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LENGO HEALTH

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PROGRAMME

ASSESSMENT OF COMMUNITY AWARENESS ON REPRODUCTIVE HEALTH – BREAST & CERVICAL CANCER AMONG WOMEN IN RIARIEDA SUB-COUNTY

REPORT

BY
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JULY 2015

ACKNOWLEDGEMENTS

This baseline survey was made possible through technical support from New Dimension Consulting (NEDICO) with funding from Bristol Myers-Squibb Foundation, Secure the Future (BMSF STF). Specific acknowledgements are extended to the Lengo Health Programme Team especially Paul Omullo and Lydia Aluoch. Acknowledgements are further extended to the BMSF STF TAP Faculty member and Kenya Country Lead Dr Lilian Kimani for technical contributions as well as overall support towards the process. The baseline survey benefitted immensely from the contributions of research assistants (Florence Apondi Owino, Priscah Awino Otieno, Gordon Odhiambo Amoke and Essaus Audi) who collected data using the different instruments. Special acknowledgements are extended to the community leaders, health workers and other key informants who provided critical insights towards the process. The Survey was made possible by women who took their time to be part of the data collection and without whose participation this Survey would not have been possible. It is sincerely hoped that this report i.e. findings, conclusions and recommendations will contribute towards developing a strong intervention that will address breast and cervical cancer in Rarieda Sub-County and beyond.

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LIST OF ACRONYMS

BMSF	Bristol-Myers Squibb Foundation
FGD	Focus Group Discussion
HPV	Human Papilloma Virus
KNCCA	Kenya National Cancer Control Strategy (2010-2025)
LeHP	Lengo Health Programme
MMS	Ministry of Medical Services
MoPHS	Ministry of Public Health and Sanitation
STF	Secure the Future
STI	Sexually Transmitted Infection
TAP	Technical Assistance Programme
WHO	World Health Organisation

DEFINITION OF KEY TERMS

Term	Definition
Breast cancer	Breast cancer is a group of cancer cells (malignant tumor) that starts in the cells of the breast. It starts in the cells of the breast as a group of cancer cells that can then invade surrounding tissues or spread (metastasize) to other areas of the body (www.nationalbreastcancer.org/what-is-breast-cancer)
Cancer	Disease caused by an uncontrolled division of abnormal cells in a part of the body. Cells do not die when they should and they continue to multiply without control forming a mass or tumor. These growths are considered either benign (not cancer) or malignant (cancer). Cancer is always named after the part of the body where it starts, even if it spreads to other body parts later.
Cervical cancer	Cervical cancer is a malignant tumour that starts in the cells of the cervix. Malignant means that it can spread, or metastasize, to other parts of the body (https://www.cancer.ca/.../cancer.../cancer.../cervix...)
Multi-Stage Stratified Sampling	Multistage sampling refers to sampling plans where the sampling is carried out in stages using smaller and smaller sampling units at each stage. In a two-stage sampling design, a sample of primary units is selected and then a sample of secondary units is selected within each primary unit.

EXECUTIVE SUMMARY

This report provides findings, conclusions and recommendations from a baseline survey to assess community awareness on reproductive health – breast & cervical cancer among women in Rarieda sub-county. The baseline survey was conducted by Lengo Health Programme (LeHP) with technical and financial support from the Bristol-Myers Squibb Foundation (BMSF) Secure the Future (STF) Technical Assistance Programme (TAP).

OBJECTIVES

The baseline survey sought to:-

i. *Assess the level knowledge of cervical and breast cancer among women and men in Rarieda sub-County, Siaya County;*
ii. *Explore attitudes of community on cancer;*
iii. *Determine people's options' and practices on cervical cancer; and*
iv. *Assess the community readiness to access the screening and treatment services.*

METHODOLOGY

The survey target population consisted of all women and men aged 15 to 49 years in Rarieda Sub County. Multi-stage stratified sampling was used to collected data from eight (8) locations of Rarieda. Sub- locations from eight locations were selected (first level). One sub-location was randomly selected. Random selection was used to select two villages (second level) in each geographical location, data was collected using the same geographical criteria. At village level households (third level) were randomly selected in line with the sample size. One woman aged 15-49 years was selected at each selected household. A total of 433 individual questionnaires were administered to women and these were complimented by eight (8) focus group discussions and 15 key informant interviews.

KEY FINDINGS

Demographic Characteristics

The majority of respondents were aged 45 years and above (37.4%) followed by those aged between 20-24 (16.6%), those aged 25-29 (13.4%) and those aged 40-44 (8.8%). Most (63.3%) of the respondents also reported having primary education and most were predominantly Christian (99%) while the minority reported being Muslim (0.7%) and other religions (0.5%). More than half of the respondents were not employed (53%) followed by those who reported being self-employed (42%) and those who reported being employed (5%). Most (72%) the respondents reported being married followed by those who reported being widowed (17%), those who have never been married (10%) and those who were divorced/separated (1%).

General Cancer Knowledge

Almost all respondents (99%) reporting ever having heard about cancer which provides the basis for programming as cancer will not be a completely new disease to target communities. Respondents' age and location have no bearing on whether or not they would have heard about cancer with no statistically significant relationship between respondents' age and whether or not they have ever heard of cancer ($p=0.069$) as well as respondents' location and whether or not they would have heard of cancer ($p=0.187$).

Breast and Cervical cancer were the most known cancers amongst respondents with 97.2% of respondents reporting knowledge of breast cancer whilst 76% reported knowledge of cervical cancer. More than half (57%) of the respondents also cited throat cancer.

Breast Cancer Knowledge

Family and community networks are significant sources of breast cancer knowledge with the majority (34.7%) of respondents reporting having heard of breast cancer through a family member. The media was the second most cited source of breast cancer information as it was cited by 27.5% of study respondents. Other key sources of breast cancer information included health workers (19%), friends (13%) along with brochures, posters and other printed materials (5.1%). The majority (67%) of respondents had not heard about breast cancer in six (6) months preceding the survey while the remainder reported having heard about breast cancer in the six (6) months preceding the survey. More respondents in South Asembo and South Uyoma were more likely to have heard about breast cancer in the six (6) months preceding the survey compared to those from the other locations.

Swelling was the most (61%) cited breast cancer symptom followed by pain (52%) and ulcers (7.1%). However, 21% of respondents reported not knowing symptoms of breast cancer. The findings provide scope for prioritizing provision of accurate and well targeted information to women. The majority (66%) of survey respondents did not know breast cancer risk factors while few cited other factors (23%), diet (5.9%), family history (4.5%) as well as frequent pregnancies (1.2%). The majority (61%) of respondents cited medical examination as a cancer detection method. In addition to medical examination as a cancer detection method, respondents also cited breast self-examination (15%), other (12.7%) and the rest did not know (12%). The majority of respondents had knowledge of medical approaches (85%) as breast cancer treatment methods followed by those who did not know (4%) and those who cited herbal remedies (4.7%).

