KNOWLEDGE, ATTITUDE AND PRACTICE SURVEY REPORT

COLLECTIVE HOPE AND QUALITY LIFE FOR LUNG CANCER PATIENTS PROJECT, IN UASIN GISHU COUNTY, KENYA

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Acknowledgment

This Knowledge, Attitude, and Practice (KAP) survey would not have been possible without the contribution of several resource persons to the compilation and realization of this report and is now acknowledged.

Special thanks to the enumerators who did the fieldwork across the six sub-counties of Uasin Gishu County, Kenya, and to all respondents who agreed to participate despite the length of time the conduct of the survey took.

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We are confident that this report provides detailed baseline data on key project indicators against which both the formative and summative evaluation of the project will be based.

DISCLAIMER: The Report is the responsibility of NCD Alliance Kenya and KEHPCA and does not necessarily reflect the views of any donor or partner.

Abbreviations and Acronyms

CHP	Community Health Promoter
CIDP	County Integrated Development Plan
CME	Continuous Medical Education
HCP	Healthcare Provider
KAP	Knowledge Attitude, and Practices
KEHPCA	Kenya Hospices and Palliative Care Association
KII	Key Informant Interviews
LC	Lung Cancer
LDCT	Low-Dose Computed Tomography
MTRH	Moi Teaching and Referral Hospital
NCDs	Non-Communicable Diseases
NCDAK	Non-Communicable Disease Alliance Kenya
NGO	Non-Governmental Organization
ODK	Open Data Kit
PLWNCDs	Persons Living with Non-Communicable Diseases
SPSS	Statistical Package for the Social Sciences
TV	Television

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EXECUTIVE SUMMARY

The Knowledge, Attitude, and Practice (KAP) survey was conducted to evaluate the level of knowledge and awareness about lung cancer among the residents of Uasin Gishu County in Kenya. The primary objectives of this survey were to evaluate the level of knowledge and awareness about lung cancer, gain insights into the attitudes of the public towards lung cancer, its risk factors, prevention, and treatment, understand the practices related to lung cancer prevention and care within the community, and to identify the challenges and barriers faced by individuals in accessing lung cancer care and treatment.

The Collective Hope and Quality Life for Lung Cancer Patients Project is being implemented by Kenya Hospices and Palliative Care Association (KEHPCA) and NCD Alliance Kenya. This project aims to expand the scope and consolidate strategies to improve the quality of life of persons living with or at risk of lung cancer in Kenya, building on advocacy gains, improved capacity, and application of innovative best practices based on the pilot phase.

The survey used a mixed-method approach by combining desk research with data collection through key informant interviews and household survey questionnaires. A sample of 271 respondents were interviewed in the six sub-counties[1]. Additionally, KII were conducted with relevant stakeholders, including NCD County coordinator, Healthcare providers, Community Health Promoters (CHPs), media, advocacy groups, caregiver of lung cancer patients, implementing partners (NCD Alliance Kenya, and Kenya Hospices and Palliative Care Association).

The key findings of the KAP survey are:

- The findings of the KAP survey reveals that the level of knowledge and awareness about lung cancer among the population in Uasin Gishu County is generally low. Although 74.5% of respondents correctly indicated that lung cancer is a cancer affecting the lungs, 24% did not know, and 0.4% and 1.1% incorrectly associated it with the heart and liver, respectively. Information dissemination largely relies on radio (56%), with limited contributions from other media. Awareness of symptoms and risk factors is varied, with smoking recognized by 62% as a primary cause. Additionally, many respondents were not aware of the early detection improving survival rates, and recommended frequency of screening for high-risk individuals and existing programs screening programs in the county.
- The community's attitudes towards lung cancer in Uasin Gishu County reveal a generally high level of concern and awareness, with 66.5% perceiving lung cancer as "very serious" compared to other diseases. A majority (72%) believe lung cancer is preventable, primarily through lifestyle changes and regular screenings, although misconceptions persist. Most respondents (74.9%) expressed willingness to undergo screening, despite barriers such as cost and distance. Stigma remains a significant issue, with 50.8% acknowledging its presence, which can lead to social exclusion and hinder open discussions about the

[1] Soy, Turbo, Moiben, Ainabkoi, Kapseret, and Kesses.

disease. Comfort levels in discussing lung cancer symptoms are high with healthcare providers (81.2%) and within social networks (68.6%). However, cultural beliefs and misconceptions influence health-seeking behaviors, often leading to delaying diagnosis and treatment.

