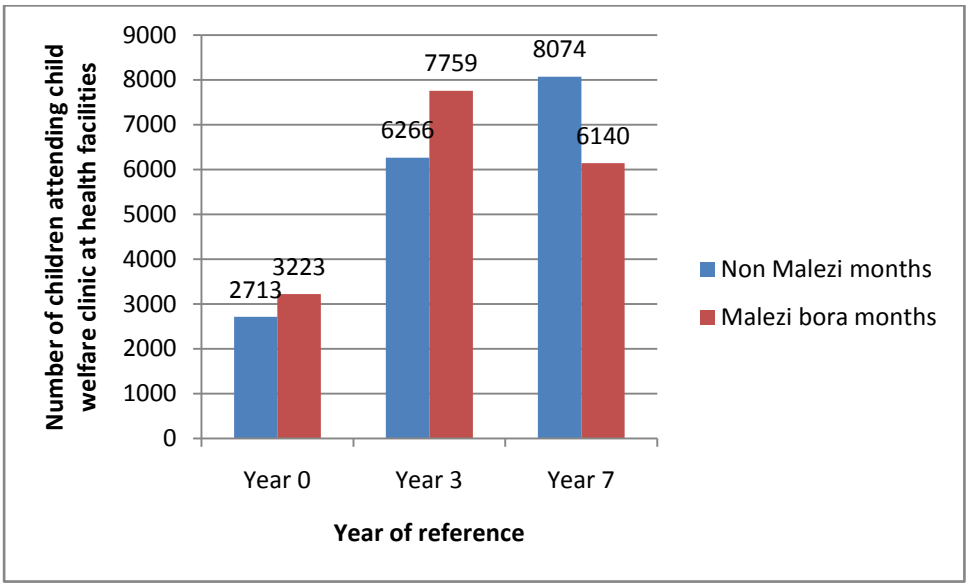

Figure 4.3: Attendance of Health Services by Children

The average number of children attending health facilities was higher during the *Malezi bora* months in 2007 and 2010 but lower in 2014.

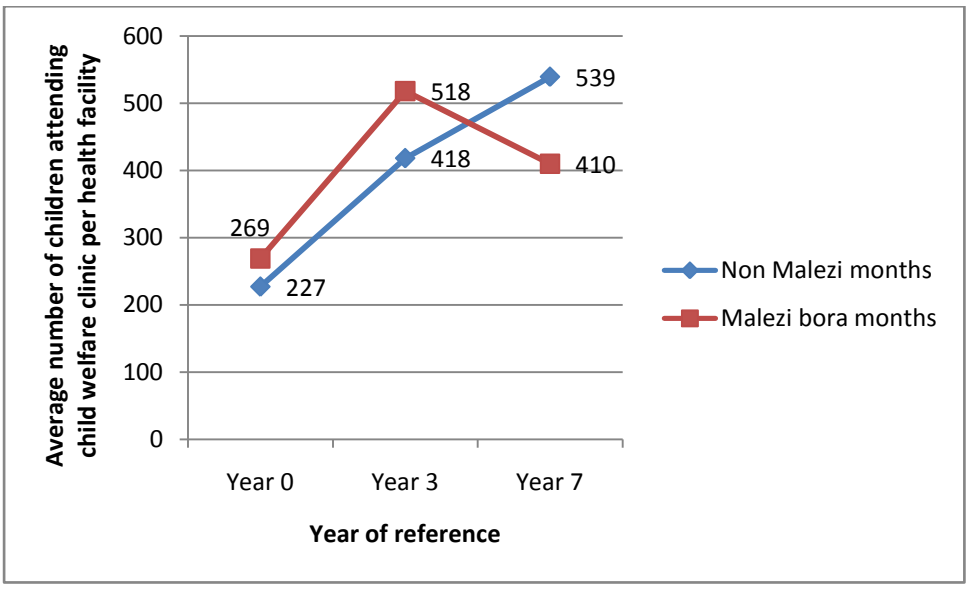

Figure 4.4: Average Number of Children Attending per Health Facility

4.3.3 Treatment of Sick Children

The results as shown in figures 4.5 and 4.6 reveal that in 2007, 2010 and 2014 more sick children attended health facilities during the *Malezi bora* months than the Non Malezi months. The average number of children attending health facilities was higher during the *Malezi bora* months in 2007, 2010 and 2014.

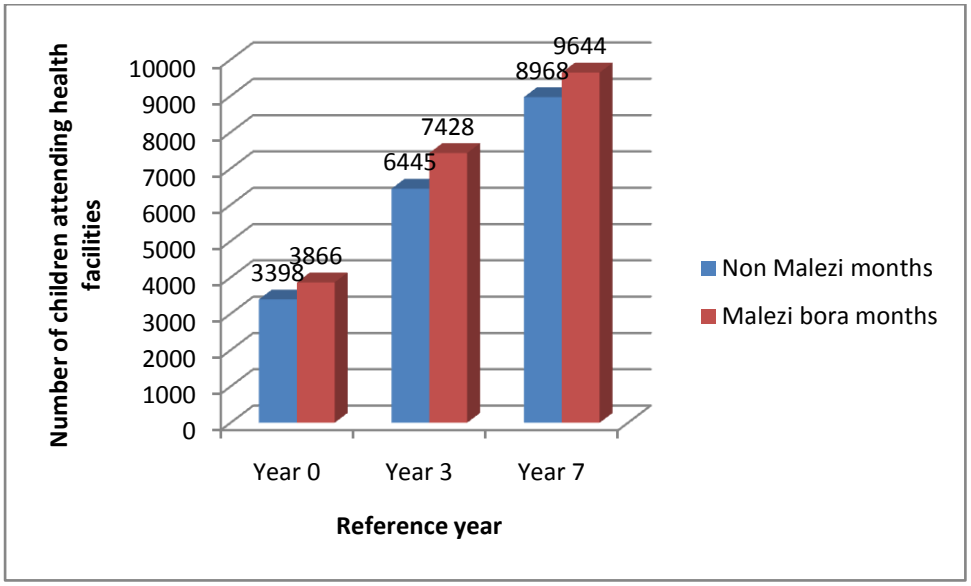

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Figure 4.5: Number of Sick Children Attending Health Facilities

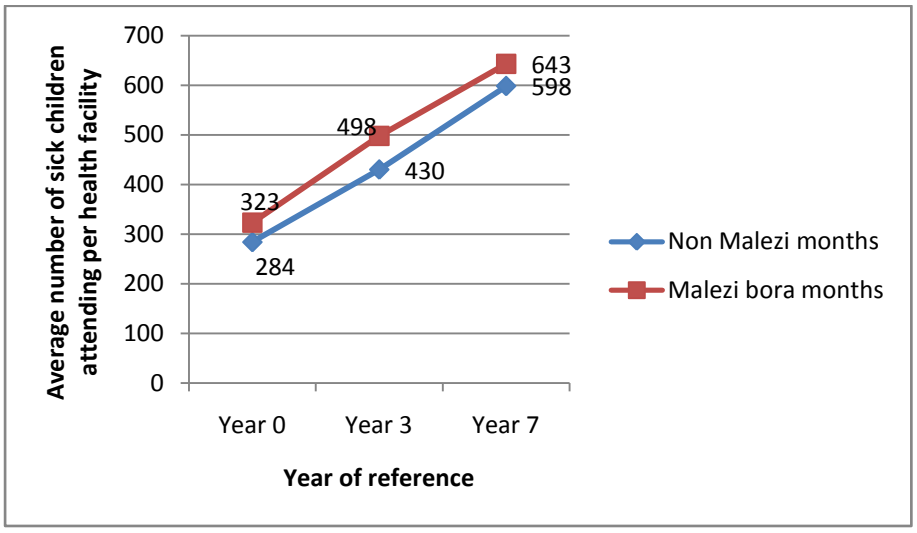

Figure 4.6: Average Number of sick Children Attending per Health Facility

4.3.4 Immunizations

The results for children who received Penta 1 vaccine are shown in figures 4.7 and 4.8 and reveal that in 2007, 2010 and 2014 fewer children were immunized with Penta 1 vaccine during the *Malezi bora* months than the Non *malezi* months. The average number of children who received Penta 1 vaccine was lower during the *Malezi bora* months in 2007 and 2010 and 2014.