Cervical Cancer Knowledge

The media were the most (27%) cited source of cervical cancer knowledge followed by family members (21.3%) and health workers (18.8%). Similar to breast cancer, most (69%) of the respondents who reported knowing of breast cancer reported having heard or seen cervical cancer related material in the six (6) months preceding the survey. In addition, there is statistically a significant relationship (p-value=0) between location and remembering, seeing or hearing anything about cervical cancer in the last 6months. South Uyoma (57%) had the highest percentage of respondents who reported having heard about cervical cancer in the six (6) months preceding the survey followed by South Asembo (38%). Most (38%) of the respondents reported not knowing symptoms of cervical cancer followed by those who cited other symptoms (31%) followed by vaginal bleeding (24%), vaginal foul smelling discharges (19%), back ache (7.5%), and pain in the womb (4.1%). The majority (52%) of respondents did not know cervical cancer while some cited having multiple sexual partners (20%). Additional factors cited included dry sex (6.6%), early onset of sexual activity (6.1%) and sexually transmitted infections STIs (6.1%).

Attitudes towards breast and cervical cancer

Respondents demonstrated positive attitudes towards breast and cervical cancer with the majority disagreeing with myths and misconceptions.

Most (45%) of the respondents strongly agreed that any adult woman including me can develop breast or cervical cancer with a small percentage (6.5%) either disagreeing or strongly disagreeing with the statement. Respondents further rejected misconceptions around breast and cervical cancer being diseases for elderly women with 42.3% disagreeing and 29% strongly disagreeing with the misconception. Positive attitudes towards factual statements regarding breast and cervical cancer as well as negative attitudes regarding misconceptions towards breast and cervical cancer demonstrate opportunities for addressing stigma and discrimination related to breast and cervical cancer. There were qualitative perceptions in all eight (8) FGDs that breast cancer only affects women and the role of men should be limited.

Cervical and Breast Cancer Practices

There is a disconnection between knowledge levels, positive attitudes and health seeking behaviours among respondents. The majority (80%) of respondents not visiting a health facility for cancer related services in the 12 months preceding the survey. 82% of the respondents reported never having been screened for cancer while there are more positive breast cancer related practices with the majority of respondents reporting having conducted breast self-examination in the 12 months preceding the survey as 81.3% of those who reported having conducted breast self-examination reporting doing so in the 12 months preceding the survey.

The majority (66%) of respondents reported never having talked to anybody about breast and cervical cancer while the remaining 34% reported having talked to someone about breast and cervical cancer. Respondents from Central Asembo (46%), East Asembo (45%) and East Uyoma were the most likely to have talked with anybody about breast and cervical cancer. On the other hand, respondents from Central Uyoma were the least likely to have talked with anybody about breast and cervical cancer. The majority of respondents (78.3%) reported not having discussed about breast and cervical cancer in the three (3) months preceding the survey while 22% reported having discussed with their partners or spouses about breast and cervical cancer.

Availability of breast and cervical cancer services

The majority (76%) of respondents highlighted that place in their community where people are able to visit and talk about cancer issues. There is a statistically significant relationship ($p=0$) between location and place in communities where people are able to visit and talk about cancer issues. Respondents from Central Asembo were most (89%) likely to report there being a place in their community where they can visit and talk about cancer issues followed by those from South Asembo (88%), West Uyoma (84%), East Uyoma (80%) and West Asembo (78%).

The hospital was the most (78.5%) cited place where respondents said they were able to visit and discuss about breast and cervical cancer issues. This was followed by the clinic (14.5%), the house (6.1%), Church/Mosque (5.8%) and Counselling Centre (3.6%). The centrality of formal health institutions (clinic and hospital) provides entry points for integrating breast and cervical cancer into broader sexual and reproductive health service and information provision. Education and counselling regarding cancers (60%) was the most cited service followed by respondents who did not know of the services available (24%), cancer screening (15.8%), cancer treatment (8.2%) as well as cancer referrals (5.2%).

While respondents outlined that services are available in their communities, they also outlined key challenges related to accessing the services. Barriers cited included the high cost of accessing the services (21.5%), unavailability of services (15.5%), transport to services points (10.6%) and other barriers (43.2%). Respondents in qualitative interviews also outlined that barriers towards accessing cancer services included long distances from health facilities, lack of facilities offering the services, ignorance as well as negative attitudes given that it affects the private parts.

RECOMMENDATIONS

CONCLUSION	RECOMMENDATION
There are high levels of general knowledge around cancers with the most commonly known being breast and cervical cancer. However, the information is inadequate to transform attitudes or to influence health seeking behaviours.	*i. Invest in the project and build upon the general knowledge that exists and focus on providing accurate information that can potentially transform attitudes and influence behaviours.*
There are different levels of breast and cervical cancer knowledge across the different locations. This could be indicative of existing approaches around cervical and breast cancer within the communities.	*ii. Project interventions should be preceded by mapping of similar interventions in the same localities. The approach will provide opportunities for leveraging on technical and financial resources while building a sustainable intervention.*
Health facilities and health workers are key sources of information and services for the majority of respondents and there are opportunities for utilizing them in project introduction and implementation.	*iii. Prioritize working with health facilities and health workers in the different locations especially as they have technical knowhow as well as service provision capacities.*
Although a key challenge noted relates to limited uptake of cancer screening and treatment services, this was not entirely a result of poor health seeking behaviours among respondents but was also due to unavailability of services within health facilities.	*iv. Demand generation for cancer related services should be informed by mapping of available service provision capacities among respondents. This will ensure that clients are mobilized for services that are available.*
The role of men has not been well mapped out and well articulated and opportunities will be lost if they are not mobilized to take up services as well as support their partners and spouses.	*v. The project should include a strong male involvement component to ensure men are mobilized to support their partners and spouses to take up services.*
Some health facilities do not have adequate resources (human, technical and equipment) to adequately provide breast and cervical cancer services. This may mean that women could be mobilized and end up failing to access the services.	*vi. Include an advocacy component within the project to focus on ensuring that health facilities are adequately resourced in order to provide services to all those who need them within their catchment area.*

1. INTRODUCTION

This report provides findings, conclusions and recommendations from a baseline survey to assess community awareness on reproductive health – breast & cervical cancer among women in Rarieda sub-county. The baseline survey was conducted Lengo Health Programme (LeHP) with technical and financial support from the Bristol-Myers Squibb Foundation (BMSF) Secure the Future (STF) Technical Assistance Programme (TAP).

1.1 OVERVIEW OF CANCERS IN KENYA

1.1.1 General Cancer Overview

Cancer accounts for accounts for an estimated 7 percent of all deaths every year in Kenya (WHO, 2014). According to Kenya Ministry of Health and Sanitation and Medical Services (2012), cervical cancer is the leading cause of deaths and the second leading cancer after breasts cancer among women. In 2014 cervical cancer was the leading cancer and cause of cancer death (WHO, 2014). Annual cancer incident and mortality rate was 28, 000 cases and 22, 000 respectively (Ministry of Public Health and Sanitation and the Ministry of Medical Services, 2011).

The most common types of reproductive health cancers in Kenya are cancers of the cervix, breast, and prostate [Kenya National Cancer Control Strategy 2010-2025,]. Findings from a study conducted by Ipsos-Synovate in 13 urban towns in Kenya suggest that there is lack of awareness and prevention strategies to tackle reproductive health cancers in the country [http://kenyacancer.org]. These findings come against the backdrop of the first global analysis of incidence and mortality trends for breast and cervical cancers over the last 30 years which shows that the two cancers are on the rise worldwide, with African women being most at risk along with those from other developing countries in East Asia and Latin America , [WHO 2007].

In Kenya, cancer ranks third after infectious and cardiovascular diseases as a cause of death (National Cancer Control Strategy 2011-2016). The incidence of cancer in the country has progressively increased over the years mainly as a result of increased exposure to preventable risk factors which include the adoption of unhealthy life styles such as unhealthy diet, physical inactivity, tobacco use and harmful use of alcohol. Other risk factors include exposure to environmental carcinogens, viral infections such as HIV, Hepatitis B & C and Human Papilloma Virus; bacterial infections such as Helicobacter Pylori; and parasitic infestations such as Schistosomiasis.

Cervical cancer is a major public health concern in Kenya. It is the second most common cancer in women but the most common cause of deaths according to Kenya Ministry of Health and Sanitation and Medical Services (2012). The efforts have been put in place to reduce the incidence, morbidity and mortality associated with cervical cancer, and to provision of primary prevention through early detection, diagnosis, appropriate management of pre cancer cancers. The Kenya government has developed a national cervical cancer prevention strategy plan (2012 to 2015),also prioritized HPV vaccine as primary prevention strategy.

Cancer of the cervix is the second most common cancer among women worldwide. In 2008, it is estimated that 526,409 new cases occurred globally with 274,883 of women (52%of cases) dying. .

Of the total new cases each year, about 86% occur in developing countries, where unfortunately 80-90% of cervical cancer related deaths occur. The Kenya situation it is estimated annual number of cervical cancer cases is 2454 while the annual number of death due to cervical cancer is 1676 in Kenya. It is projected that by the year 2025, the number of new cervical cancer cases annually in Kenya will reach 4261[Kenya Cancer Registry]. Despite the existence of National Cervical Cancer Strategic Plan [NCCPSP 2012 -2015] implementation is still low and haphazard, only in a few selected sites where screening and treatment coverage exist.

The main challenge is to increase access to improve the access cervical screening health community quality services that are inexpensive, and the other challenge is increase the level of community awareness and readiness to access cancer services. In Siaya County estimated Population Women of childbearing age (15–49yrs) is estimated at 47210 the numbers of women screened for cervical cancer by July to December 2013 are 262 [Siaya County Cervical Cancer Data Collection form 2014)Cervical cancer screen data from Siaya County shows the number of patients screened continue to increase [Cervical Cancer data form 2014).

A research study published in the September 2011 issue of the Lancet indicated that in 2010, there were over 1.6 million women diagnosed with breast cancer, compared to only 641,000 in 1980 [Lancet 2011]. The increase in prevalence of cervical cancer was more modest but the two cancers together accounted for the deaths of 625,000 women in 2010, compared to 424,000 in 1980 [Lancet 2011]. Of more relevance to policy makers in Kenya is the finding that the burden was uneven, with deaths and incidence rising most in developing countries but decreasing in industrialized countries [Lancet 2011]. According to the Lancet report, "Women younger than 50 in developing countries accounted for 23 per cent of global breast cancer deaths and 34 per cent of global cervical cancer deaths, whereas their peers in developed nations accounted for 10 per cent of both" [Lancet 2011].

Cancer of cervix is easily detectable and curable in its early stages. Unfortunately only 5% of women in developing countries undergo screening for cervical cancer compared to over 40% in developing countries, and 70% of higher in countries that have shown marked reduction in incidence and prevalence of cervical cancer. It can be argued where the level of cervical cancer awareness and where screening rates are low the majority of women present at late stages with invasive and advanced disease. In Kenya it is estimated that only 3.2. % of women in Kenya aged 18 -69 yrs have been screened for cervical cancer [Kenya, NCCPSP 2012]. Low levels of community awareness on the importance of screening coupled with low knowledge of common symptoms of cervical cancer, inadequate skills among service providers; inadequate equipment and supplies; lack of treatment facilities when there is pre-cancer or cancer diagnosis; inadequate monitoring and evaluation –especially data collection and management of existing programs. Human papilloma virus (HPV) is the primary cause of 99.7% of all cervical cancer. Infection with one or more of the 15 high-risk oncogenic types leads to invasive cervical cancer after 10 -20 years. Globally, about 70% of all cases of cervical cancer are caused by HPV types 16 and 18 and with availability of vaccines at right stage of reproductive of a woman, potential risk of developing cervical cancer can be reduced.

Primary prevention therefore is a critical for preventing infection with HPV, this call for intensive primary preventions interventions aimed at increasing education and awareness to reduce high risk sexual behavior and other risk factors for cervical cancer. The Kenya Cervical Cancer Prevention program is committed to establishing community partnerships and community based programs intended to mobilize the communities to seek cervical screening services, supporting screen positive patients to access treatment and to encourage community participation in providing palliative care to patients with end stage terminal of the disease.

1.1 BACKGROUND TO THE BASELINE SURVEY

Bristol-Myers Squibb Foundation (BMSF) Secure The Future Technical Assistance Programme is supporting an 18 months project in Rarieda Sub-County, Siaya County on Mobile Cervical and Breast Cancer Screening and demand creation. The project is being implemented by Lengo Health Programme and has three objectives as follows:-

- **To give information** to the general community of Rarieda Sub-County about risk factors and preventive measures of cervical and breast cancer
- **To screen women** of cervical cancer, treat precancerous lesions and facilitate treatment of identified cases
- **To provide psychosocial support and referral channels** to rural women diagnosed of cancer.

The baseline survey intended to assess cervical cancer knowledge among community men and women aged 15-49 years in Rarieda sub County and the specific objectives were to:-

- Assess the level knowledge of cervical and breast cancer among women and men in Rarieda sub-County, Siaya County;
- Explore attitudes of community on cancer;
- Determine people's options' and practices on cervical cancer; and
- Assess the community readiness to access the screening and treatment services.

1.2 BASELINE SURVEY METHODOLOGY

Study Design

The assessment was based on a cross-sectional survey design which was selected for its suitability in documenting pre-intervention knowledge, attitudes and behaviour.