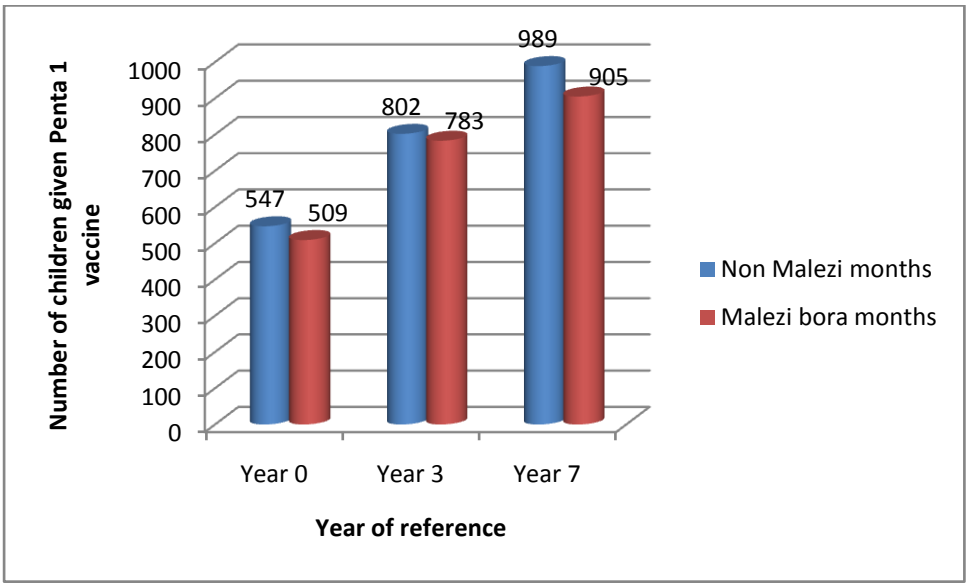

Figure 4.7: Children who Received Penta1

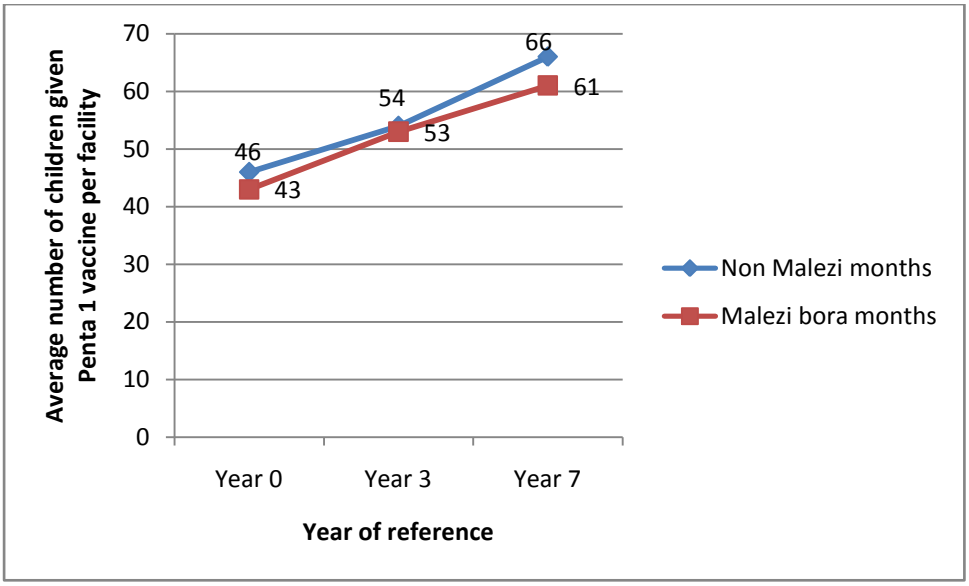

Figure 4.8: Average Number of Children who Received Penta1

The results for children who received Penta 3 vaccine are shown in figures 4.9 and 4.10 and reveal that in 2007, 2010 and 2014 there were mixed results for children who were immunized with Penta 3 vaccine during the *Malezi bora* months and the Non *malezi* months. The average number of children who received Penta 3 vaccine did not conform to any pattern during the *Malezi bora* months and non *Malezi bora* months for 2007, 2010 and 2014.

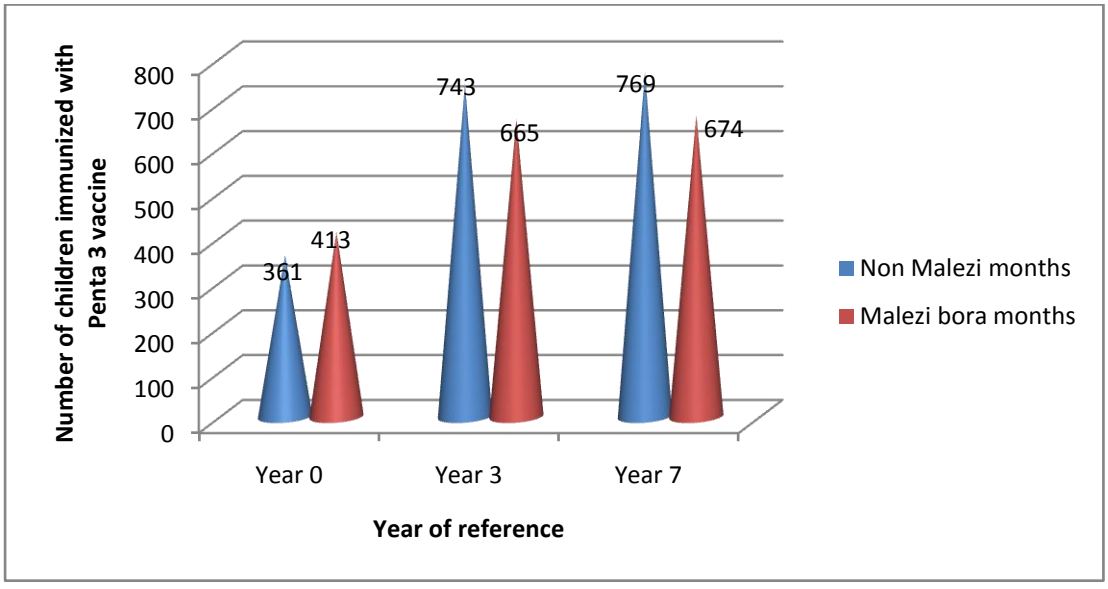

Figure 4.9: Children who Received Penta3

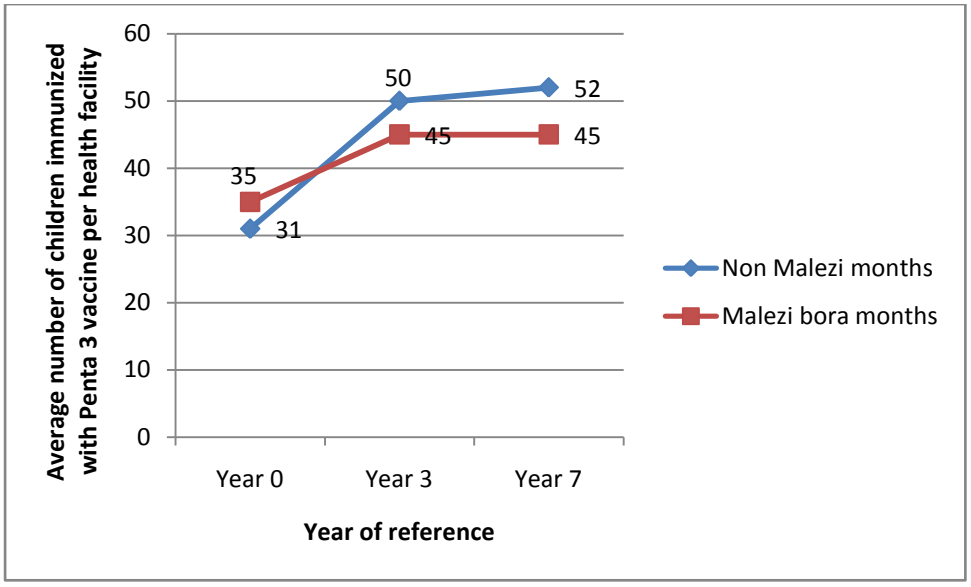

Figure 4.10: Average Number of Children who Received Penta 3

The results for children immunized against tuberculosis are shown in figures 4.11 and 4.12 and reveal that in 2007, 2010 and 2014 there were mixed results for children who were immunized with BCG vaccine during the *Malezi bora* months and the Non *malezi* months. The average number of children who received BCG vaccine did not conform to any pattern during the *Malezi bora* months and non *Malezi bora* months for 2007, 2010 and 2014.