Study Population

The survey target population consisted of all women and men aged 15 to 49 years in Rarieda Sub County. The core inclusion criteria for the study is outlined:

- Women aged 15 to 49 years;
- Household resident for at least 6 months;
- Be present at the time of the interviewing process; and

- Consent in an informed and voluntary way to participate and have caretaker's consent if less than 18 years.

Study Sample:

Multi-stage stratified sampling was used to collected data from eight (8) locations of Rarieda. Sub-locations from eight locations were selected (first level). One sub-location was randomly selected. Random selection was used to select two villages (second level) in each geographical location, data was collected using the same geographical criteria. At village level households (third level) were randomly selected in line with the sample size. One woman aged 15-49 years was selected at each selected household. In households where more than one woman within the age group was willing to be part of the survey, the enumerator randomly selected one of them. The sample size was calculated using a confidence level of 95%, an acceptable margin of error of 5%, a response distribution of 50% as well as a population size of 68,965 women aged 15-49 years. The preconditions yielded a statistically representative minimum sample size of 510 women aged 15-49 years. The sample size was further increased by 5% to account for contingencies such as non-response or recording error which increased it the sample size to 536. The sample size was allocated equally to each of the villages; with each location allocated 67 women aged 15-49 years.

1.3 BASELINE SURVEY LIMITATIONS

- The Baseline survey was initially scheduled to take two months and the timeframe was revised to one month; and
- Data collection for the study was conducted during the rainy season which posed some accessibility challenges.
- Data collection was done during farms planting season which made some respondents not have enough time to give their opinion.

2. BASELINE SURVEY FINDINGS

2.1 Demographic Characteristics

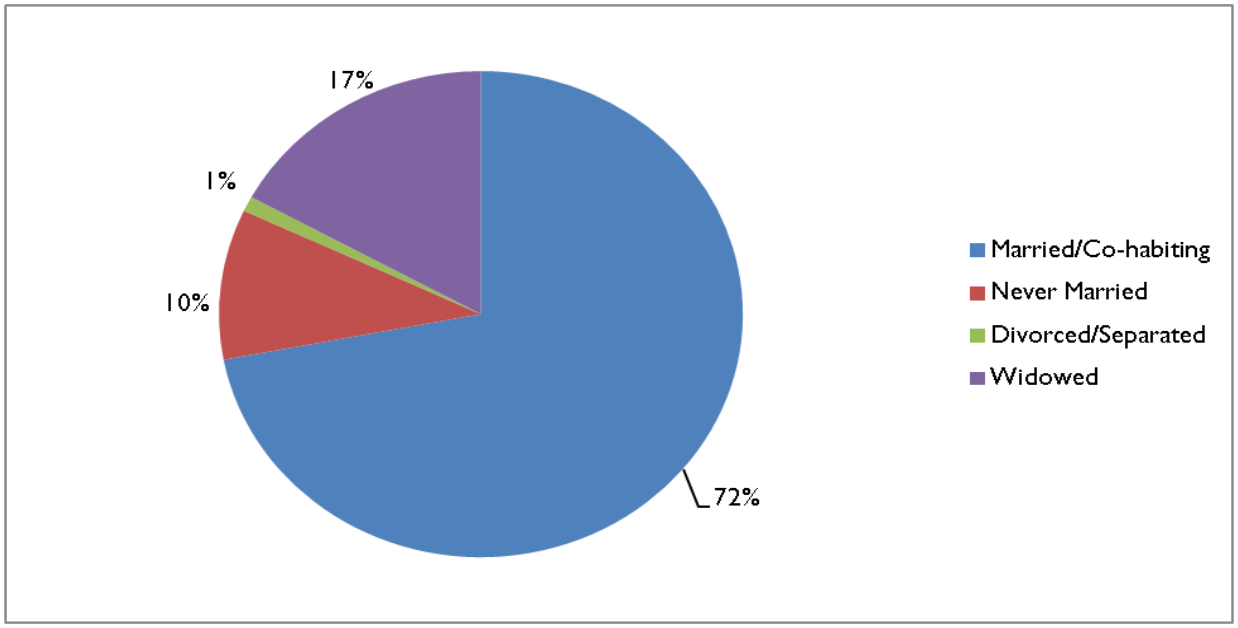
The majority of respondents were aged 45 years and above (37.4%) followed by those aged between 20-24 (16.6%), those aged 25-29 (13.4%) and those aged 40-44 (8.8%). Most (63.3%) of the respondents also reported having primary education followed by those with secondary education (26.1%) and those with no education (7.9%). The table below shows the age distribution of study respondents.

Table 1: Age Distribution of Respondents

Age Group	Frequency	Valid Percent
15-19	31	7.2
20-24	72	16.6
25-29	58	13.4
30-34	36	8.3
35-39	36	8.3
40-44	38	8.8
45 and above	162	37.4
Total	433	100.0

Survey respondents were predominantly Christian (99%) while the minority reported being Muslim (0.7%) and other religions (0.5%). In addition to most of the respondents having low education, more than half of them reported not being employed (53%) followed by those who reported being self-employed (42%) and those who reported being employed (5%). Most (72%) the respondents reported being married followed by those who reported being widowed (17%), those who reported never being married (10%) and those who reported being divorced/separated (1%). The figure below shows the marital status of survey respondents.

Figure 1: Marital Status of Respondents



2.2 Cancer Knowledge

2.2.1 General Cancer Knowledge

Almost all respondents (99%) reporting ever having heard about cancer. This provides the basis for programming as cancer will not be a completely new disease to target communities. The study found no significant relationship between respondents' age and whether or not they have ever heard of cancer Age (p=0.069) as well as respondents' location and whether or not they would have heard of cancer (p=0.187). The table below shows the distribution on ever having heard of cancer by age of respondent.

Table 2: Ever heard of cancer by age

			Heard about cancer?		Total
			Yes	No	
Age of Respondent	15-19	Count	30	1	31
		% within Age of Respondent	1.0	.0	1.0
	20-24	Count	72	0	72
		% within Age of Respondent	1.0	.0	1.0
	25-29	Count	56	2	58
		% within Age of Respondent	1.0	.0	1.0
	30-34	Count	36	0	36
		% within Age of Respondent	1.0	.0	1.0
	35-39	Count	36	0	36
		% within Age of Respondent	1.0	.0	1.0
	40-44	Count	38	0	38
		% within Q1 Age of Respondent	1.0	.0	1.0
	45 and above	Count	162	0	162
		% within Q1 Age of Respondent	1.0	.0	1.0
Total		Count	430	3	433
		% within Age of Respondent	1.0	.0	1.0

(P-value =0,069, not statistically significant)

Breast and Cervical cancer were the most known cancers amongst respondents with 97.2% of respondents reporting knowledge of breast cancer whilst 76% reported knowledge of cervical cancer. More than half (57%) of the respondents also cited throat cancer. High levels of the two reproductive cancers further provider crucial intervention entry points as once the project is being implemented. The table below shows the knowledge of different types of cancers.

Table 3: Knowledge of cancers by type

Types of cancer	N	%
Breast cancer	421	97.2
Cervical cancer	327	75.5
Throat cancer	247	57.0
Leg cancer	85	19.6
Uterus cancer	34	7.9
Blood cancer	7	1.6

Types of cancer	N	%
Cancer of the hand	4	.9
Liver cancer	6	1.4
Eye cancer	3	.7
Face cancer	1	.2
Lung cancer	4	.9
Other	26	6

2.2.2 Breasts Cancer Knowledge

The survey assessed levels of breast cancer knowledge as well as sources of information on cervical cancer. Family and community networks are significant sources of breast cancer knowledge with the majority (34.7%) of respondents reporting having heard of breast cancer through a family member. The media was the second most cited source of breast cancer information as it was cited by 27.5% of study respondents. Other key sources of breast cancer information included health workers (19%), friends (13%) along with brochures, posters and other printed materials (5.1%).

Table 4: Source of Breast Cancer Knowledge

	N	%
Media	119	27.5
Brochures, posters and other printed materials	22	5.1
Health workers	81	18.8
Family member	150	34.7
Friends	55	12.7
Religious leaders	4	0.9
Teachers	14	3.2
Other, specify	27	6.3
Never heard	7	1.6

The majority (67%) of respondents had not heard about breast cancer in six (6) months preceding the survey while the remainder reported having heard about breast cancer in the six (6) months preceding the survey. The lower percentage of respondents who reported having heard of breast cancer in the 6 months preceding the survey may point to the need for an intervention that strengthens community knowledge and information around breast cancer. More respondents in South Asembo and South Uyoma were more likely to have heard about breast cancer in the six (6) months preceding the survey compared to those from the other locations. This could be critical in understanding the existing interventions in those locations. The table below shows the likelihood of hearing about breast cancer in the six (6) months preceding the survey by location.

Table 5: Seeing or Hearing anything about breast cancer in the past 6 months

			Yes	No	Total
Location	Central Asembo	Count	8	27	35
		% within Location	23%	77%	100%
	South Asembo	Count	32	33	65

			Yes	No	Total
		% within Location	49%	51%	100%
	East Asembo	Count	14	37	51
		% within Location	27%	73%	100%
	West Asembo	Count	14	58	72
		% within Location	19%	81%	100%
	Central Uyoma	Count	16	37	53
		% within Location	30%	70%	100%
	West Uyoma	Count	16	28	44
		% within Location	36%	64%	100%
	South Uyoma	Count	25	29	54
		% within Location	46%	54%	100%
	East Uyoma	Count	16	35	51
		% within Location	31%	69%	100%
Total		Count	141	284	425
		% within Location	33%	67%	100%

There is a statistically significant relationship (p=0.004) between location and seeing or hearing anything about breast cancer in the last 6 months.

Swelling was the most (61%) cited breast cancer symptom followed by pain (52%) and ulcers (7.1%). However, 21% of respondents reported not knowing symptoms of breast cancer. The findings provide scope for prioritizing provision of accurate and well targeted information to women. The majority (66%) of survey respondents did not know breast cancer risk factors while few cited other factors (23%), diet (5.9%), family history (4.5%) as well as frequent pregnancies (1.2%). Knowledge levels around breast cancer prevention methods are also low with the majority of respondents outlining that they did not know any breast cancer prevention method. One third of the respondents cited medical screening followed by those who reported other prevention methods while the remainder mentioned self examination as shown in the table below.

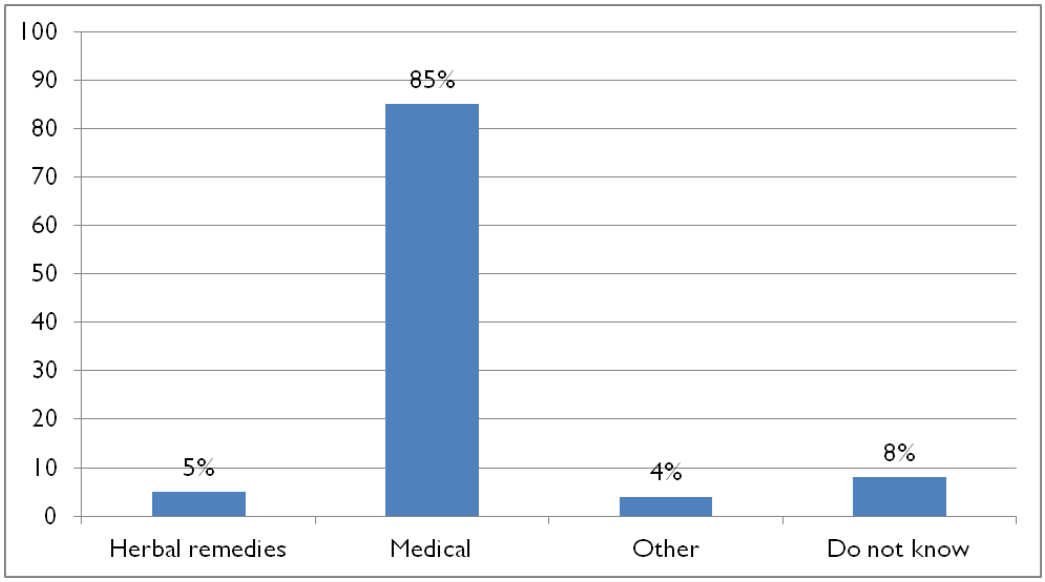
Table 6: Breast Cancer Prevention Methods

Prevention Method	N	%
Self examination	20	4.7
Medical screening	137	32.2
Other (Specify)	52	12.2
Do not know	219	51.5

The majority (61%) of respondents cited medical examination as a cancer detection method. This provides opportunities as health workers were also cited by 19% of respondents as sources of breast cancer information. In addition to medical examination as a cancer detection method, respondents also cited breast self-examination (15%), other (12.7%) and the rest did not know (12%).

The majority of respondents had knowledge of medical approaches (85%) as breast cancer treatment methods followed by those who did not know (4%) and those who cited herbal remedies (4.7%). The figure below shows breast cancer treatment methods.

Figure 2: Breast Cancer Treatment Methods



2.2.3 Cervical Cancer Knowledge

While family members were the most cited sources of breast cancer, the media were the most (27%) cited source of cervical cancer knowledge followed by family members (21.3%) and health workers (18.8%). The table below shows sources of cervical cancer knowledge.

Table 7: Source of cervical cancer knowledge

Heard about cervical cancer	N	%
Media	116	26.9
Health workers	81	18.8
Family member	92	21.3
Friends	8	1.9
Religious leaders	12	2.8
Other, specify	79	18.3
Never heard	71	16.4

Similar to breast cancer, most (69%) of the respondents who reported knowing of breast cancer reported having heard or seen cervical cancer related material in the six (6) months preceding the survey. In addition, there is statistically a significant relationship (p-value=0) between location and remembering, seeing or hearing anything about cervical cancer in the last 6months. The table below shows responses on whether or not respondents remember seeing or hearing anything about cervical cancer in the six months preceding the survey. South Uyoma (57%) had the highest percentage of respondents who reported having heard about cervical cancer in the six (6) months preceding the survey followed by South Asembo (38%).