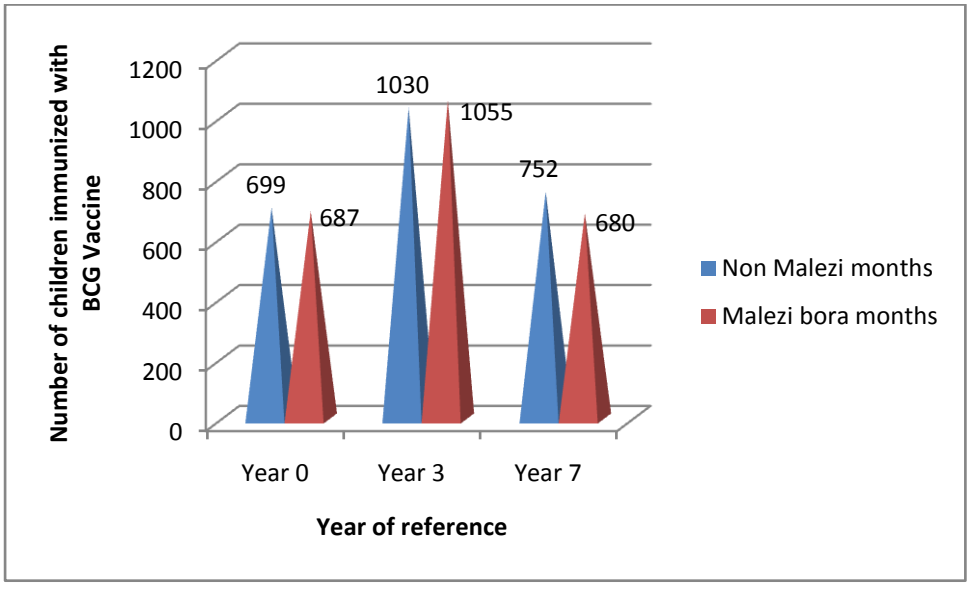

Figure 4.11: Children Immunized with BCG Vaccine

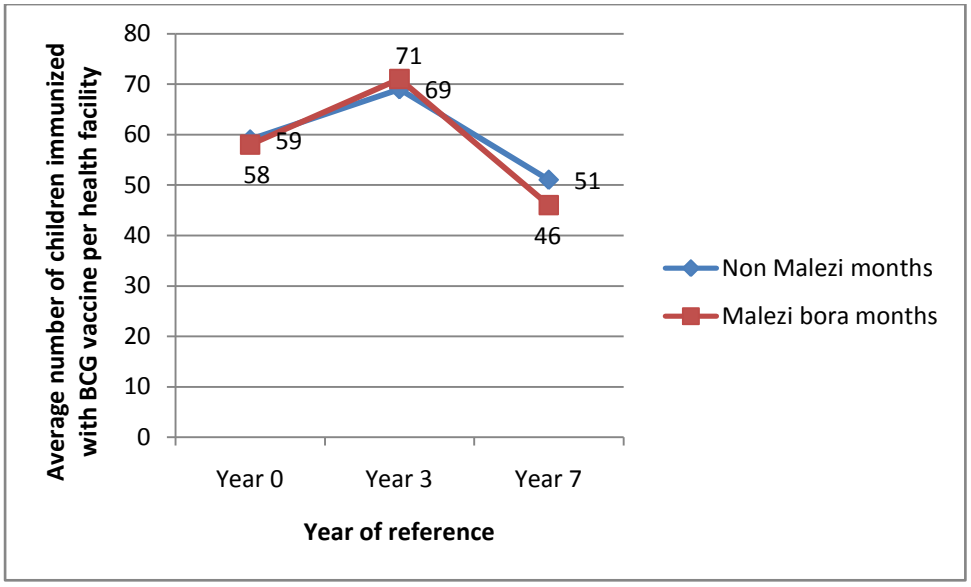

Figure 4.12: Average Number of Children Immunized with BCG Vaccine

The results for children immunized against poliomyelitis are shown in figures 4.13 and 4.14 and reveal that in 2007, 2010 and 2014 more children were immunized during the *Malezi bora* months than the Non *Malezi* months. The average number of children who received OPV 0 vaccine was higher during the *Malezi bora* months than Non *Malezi bora* months for 2007 and 2010 and 2014.

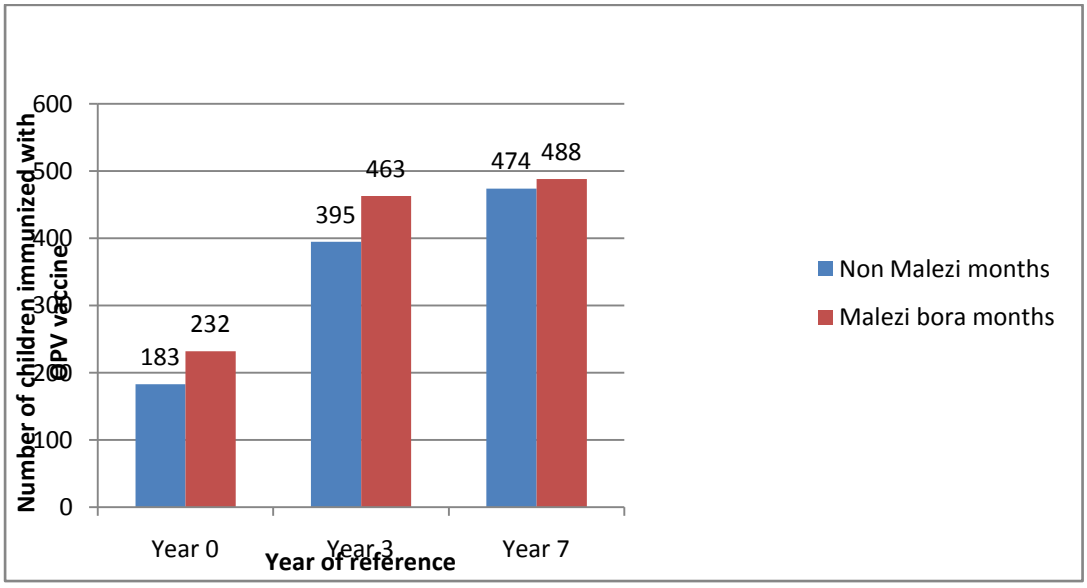

Figure 4.13: Children who Received OPV 0 Vaccine

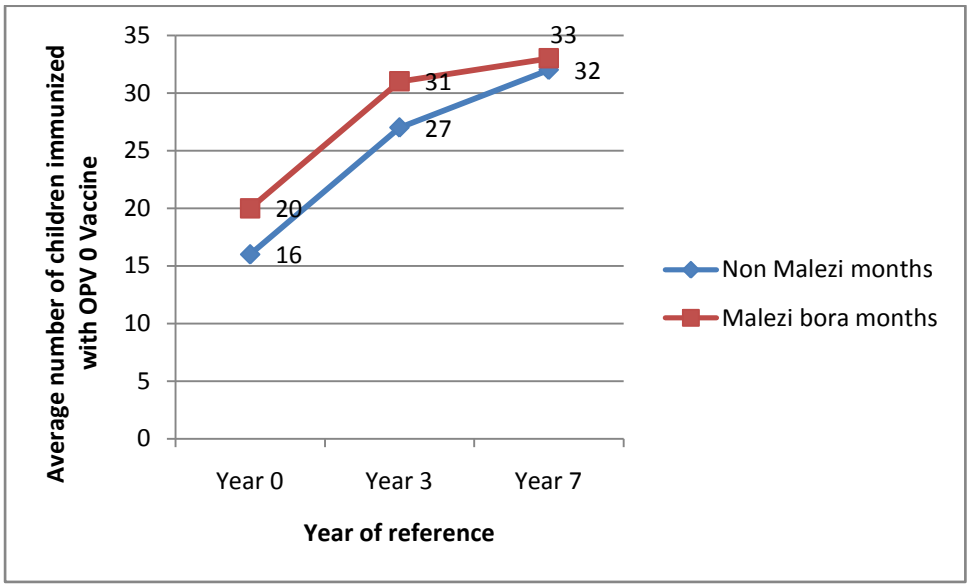

Figure 4.14: Average Number of Children who Received OPV 0 Vaccine

The results for children who received OPV 3 are shown in figures 4.15 and 4.16 and reveal that in 2007, 2010 and 2014 the number of children immunized during the *Malezi bora* months did not conform to any pattern as compared to the children immunized during the Non *malezi* months..The average number of children who received OPV 3 vaccine likewise did not conform to any pattern during the *Malezi bora* months and Non *Malezi bora* months for 2007, 2010 and 2014

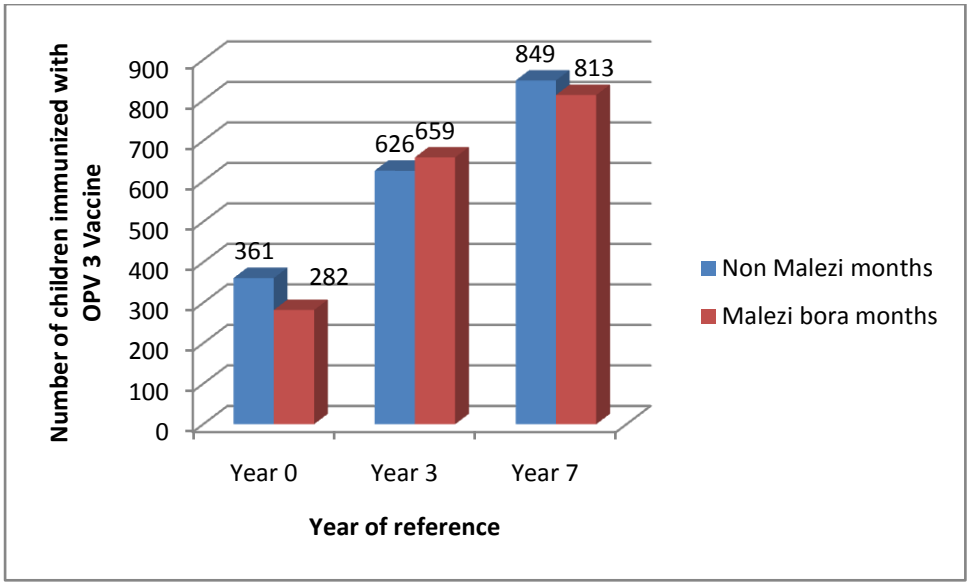

Figure 4.15: Children Immunized with OPV 3 Vaccine

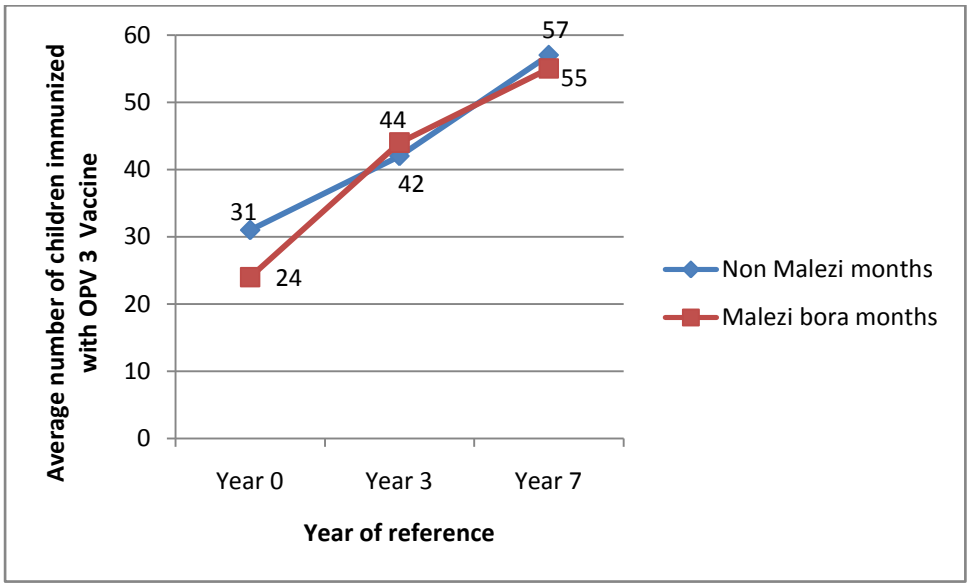

Figure 4.16: Average Number of Children Immunized with OPV 3 Vaccine

The results for children immunized against measles are shown in figures 4.17 and 4.18 and reveal that in 2007, 2010 and 2014 more children were immunized during the *Malezi bora* months than those immunized during the Non *malezi* months. The average number of children who received measles vaccine likewise were more during the *Malezi bora* months and non *Malezi bora* months for 2007, 2010 and 2014.

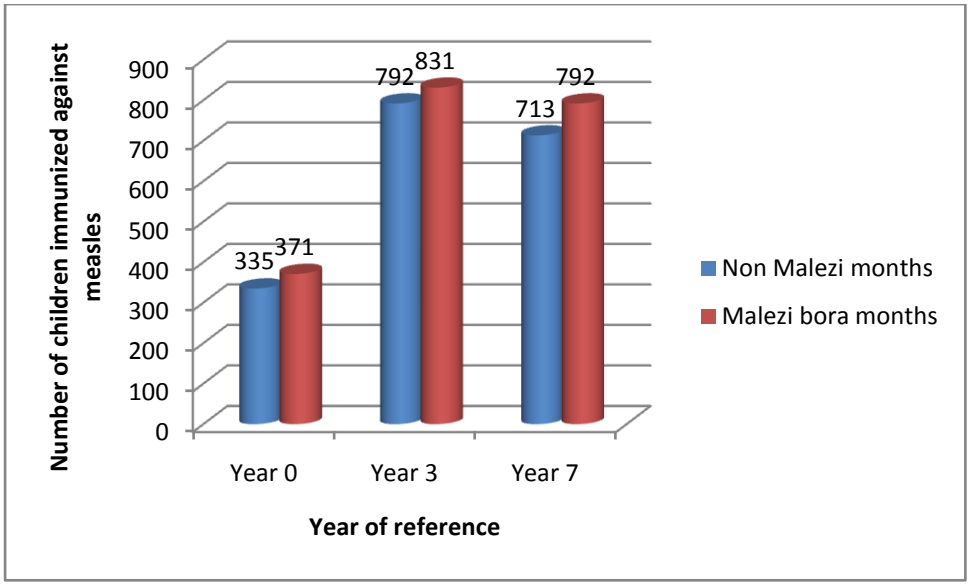

Figure 4.17: Children Immunized against Measles

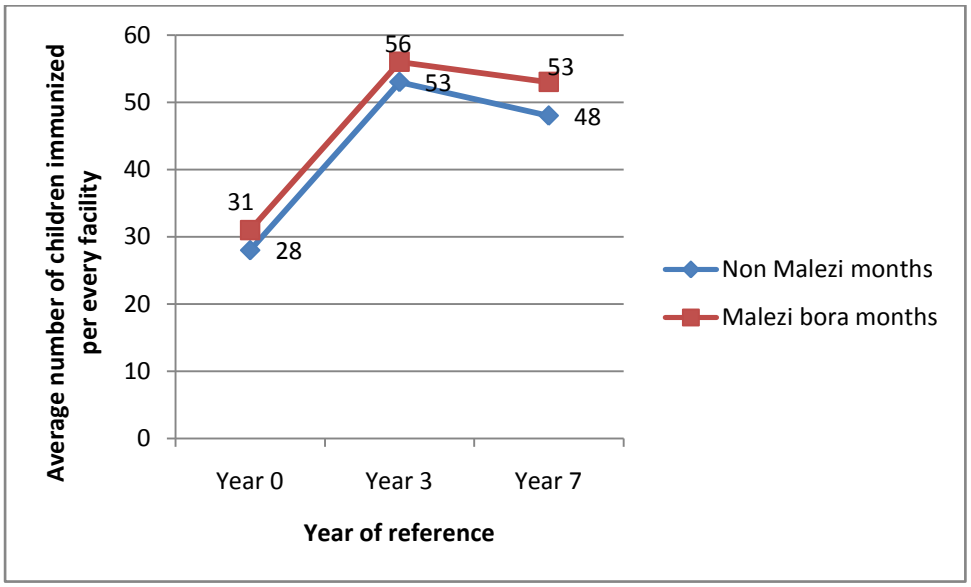

Figure 4.18: Average Number of Children Immunized for Measles

4.3.5 Vitamin A supplementation

The results as shown in figures 4.19 and 4.20 reveal that in 2007, 2010 and 2014 more children were given vitamin A during the *Malezi bora* months than those given vitamin A during the non *Malezi* months. The average number of children who received vitamin A likewise were more during the *Malezi bora* months than those who received during the non *Malezi bora* months for 2007, 2010 and 2014.