Table 8: Hearing or seeing anything about cervical cancer in the past 6 months

			Yes	No	Total
Location	Central Asembo	Count	12	18	30
		% within Location	40%	60%	100%
	South Asembo	Count	21	34	55
		% within Location	38%	62%	100%
	East Asembo	Count	9	35	44
		% within Location	20%	80%	100%
	West Asembo	Count	14	48	62
		% within Location	23%	77%	100%
	Central Uyoma	Count	7	33	40
		% within Location	18%	83%	100%
	West Uyoma	Count	10	25	35
		% within Location	29%	71%	100%
	South Uyoma	Count	28	21	49
		% within Location	57%	43%	100%
	East Uyoma	Count	11	36	47
		% within Location	23%	77%	100%
Total		Count	112	250	362
		% within Location	31%	69%	100%

Most (38%) of the respondents reported not knowing symptoms of cervical cancer followed by those who cited other symptoms (31%) followed by vaginal bleeding (24%), vaginal foul smelling discharges (19%), back ache (7.5%), and pain in the womb (4.1%). The table below shows symptoms of cervical cancer as outlined by respondents.

Table 9: Symptoms of cervical cancer

Symptoms of cervical cancer	N	%
Vaginal bleeding	86	23.8
Vaginal foul smelling discharges	70	19.3
Back ache	27	7.5
Pain in the womb	15	4.1
Other (Specify)	111	30.7
Do not know	137	37.8

The majority (52%) of respondents did not know cervical cancer while some cited having multiple sexual partners (20%). Additional factors cited included dry sex (6.6%), early onset of sexual activity (6.1%) and sexually transmitted infections STIs (6.1%). Respondents in qualitative respondents also cited using a tight brassiere as a cause of breast cancer while others cited high sugar uptake in diets as causes of cancer.

"Cervical Cancer is caused by uncircumcised men. Once they have sex with a woman they deposit some dirt which develops into cervical cancer" **Male FGD participant**

Most of the respondents did not know methods of preventing development of cervical cancer as shown in the table below.

Table 10: Ways of preventing development of cervical cancer

Prevention method	N	%
Early treatment of STIs	33	9.1
Avoid multiple sexual partners	38	10.5
Avoid early sexual intercourse	15	4.1
Stop Smoking	2	0.6
Protected sex	36	9.9
Other (Specify)	110	10.4
Do not know	173	47.8

There are similarities in breast and cervical cancer treatment knowledge with the majority of respondents citing medical attention as the option for cervical cancer treatment. This was followed by respondents who did not know as well as those who cited traditional medicines and those who cited other treatment options.

2.3 Attitudes on Breast and Cervical Cancer

Respondents demonstrated positive attitudes towards breast and cervical cancer with the majority disagreeing with myths and misconceptions. Most (45%) of the respondents strongly agreed that any adult woman including me can develop breast or cervical cancer with a small percentage (6.5%) either disagreeing or strongly disagreeing with the statement. Respondents further rejected misconceptions around breast and cervical cancer being diseases for elderly women with 42.3% disagreeing and 29% strongly disagreeing with the misconception. Positive attitudes towards factual statements regarding breast and cervical cancer as well as negative attitudes regarding misconceptions towards breast and cervical cancer demonstrate opportunities for addressing stigma and discrimination related to breast and cervical cancer. There were qualitative perceptions in all eight (8) FGDs that breast cancer only affects women and the role of men should be limited. This demonstrates gaps around ensuring males are strongly involved in the reproductive health decisions of their spouses and partners. The table below shows attitudes towards breast and cervical cancer.

Table 11: Attitudes towards breast and cervical cancer

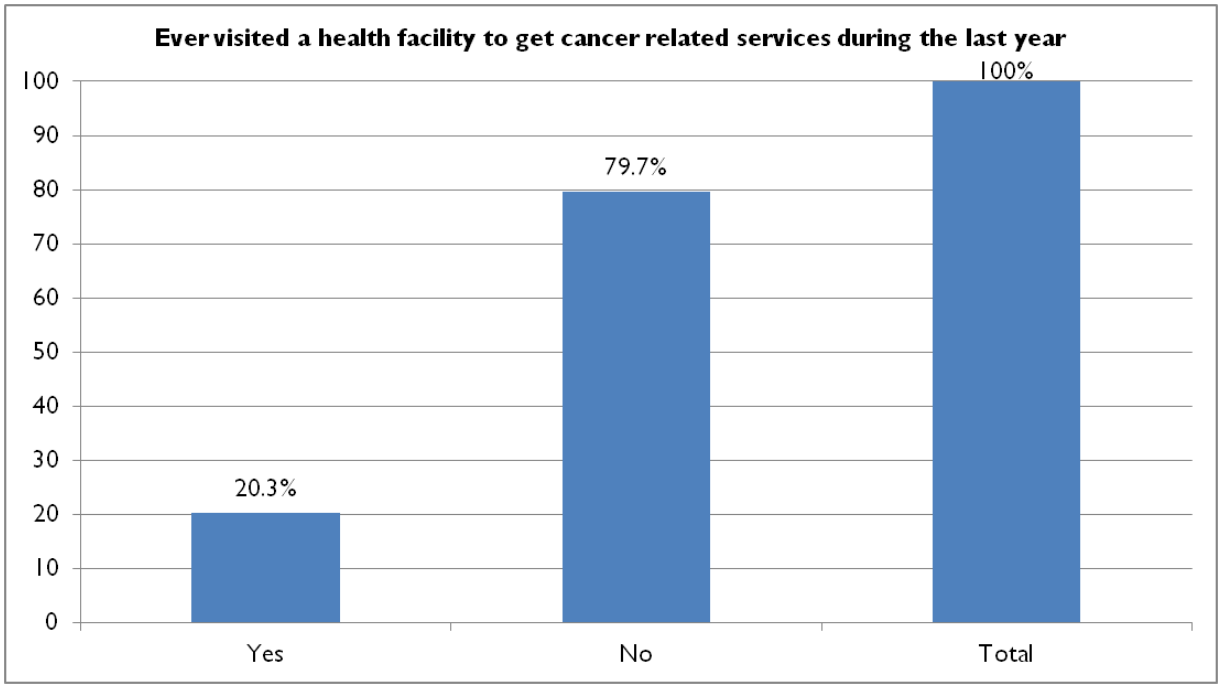
Attitudes on Breast and Cervical Cancer	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
Any adult woman including me can develop breast or cervical cancer	45.0	27.3	21.2	2.8	3.7
Cervical cancer is a disease for everyone including children	25.2	20.6	10.6	28.9	14.8
Breast and cervical cancer are diseases for the elderly women	9.0	8.8	11.1	42.3	28.9
I would rather not know if I had breast or cervical cancer	5.3	3.7	1.6	47.8	41.6