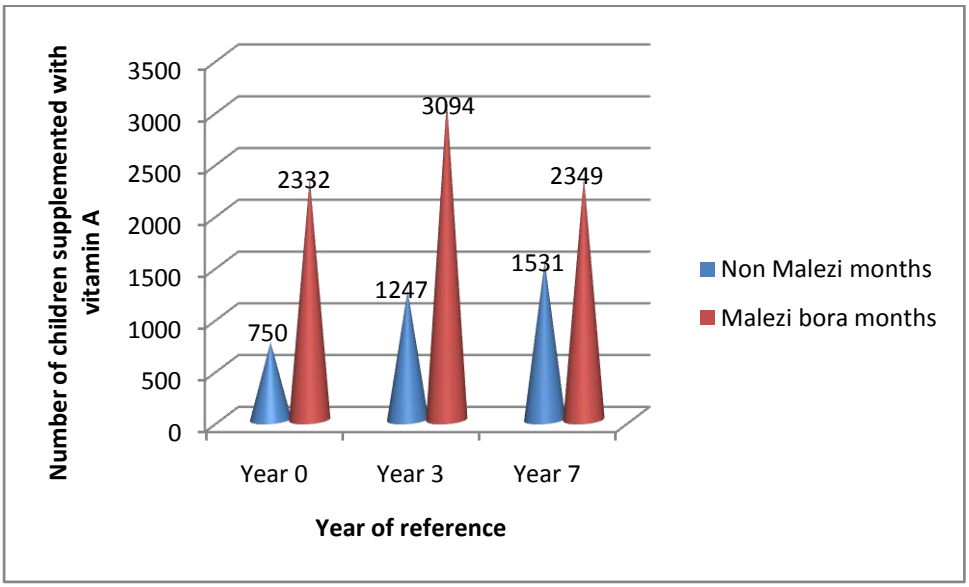

Figure 4.19: Vitamin A Supplementation

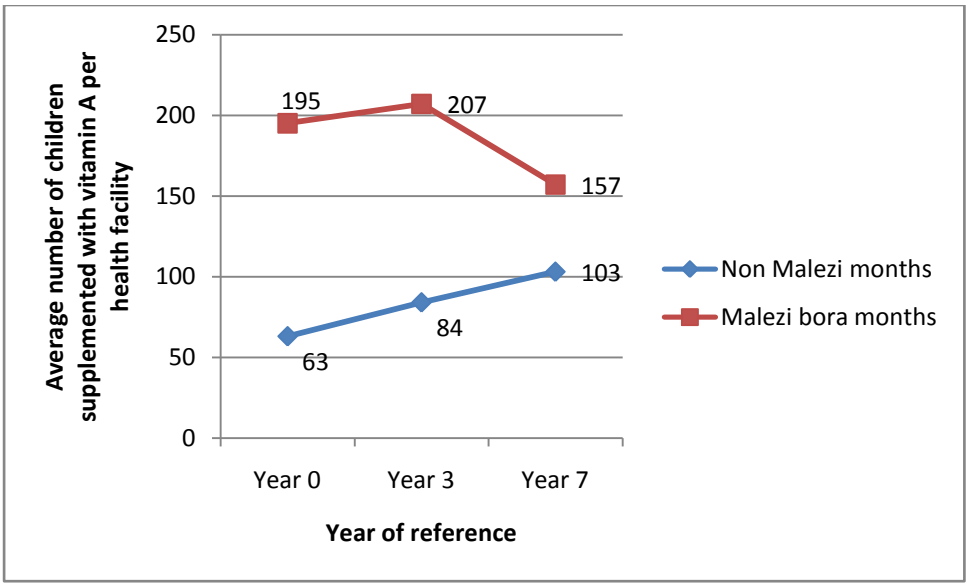

Figure 4.20: Average Number of Children given Vitamin A Supplementation

4.3.6 Children Dewormed

The results as shown in figures 4.21 and 4.22 reveal that in 2007, 2010 and 2014 more children were dewormed during the *Malezi bora* months than those who were dewormed during the non *malezi* months. The corresponding figures for 2007, 2010 and 2014 for the *Malezi bora* months were; 965, 3348 and 2207 respectively

compared to 466, 1827 and 1547 respectively for non *Malezi bora* months. The average number of children who were dewormed, likewise, were more during the *Malezi bora* months than those who were dewormed during the non *Malezi bora* months for 2007,2010 and 2014.

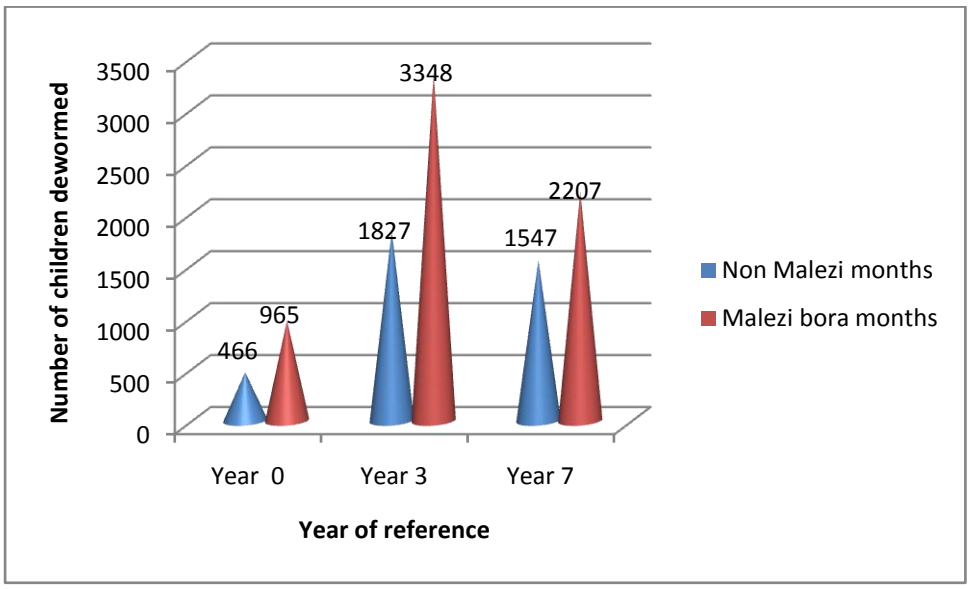

Figure 4.21: Children Dewormed

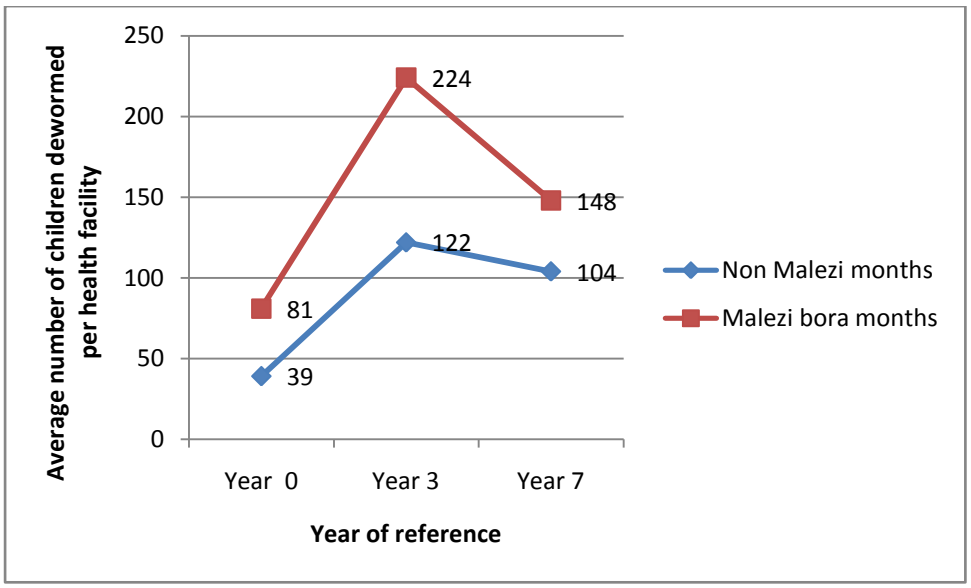

Figure 4.22: Average Number of Children Dewormed

4.4 The Perception of Health Managers and Health Workers (n=30)

The Sub County Health Managers and health workers had a positive perception on the *Malezi bora* Strategy or Initiative. The overall rating of the *Malezi bora* Strategy by the health managers was perceived to be excellent. Most managers, 20 out 31 constituting 65 % perceive the *Malezi bora* strategy as excellent, 5 managers constituting 16% perceived it as a good strategy and only 6 managers perceived it as a poor strategy. Figure 4.23 shows the details.

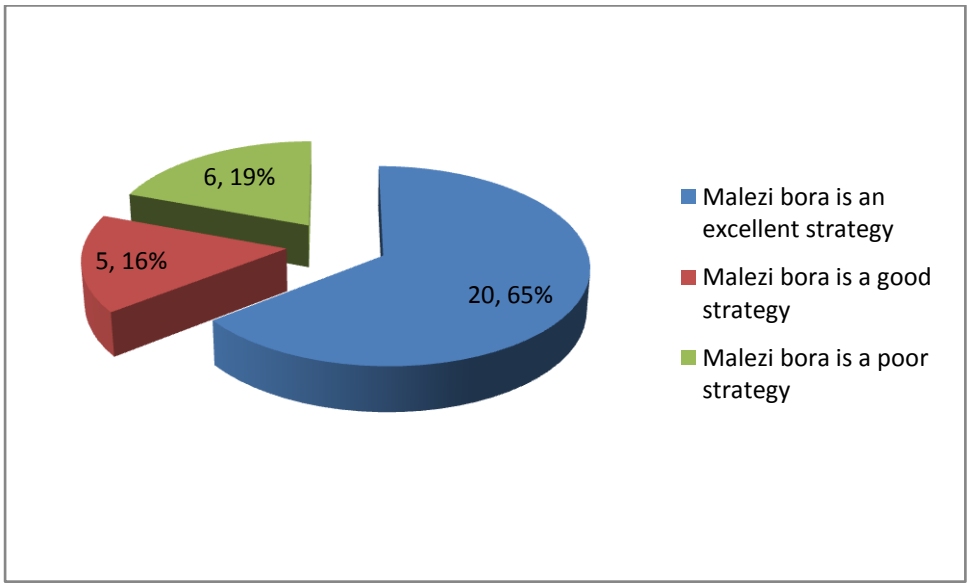

Figure 4.23: Rating of *Malezi bora* Strategy

4.5 In-depth Interviews and Focus Group Discussions

The study carried out in-depth interviews with 30 health workers and 1 focus group discussions consisting of 10 caregivers at Lumakanda Sub County Hospital. According to the focus group discussion, health workers offer excellent services, especially the maternity health services. One of them said, *'I comfortably put the performance of health workers at 50% (good) but I give 100% for the maternity staff', the nurses in maternity are meticulous, the maternity is quite clean and at any given time there is somebody.' 'I delivered this son of mine in Lumakanda Hospital and the nurses gave me excellent services and the maternity ward is very clean.'* However

there were issues with staff reporting late or starting work late and issues of the shortage of drugs and other commodities.

'*Shortage of commodities is a major hindering factor to utilization of services'*- caregiver in the FGD at Lumakanda Hospital. The study established that all child health services were offered free for all children less than 5 years old. These included preventive, promotive and curative services. All the caregivers in the focus group discussions had heard of *Malezi bora* messages.

'*Malezi bora is now a household name and I can mention very many messages but what I can say in a summarized way is that the Malezi bora messages are for the holistic care for the children and help prevent many diseases'*- caregiver in the FGD at Lumakanda Hospital.

CHAPTER FIVE: DISCUSSION

5.1 Introduction

This chapter discusses the findings of the study, starting with the influence of *Malezi bora* messages on practices of caregivers followed by the description of utilization of child health services (uptake) by children under 5 years old in Lugari Sub County, Kenya. The study then covers perception of health managers and health workers on the *Malezi bora* strategy.

5.2 Influence of *Malezi bora* Messages on Practices of Caregivers

In this study there was a significant association between hearing of *Malezi bora* message and routine growth monitoring (p= .001) and seeking counseling (p= .003) and overall P of less than 0.003 for positive actions taken by caregivers who had heard of *Malezi bora* messages as opposed to care givers who had reported not to have heard *Malezi bora* message. Although scanty literature on communication messages during child health days was found, this study concurs with the findings of Christopher and others where Antidrug communication messages (advertising) was shown to be an effective way to dissuade eighth-grade adolescent girls from initiating marijuana use (Christopher et al., 2010).

Further this study on *Malezi bora* communicated messages is not consistent with a study in Ghana by Aba Baffoe where 71% mothers (caregivers) were able to recall how to administer anti-malarial drugs correctly but at home, only 14.6% gave the correct drug, at the correct dosage for the correct duration (Aba, 2015).

This study computed p-values for association of *Malezi bora* messages with actual practices unlike all the studies cited.

5.3 Outputs of Child Health Interventions for 2007, 2010 and 2014

The results reveal that in 2007, 2010 more children attended health facilities during the *Malezi bora* months than the Non *Malezi bora* months and these results concur with the Kenyan National results of the first *Malezi bora* conducted in 2007 where an increase was observed during the *Malezi bora* months as compared to the Non *Malezi bora* months (MOPHS 2007). However in 2014, it was observed that more children attended during the Non *Malezi bora* months than the *Malezi bora* months. This situation could be explained by the fact that this was the peak period when services were being devolved to the Counties and elements of uncertainty and confusion was prevalent. This statement is supported by 2013/2014 health sector performance report which sited restructuring in the health sector, following the onset of devolution, as having greatly affected the service delivery in some areas (Health Sector performance report 2013/2014).

The results reveal that in 2007, 2010 and 2014 more sick children attended health facilities during the *Malezi bora* months than the Non *Malezi bora* months. This result concur with the National *Malezi bora* results of 2007 where 11% more sick children less than 5 years old were brought for care at the health facilities in November more than in October 2007 (MOPHS 2007).

The results reveal that in 2007, 2010 and 2014 fewer children were immunized with Penta 1 vaccine during the *Malezi bora* months than the Non *Malezi bora* months.

This result is not in tandem with the expectation but it is similar to the results of the 2007 National *Malezi bora* report which revealed that the utilization of EPI services appeared not to have been affected by the *Malezi bora* activities. The November 2007 data showed very little increase in coverage for Measles and Pentavalent 1 vaccines and a reduction in BCG and OPV.

The results reveal that in 2007, 2010 and 2014 more children were given vitamin A during the *Malezi bora* months than those given vitamin A during the Non *Malezi bora* months. This result is in concurrence with the 2007 National *Malezi bora* activities which revealed that more children received Vitamin A supplements during the *Malezi bora* months than the Non *Malezi bora* months (MOPHS, 2007).

The results reveal that in 2007, 2010 and 2014 more children were dewormed during the *Malezi bora* months than those who were dewormed during the non *Malezi* months. This result is in concurrence with the 2007 National *Malezi bora* activities which revealed that more children were dewormed during the *Malezi bora* months than the Non *Malezi bora* months (MOPHS, 2007).

This study generally concurs with other studies conducted in other countries and they all show increased utilization during the child health weeks. In 2008 child health days in Zambia boosted vitamin A coverage from less than 10 per cent in 2005 to over 80 per cent in 2007. The campaign in November 2007 reached 81per cent of the country's children polio vaccination and 80 per cent with Vitamin A supplementation (UNICEF, 2008).

Malawi conducted annual child health weeks in which Vitamin A supplementation, de-worming of children and treatment of bed-nets was conducted for communities and using the Child Health Days, Malawi was able to reach 97.7% of eligible children (UNICEF, 2006).

During the first *Malezi bora* event in Kenya in 2007, it was observed that the number of children brought to the health facilities increased when compared with same period in 2006 and therefore caregivers responded to the communication messages to take their children for routine health services (MOPHS, 2007).

5.4 Perception of health managers and health workers on *Malezi bora* Strategy

The Health Managers and health workers had a positive perception on the *Malezi bora* Strategy or Initiative. The overall rating of the *Malezi bora* Strategy by the health managers was excellent. This study concurs with a study done to assess health workers perceptions in Kenya, Mali, Ethiopia, and Cameroon where it was concluded that integration was generally well accepted by health workers since most integrated services were perceived positively by the communities. They cited the opportunity to receive multiple services at one visit, time and transportation cost savings, increased service utilization, maximized health worker efficiency, and reduced reporting requirements (Ryman et al., 2012). This study also concurs with first *Malezi bora* report in Kenyan of 2007 where majority health workers approved the *Malezi bora* strategy (MOPHS, 2007).

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

1. *Malezi bora* messages had influence on caregivers' actions of seeking care of their children and increased utilization of child health services.
2. The *Malezi bora* intervention outputs increase was found to be dependent on the times *Malezi bora* messages were communicated
3. Lugari Sub County Health Managers/health workers had focused and positive attitudes to the *Malezi bora* Initiative

6.2 Recommendations

1. Sustain the communication of *Malezi bora* messages.
2. Focus interventions in immunizations which were not affected by *Malezi bora* communicated messages.
3. Resource mobilization for *Malezi bora* by Lugari Leadership recommended.

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(http://www.apromiserenewed.org).

APPENDICES

Appendix 1A: Informed Consent Form

CONSENT FORM

Hello, my name is ……..a student from Maseno University. I am carrying out a research on how caregivers with children aged less than five years use child health services that are offered in health facilities. I am looking for caregivers who have brought their young children for health services to involve them in the study. I will ask questions on the services your child received today. I will also like to know what you know and feel about *Malezi bora*. There are no risks or harm to you or your child or direct benefits to you in participating in the survey but your participation will contribute to improving child health services in this and other health facilities. Please be assured that your participation is purely voluntary and all information you give will be kept strictly confidential and will not be disclosed to anybody else. Kindly note that you may choose to stop your participation at any time or refrain from answering any questions.

At this time, do you want to ask me anything about this survey?

Do I have your agreement to participate? ……. (Write YES or NO)

Signature: (Surveyor) …….

Date …….

Appendix 1B: Informed Consent Form (Kiswahili version)

Nadhiri ya kukubali

Hujambo, jinalangu ni …….mwanafunzi katika chuocha Maseno. Kwa sasa nafanya utafiti kuhusiana na malezi ya watoto chini ya umri wa miaka mitano kwa kuuliza maswali machache kuhusiana na huduma za watoto walizopata siku ya leo kwenye sahanati. Nitakuuliza pia maswali machache kuhusiana na *Malezi bora*. Kuhusika kwako katika utafiti huu ni kwa hiari yako na ijapokuwa hakuna malipo ni salama kwako na mtoto na kutasaidia kuimarisha huduma wanazotoa madaktari katika sahanati hii na zinginezo katika wilaya hii. Kujihusisha kwako ni kwa hiari na zi lazima ujibu maswali yote na unaweza kuacha kuendelea wakati wowote upendao. Mwisho matokeo yako yote ni siri na hayatapeanwa kwa mtu yeyote yule, wakati wowote ule.

Kwa wakati huu, je una swali lolote?

Je, kwa wakat ihuu, unakubali nianze kukuuliza maswali ? ……. (Andika NDIO au HAPANA)

Sahihi ya anaye uliza maswali (mtafiti) …….

Tarehe …….

Appendix 2: Observation checklist/ Questionnaire

(To be administered to 2 health work present per health facility)

1. Identification details	
1.1 Name of interviewer	
1.3 Date of visit	
1.4 Name of health facility visited	
1.5 Type of the facility (Circle as appropriate)	GOK/Hosp, HC, Dispensary)
1.6 Division:	
1.7 Sub County	

2. Observe communication materials available & Displayed	**Tick applicable**
2.1 List *Malezi bora* materials available	□ posters □ brochures □ banner □fact sheets □Step-by-step Baby guide/Calendar □ fliers

3 Social mobilization activities	**Tick applicable**
List*Malezi bora* activities conducted prior to or during the weeks of *Malezi bora* (May and November)?	□ Road shows □ House to house visit □ Radio spot □ print media/press □ Baraza's □ Health talks

4. List three challenges experienced in this health facility during the *Malezi bora* period;

_____

_____

_____

_____

5. What is your overall rating of *Malezi bora* Strategy in regard to improving the health of the children in your area?(1for excellent, 2 for good and 3 for poor).