Attitudes on Breast and Cervical Cancer	Strongly agree	Agree	Don't know	Disagree	Strongly disagree
Getting breast and cervical cancer is a death sentence or there is not much that can be done when someone has breast or cervical cancer	13.4	13.2	3.0	61.2	9.2
Talking to family about symptoms of breast or cervical cancers is embarrassing	2.5	3.9	.5	46.2	46.9

2.4 Cervical Cancer and Breast Cancer Practices

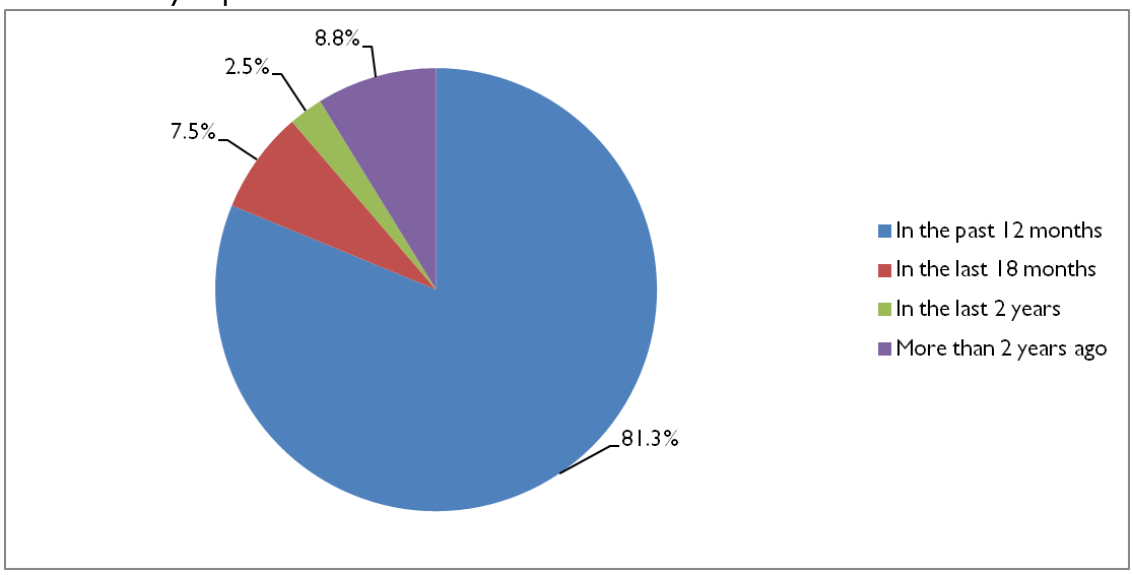
There is a disconnection between knowledge levels, positive attitudes and health seeking behaviours among respondents. The majority (80%) of respondents not visiting a health facility for cancer related services in the 12 months preceding the survey. The figure below shows respondents who reported ever visiting a health facility for breast and cervical cancer related services in the 12 months preceding the survey.

Figure 3: Ever visited a health facility to get cancer related services during the past 12 months



The health seeking behaviours are further illustrated by the fact that 82% of the respondents reported never having been screened for cancer. There are more positive breast cancer related practices with the majority of respondents reporting having conducted breast self-examination in the 12 months preceding the survey as 81.3% of those who reported having conducted breast self-examination reported doing so in the 12 months preceding the survey as illustrated in the figure below.

Figure 4: Last time you performed breast self examination



Although family members were cited as key sources of cancer information, the majority (66%) of respondents reported never having talked to anybody about breast and cervical cancer. The remaining 34% reported having talked to someone about breast and cervical cancer. There is a statistically significant relationship between location and ever talking with anybody about breast or cervical cancer. Respondents from Central Asembo (46%), East Asembo (45%) and East Uyoma were the most likely to have talked with anybody about breast and cervical cancer. On the other hand, respondents from Central Uyoma were the least likely to have talked with anybody about breast and cervical cancer as illustrated in the table below.

Table 12: Ever talked with anybody about breast or cervical cancer

			Yes	No	
Location	Central Asembo	Count	16	19	35
		% within Location	46%	54%	100%
	South Asembo	Count	26	40	66
		% within Location	39%	61%	100%
	East Asembo	Count	24	29	53
		% within Location	45%	55%	100%
	West Asembo	Count	20	54	74
		% within Location	27%	73%	100%
	Central Uyoma	Count	10	43	53
		% within Location	19%	81%	100%
	West Uyoma	Count	14	30	44
		% within Location	32%	68%	100%
	South Uyoma	Count	16	41	57
		% within Location	28%	72%	100%
	East Uyoma	Count	23	28	51
		% within Location	45%	55%	100%
Total		Count	149	284	433
		% within Location	34%	66%	100%

There is limited discussion of breast and cervical cancer issues between respondents and their partners/spouses. The majority of respondents (78.3%) reported not having discussed about breast and cervical cancer in the three (3) months preceding the survey while 22% reported having discussed with their partners or spouses about breast and cervical cancer.

2.5 Availability of Cancers Related Services

Knowledge about breast and cervical cancer, positive attitudes as well as practice will only translate into health outcomes if cancer services are available and easily accessible for the women. The survey assessed availability of cancer related services in the different locations and findings can inform service availability advocacy initiatives. The majority (76%) of respondents highlighted that place in their community where people are able to visit and talk about cancer issues. This is critical and provides entry points for introducing the producing in the various communities. There is a statistically significant relationship (p=0) between location and place in communities where people are able to visit and talk about cancer issues. Respondents from Central Asembo were most (89%) likely to report there being a place in their community where they can visit and talk about cancer issues followed by those from South Asembo (88%), West Uyoma (84%), East Uyoma (80%) and West Asembo (78%). The table below shows responses on there being a place in communities where respondents are able to visit and talk about cancer.

Table 13: Place in your community where people are able to visit and talk about cancer issues

			Yes	No	
Location	Central Asembo	Count	31	4	35
		% within Location	89%	11%	100%
	South Asembo	Count	58	8	66
		% within Location	88%	12%	100%
	East Asembo	Count	37	16	53
		% within Location	70%	30%	100%
	West Asembo	Count	58	16	74
		% within Location	78%	22%	100%
	Central Uyoma	Count	32	21	53
		% within Location	60%	40%	100%
	West Uyoma	Count	37	7	44
		% within Location	84%	16%	100%
	South Uyoma	Count	34	23	57
		% within Location	60%	40%	100%
	East Uyoma	Count	41	10	51
		% within Location	80%	20%	100%
Total		Count	328	105	433
		% within Location	76%	24%	100%

The hospital was the most (78.5%) cited place where respondents said they were able to visit and discuss about breast and cervical cancer issues.