End of interview

Appendix 3: Exit Interview questionnaire

(The researcher to interview care givers with children under 5 years old leaving the health facility)

- To be carried out at the health facilities to mothers/caregivers of children less than five years leaving the facility.
- To administer the Exit interview to 7 mothers /caregivers per health facility.

Identifiers

Facility Name: ……**Sub County**: ……..**County**: ……

Interviewer: …… **Date:** ……

Verbal consent obtained: Yes/No (circle as appropriate)

Exit interview number: …….

Reasons for coming to the health facility

1. Why did you come to the health facility today? Tick as appropriate

    - My child is sick
    - Brought my child for immunization
    - Brought my child for routine growth monitoring
    - Brought my child for Vitamin A
    - Other reasons …… (Specify)

2. Have you ever heard of *Malezi bora*? Yes/No (circle as appropriate)

3. If yes in question 2 can you remember the source?

Source	**Tick as appropriate**
Radio	
Television	
Posters & pamphlets	
Banners	
Church	
Mosque	
Road shows	
Health facility	

4. If no in question 2, skip to question 8.

5. What MaleziBora messages can you remember?

Message	**Tick as appropriate**
Breastfeeding	
Good nutrition	
Immunization	
Vitamin A supplementation	
Diarrhea	
ITN use	
Key steps to a healthy child	
Family planning	
Child health rights	
Treatment of malaria	
Safe water	
ORS	
Polio	
Hand washing	
Cannot remember	

6. How do you rate the *Malezi bora* messages? Tick as appropriate
    - Useful
    - A little useful
    - Not useful
7. Explain the actions you take as a result of the knowledge received from *Malezi bora* messages? ……..
8. What health services or health interventions did your child receive today? Tick as appropriate

Service received by child	**Tick as appropriate**
Weighed	
Immunized	
Vitamin A	
Dewormed	
Treated	
ITN	
Counseled	
ORS	

9. How long has it taken for your child tobe given the health services at this facility? Tick as appropriate

    0-30 minutes

    30 minutes-1 hour

    Over 1 hour
10. Did you make any payments for any service today? Yes/No (tick as appropriate)
11. If yes, for which services? Tick as appropriate.

    Registration

    Immunization

    Consultation

    Drugs

    Laboratory

Maternal

12. Were you satisfied with services offered today? Yes/No (tick as appropriate).
    Give reason: …….

End of interview

Appendix 4: Monitoring Tool for Health Facilities

Name of interviewer:

Name of respondent:

Date of interview:

Introduction	
Name of health Facility	
Sub County Population	
Catchment population (estimate)	
Children under 1 year(estimate)	
Children under 5 years(estimate)	
Infant deaths (2013)	
Under five deaths (2013)	

Indicator (Tick year as appropriate)	**Year:2007,2010,2014**		**Year : 2007,2010,2014**	
	April	**May**	**October**	**November**
Number of children <5yrs attended				
Number of infants 0-6 months attended				
Number of sick children <5 yrs sick attended				
Children immunized (type of vaccine)				
Pentavalent 1				
Pentavalent 3				
BCG				
OPV 0				
OPV 3				
Measles				
Number of 6-11 months children receiving vitamin A				

Number of 12-59 months children receiving vitamin A				
Number of 1-5 years children dewormed at the health facility				

End of interview

Appendix 5: Focus group discussion guide

To discuss with mothers at MCH Clinic

1. Who feeds children at home?
2. When children get sick, where do you first seek help?
3. Where do people go for health services?
4. How would you rate the performance of health workers? (1= excellent, 2 = good and 3 = poor)
5. How would you rate the cost of treatment in the Government owned health facilities? (1= expensive, 2 = not expensive, 3= cheap)
6. Have you ever heard of *Malezi bora* messages?
7. If yes in question 6, mention some of the messages.

End of discussion

Appendix 6: Sampling Frame and the selected health facilities

Code	Name of health facility	Sub County	✓ Means selected facility
	District Hospital		
1	Lumakanda district hospital	Lugari	✓
	Sub District Hospitals		
2	Mautuma sub district hospital	Lugari	✓
	Health Centres		
3	Matete health centre	Matete	✓
	Dispensaries		
4	Chekalini dispensary	Lugari	✓
5	Lugari forest dispensary	Lugari	✓
6	Lunyito dispensary	Lugari	✓
7	Majengo dispensary	Lugari	✓
8	NYS dispensary	Lugari	
9	Mapengo dispensary	Lugari	✓
10	Mbagara dispensary	Lugari	✓
11	Mukuyu dispensary	Lugari	✓
12	Munyuki dispensary	Lugari	✓
13	Marakusi dispensary	lugari	
14	Musembe dispensary	Lugari	✓
15	Lumani dispensary	Matete	✓
16	Mahanga dispensary	Matete	✓
17	Maturu dispensary	Matete	✓
18	NzoiaMatete dispensary	Matete	

Appendix 7: Maseno University Authority Letter

MASENO UNIVERSITY
SCHOOL OF GRADUATE STUDIES

Office of the Dean

Our Ref: PG/MPH/00015/02

Private Bag, MASENO, KENYA
Tel:(057)351 22/351008/351011
FAX: 254-057-351153/351221
Email: sgs@maseno.ac.ke

Date: 16th June, 2015

TO WHOM IT MAY CONCERN

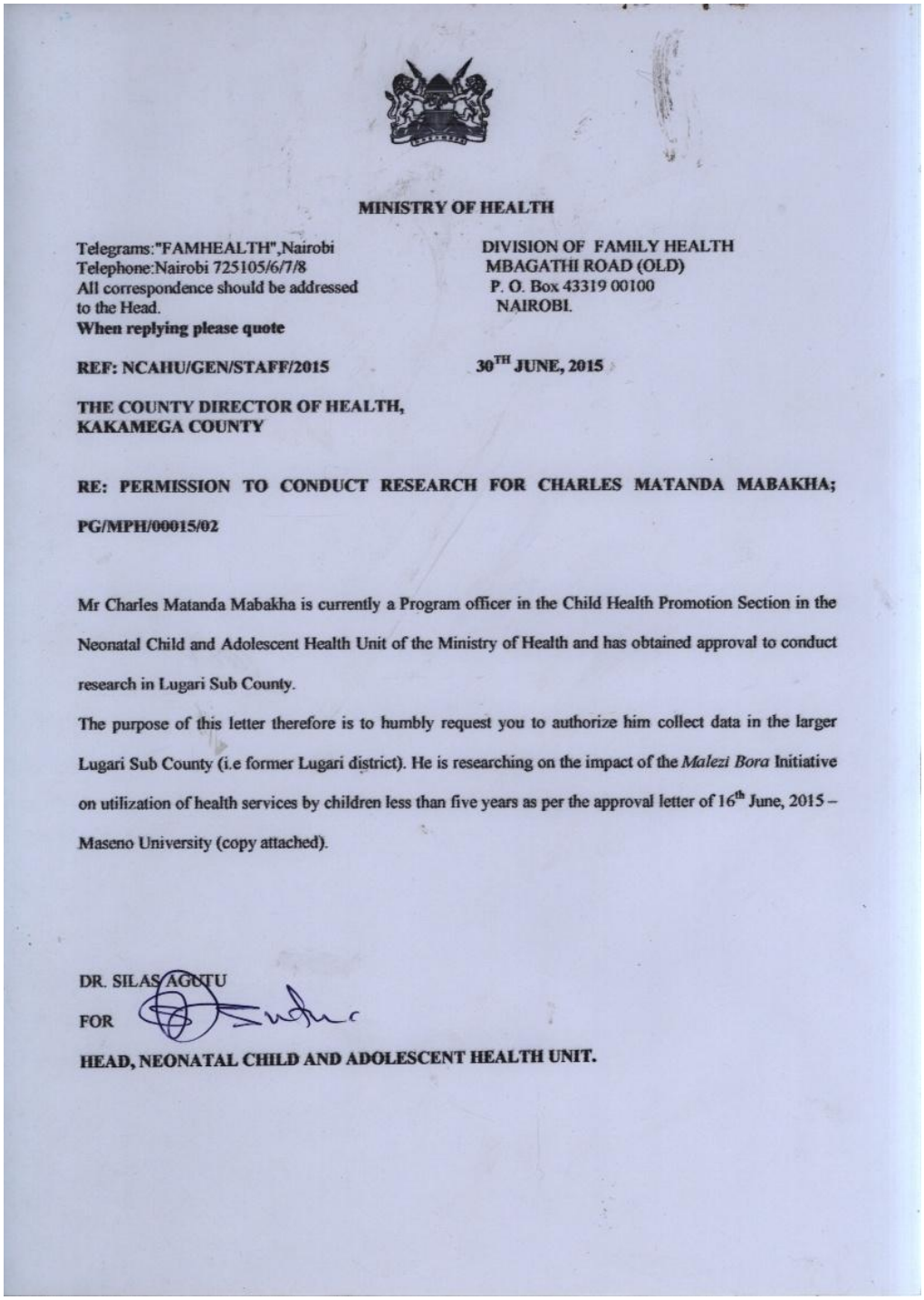
RE: PROPOSAL APPROVAL FOR CHARLES MATANDA— PG/MPH/00015/2002

The above named is registered in the Master of Public Health of the School of Public Health and Community Development, Maseno University. This is to confirm that his research proposal titled "The Evaluation of Malezi Bora Initiative on Utilization of Health Services by Children Less than Five Years in Lugari Sub County" has been approved for conduct of research subject to obtaining all other permissions/clearances that may be required beforehand.