This was followed by the clinic (14.5%), the house (6.1%), Church/Mosque (5.8%) and Counselling Centre (3.6%). The centrality of formal health institutions (clinic and hospital) provides entry points for integrating breast and cervical cancer into broader sexual and reproductive health service and information provision.

Education and counselling regarding cancers (60%) was the most cited service followed by respondents who did not know of the services available (24%), cancer screening (15.8%), cancer treatment (8.2%) as well as cancer referrals (5.2%). The table below shows cancer services reported by respondents as being available.

Table 14: Cancer services available in communities

Cancers services	N	%
Education and counseling regarding Cancers	198	60
Cancer Screening	52	15.8
Cancer treatment	27	8.2
Cancer Referrals	17	5.2
Do not know	79	23.9

> *"We know that cancer is a disease that develops slowly and it is very expensive to treat"* **Chief in East Uyoma**

While respondents outlined that services are available in their communities, they also outlined key challenges related to accessing the services. Barriers cited included the high cost of accessing the services (21.5%), unavailability of services (15.5%), transport to services points (10.6%) and other barriers (43.2%). Respondents in qualitative interviews also outlined that barriers towards accessing cancer services included long distances from health facilities, lack of facilities offering the services, ignorance as well as negative attitudes given that it affects the private parts. Health staff also cited long in queues, ignorance ,distance, limited partner support, poor health seeking behaviours along with inability of health facilities to provide services as key barriers towards accessing services. The table below shows the barriers for accessing cancer services in different communities as outlined by respondents.

Table 15: Barriers to accessing cancer services

Barriers to accessing cancer services in this community	N	%
Unavailability of services	67	15.5
Cost of services (very high)	93	21.5
Transport to service points	46	10.6
Gender imbalances	8	1.8
Myths and misconceptions behind	19	4.4
Stigma and discrimination at community level	20	4.6
No barrier	10	2.3
Other (specify)	187	43.2
Do not know	71	16.4

3. BASELINE SURVEY CONCLUSIONS

The baseline survey documented knowledge, attitudes and behaviours related to breast and cervical cancer in Riarieda Sub-County. It further assessed availability of cancer related services as well as key barriers towards accessing the services. This section presents key findings emerging from the data.

KNOWLEDGE

There is adequate general knowledge of breast and cervical cancer with almost all respondents having heard of the disease. The study concluded that this will be a critical entry point for the project as it will not be introducing an entirely new disease. People's ages and locations have a bearing on whether or not they know about breast and cervical cancer and interventions will need to be built around existing interventions where there is high knowledge. In addition, the study concluded that although there is overall knowledge around cancer, there are gaps in the accuracy of the information that respondents have.

Breast and cervical cancer are the most known types of cancers and this provides key opportunities for introducing the project especially if there will be efforts towards integrating it with broader sexual and reproductive health. Family and community networks are key sources of breast and cervical cancer information while health workers and the media are also critical. Communication messages, channels and targeting approaches will need to be informed by the existing information pathways for stronger success.

While general knowledge levels around cervical cancer are adequate, intervals for accessing information are long and the majority of respondents may spend over half a year (6 months) without hearing anything about breast and cervical cancer. Knowledge of breast and cervical cancer symptoms is low and there are still key misconceptions around the risk factors as well as symptoms. The qualitative component of documented low male involvement in cancer and this emanates from strong cancer communication focus only on females with limited priority on males.

There are low levels of knowledge on the different cervical cancer prevention methods as well as diagnosis methods especially self examination processes. Formal health institutions (clinic and hospital) were the most cited sources of cancer examination services. The centrality of formal health institutions as sources of cancer information is critical and provides opportunities for demand generation to ensure people take up routine services like cancer screening/examination. There are key misconceptions on breast and cervical cancer risk factors.

ATTITUDES

There are positive attitudes towards breast and cervical cancer and this provides opportunities for addressing stigma and discrimination. Additional opportunities exist around ensuring that using positive attitudes to develop strong health seeking behaviours and creating an enabling and supportive environment for those who would have been diagnosed. Conversely, negative attitudes towards myths and misconceptions can be used to address these by providing accurate information.

PRACTICES

Adequate levels of knowledge levels as well as positive attitudes are not translating into cancer related health seeking behaviours among respondents. Most of the respondents do not attend health facilities to be checked for breast and cervical cancer while self examination levels are also low for breast cancer. The study concluded that the disconnect between those who know about cancer and those who take up services emanate from the fact that information provided in relation to available services is inadequate and services are also sometimes not available. Uptake of screening services is also affected by the fact that the targeted communities do not often seek health services if they are not in pain.

AVAILABILITY AND ACCESSIBILITY OF SERVICES

Respondents outlined that hospitals and clinics provide education and counselling regarding breast and cervical cancer. However, smaller percentages of respondents know about actual screening and treatment services. Interventions will need to ensure that any demand generation will be based on analysis of service provision capacities of health facilities. There are barriers towards accessing services and these include long distances from health facilities, lack of facilities offering the services, ignorance as well as negative attitudes given that it affects the private parts.

4. BASELINE SURVEY RECOMMENDATIONS

CONCLUSION	RECOMMENDATION
There are high levels of general knowledge around cancers with the most commonly known being breast and cervical cancer. However, the information is inadequate to transform attitudes or to influence health seeking behaviours.	Invest in the project and build upon the general knowledge that exists and focus on providing accurate information that can potentially transform attitudes and influence behaviours.
There are different levels of breast and cervical cancer knowledge across the different locations. This could be indicative of existing approaches around cervical and breast cancer within the communities.	Project interventions should be preceded by mapping of similar interventions in the same localities. The approach will provide opportunities for leveraging on technical and financial resources while building a sustainable intervention.
Health facilities and health workers are key sources of information and services for the majority of respondents and there are opportunities for utilizing them in project introduction and implementation.	Prioritize working with health facilities and health workers in the different locations especially as they have technical knowhow as well as service provision capacities.
Although a key challenge noted relates to limited uptake of cancer screening and treatment services, this was not entirely a result of poor health seeking behaviours among respondents but was also due to unavailability of services within health facilities.	Demand generation for cancer related services should be informed by mapping of available service provision capacities among respondents. This will ensure that clients are mobilized for services that are available.
The role of men has not been well mapped out and well articulated and opportunities will be lost if they are not mobilized to take up services as well as support their partners and spouses.	The project should include a strong male involvement component to ensure men are mobilized to support their partners and spouses to take up services.
Some health facilities do not have adequate resources (human, technical and equipment) to adequately provide breast and cervical cancer services. This may mean that women could be mobilized and end up failing to access the services.	Include an advocacy component within the project to focus on ensuring that health facilities are adequately resourced in order to provide services to all those who need them within their catchment area.

5. ANNEXES

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