17 JUN 2015

for Prof. P.O. Owuor
DEAN, SCHOOL OF GRADUATE STUDIES

Appendix 8: Ministry of Health Authority Letter



MINISTRY OF HEALTH

Telegrams:"FAMHEALTH",Nairobi
Telephone:Nairobi 725105/6/7/8
All correspondence should be addressed to the Head.
When replying please quote

DIVISION OF FAMILY HEALTH
MBAGATHI ROAD (OLD)
P. O. Box 43319 00100
NAIROBI.

REF: NCAHU/GEN/STAFF/2015

30TH JUNE, 2015

THE COUNTY DIRECTOR OF HEALTH,
KAKAMEGA COUNTY

RE: PERMISSION TO CONDUCT RESEARCH FOR CHARLES MATANDA MABAKHA; PG/MPH/00015/02

Mr Charles Matanda Mabakha is currently a Program officer in the Child Health Promotion Section in the Neonatal Child and Adolescent Health Unit of the Ministry of Health and has obtained approval to conduct research in Lugari Sub County.

The purpose of this letter therefore is to humbly request you to authorize him collect data in the larger Lugari Sub County (i.e former Lugari district). He is researching on the impact of the *Malezi Bora* Initiative on utilization of health services by children less than five years as per the approval letter of 16th June, 2015 – Maseno University (copy attached).

DR. SILAS AGUTU
FOR
HEAD, NEONATAL CHILD AND ADOLESCENT HEALTH UNIT.

Appendix 9: Maseno University Ethics Review Committee Approval

REPUBLIC OF KENYA

Telegrams: "PROVMED", KAKAMEGA
Telephone: 056 31125
Fax: 056 31125
E-mail: pdmswestern@gmail.com
When replying please quote

KAKAMEGA COUNTY
P O BOX 2309
KAKAMEGA
G.P.O. 50100

Ref : CGK/MOH/CIR/VOL1/ 5/142

24th September, 2015

COUNTY GOVERNMENT OF KAKAMEGA
OFFICE OF CHIEF OFFICER OF HEALTH

To

SCMOH

- Lugari Sub County.

RE: PERMISSION TO CARRY OUT RESEARCH IN LUGARI SUB COUNTY : CHARLES MATANDA MABAKHA

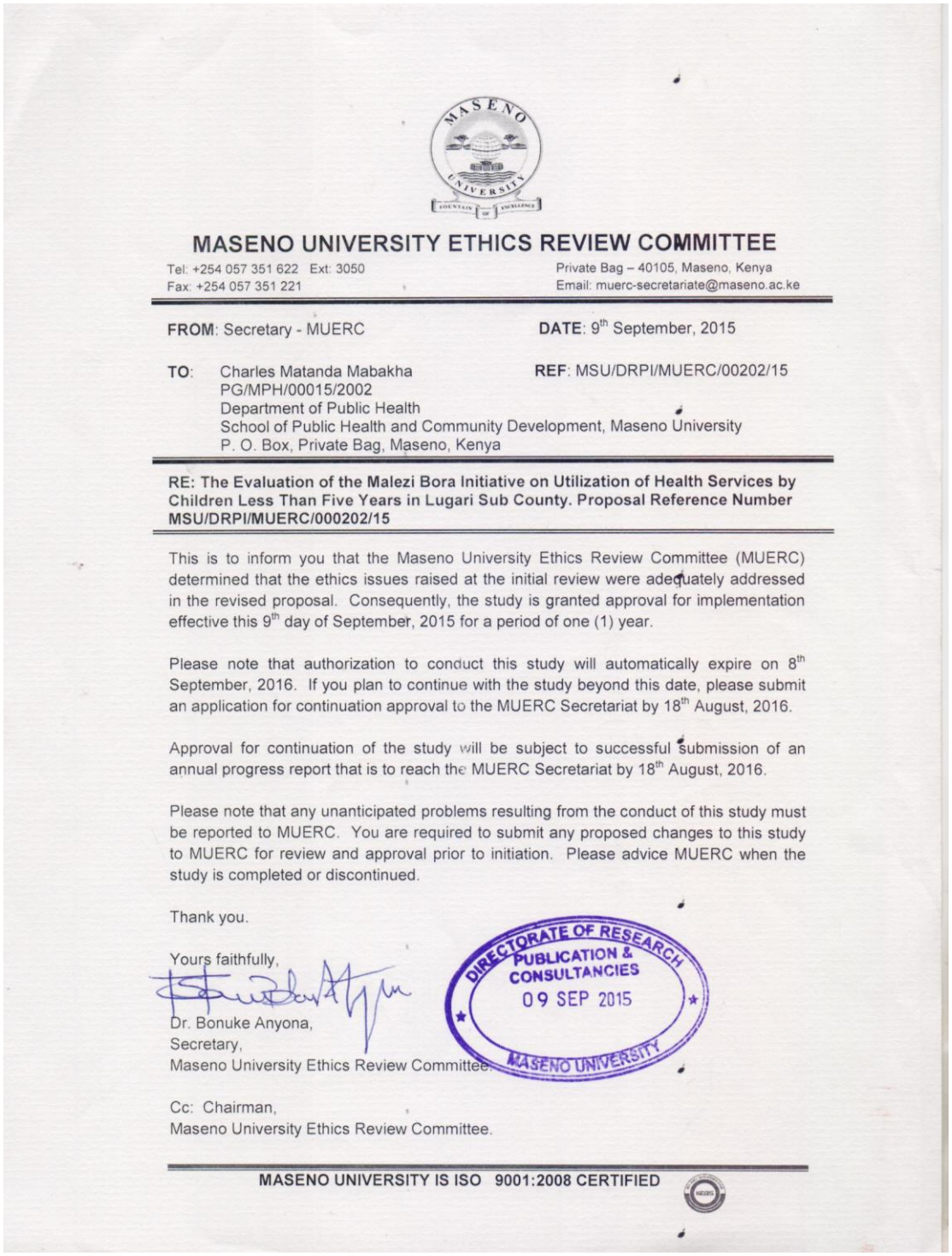
The above named is a Program Officer in the Child Health Promotion Unit of the Ministry of Health. He wishes to conduct a study on the Evaluation of the Malezi Bora initiative on utilization of Health Services by children less than five (5) years in Lugari Sub County.

Kindly allow him to carry out the study in your Sub County and accord him all the necessary support.

Thank you

Dr. David Oluoch
For: Chief Officer for Health/County Director for Health
KAKAMEGA COUNTY.

Appendix 10: Kakamega County Director Authority Letter



MASENO UNIVERSITY ETHICS REVIEW COMMITTEE

Tel: +254 057 351 622 Ext: 3050
Fax: +254 057 351 221

Private Bag – 40105, Maseno, Kenya
Email: muerc-secretariate@maseno.ac.ke

FROM: Secretary - MUERC

DATE: 9th September, 2015

TO: Charles Matanda Mabakha
PG/MPH/00015/2002
Department of Public Health
School of Public Health and Community Development, Maseno University
P. O. Box, Private Bag, Maseno, Kenya

REF: MSU/DRPI/MUERC/00202/15

RE: The Evaluation of the Malezi Bora Initiative on Utilization of Health Services by Children Less Than Five Years in Lugari Sub County. Proposal Reference Number MSU/DRPI/MUERC/000202/15

This is to inform you that the Maseno University Ethics Review Committee (MUERC) determined that the ethics issues raised at the initial review were adequately addressed in the revised proposal. Consequently, the study is granted approval for implementation effective this 9th day of September, 2015 for a period of one (1) year.

Please note that authorization to conduct this study will automatically expire on 8th September, 2016. If you plan to continue with the study beyond this date, please submit an application for continuation approval to the MUERC Secretariat by 18th August, 2016.

Approval for continuation of the study will be subject to successful submission of an annual progress report that is to reach the MUERC Secretariat by 18th August, 2016.

Please note that any unanticipated problems resulting from the conduct of this study must be reported to MUERC. You are required to submit any proposed changes to this study to MUERC for review and approval prior to initiation. Please advice MUERC when the study is completed or discontinued.

Thank you.

Yours faithfully,

DIRECTORATE OF RESEARCH PUBLICATION & CONSULTANCIES 09 SEP 2015 MASENO UNIVERSITY

Dr. Bonuke Anyona,
Secretary,
Maseno University Ethics Review Committee.

Cc: Chairman,
Maseno University Ethics Review Committee.

MASENO UNIVERSITY IS ISO 9001:2008 CERTIFIED

Appendix 11: Map showing Lugari Sub County