- Practices related to lung cancer prevention and care in Uasin Gishu County show a mixed response among the community. While 65% of respondents would visit a health facility if they experienced symptoms like a persistent cough or chest pain, 42% would use home remedies, and only 1% would ignore symptoms. A significant 46.8% would seek medical advice immediately upon experiencing symptoms, yet 96.7% have never undergone lung cancer screening, often due to financial constraints or assumptions about TB or pneumonia. Smoking rates are low, with only 7.2% of respondents or their household members smoking. However, health education on lung cancer is insufficient, with 78.9% never attending a session. Among those who did, 60% of sessions were organized by government entities. Preventive practices are somewhat adopted, with 60.3% avoiding smoking, but only 21.3% engaging in regular medical check-ups. Despite these gaps, there is a strong willingness (82.3%) to adopt lifestyle changes to reduce lung cancer risk, indicating a potential for improved outcomes with better education and resources.

- The impact of lung cancer in Uasin Gishu County is huge, both at the individual and community levels. The survey reveals that 89% of households have not had a lung cancer diagnosis, with only 3% reporting a diagnosis, potentially due to low engagement with screening services, as only 3.3% have undergone screenings. Financial constraints, lack of information, and distance to healthcare facilities contribute significantly to delayed diagnosis and treatment.

Based on the findings of the KAP survey, the following recommendations have been identified:

a) Equip healthcare providers with knowledge on lung cancer screening, diagnosis, and treatment.
b) Strengthen Community Health Promoters (CHPs) by providing comprehensive training, updated materials, and support to improve awareness creation in the communities.
c) Raise awareness about lung cancer symptoms, risk factors, and the importance of early detection through local media, community meetings, and social media.
d) Create and distribute brochures and other educational materials to inform both the public and healthcare providers.
e) Introduce lung cancer education in schools to raise awareness from a young age.
f) Advocate for increased funding from the Uasin Gishu County Government for screening programs, diagnostic equipment, treatment facilities, and public awareness campaigns.

INTRODUCTION

1.1: NCD ALLIANCE KENYA

Non-Communicable Disease Alliance Kenya (NCD Alliance Kenya, NCDAK) is a not-for-profit organization registered in 2012 under section 10 of the NGOs Coordination Act 1990 (OP.218/051/12- 0125/8213). NCDAK brings together synergistic relationships of multi-sectoral stakeholders to facilitate active promotional and advocacy activities for the prevention and control of non-communicable diseases (NCDs) and the provision of quality NCD care services. The Organisation seeks to address the rising prevalence of NCDs comprehensively and sustainably in Kenya by bringing together stakeholders working on NCD prevention and control. It plays a leading role in coordinating, capacity building its membership, and developing partnerships with multi-sectoral stakeholders, both health and non-health, to facilitate effective promotion and advocacy interventions for the prevention and control of NCDs. NCD Alliance Kenya emerged out of the need to comprehensively and sustainably address the rising prevalence of NCDs in Kenya and other parts of the world.

NCD Alliance Kenya provides a framework within which different stakeholders can collaborate to ensure that Kenyans enjoy a good quality of life free of NCDs and their adverse effects. The Organisation was therefore conceptualized as a platform from which people would themselves address issues affecting their well-being and development, with the support of the wider community

1.2: KENYA HOSPICES AND PALLIATIVE CARE ASSOCIATION

Kenya Hospices and Palliative Care Association (KEHPCA), uses a multi-sectoral approach working with palliative care providers, the Ministry of Health, county governments, development partners, and communities to integrate palliative care from policy to community levels through capacity building, mentorship, patient and caregiver support. With over 16 years of dedication to palliative care work, KEHPCA is a powerful voice for persons living with palliative care needs, including people with lung cancer. KEHPCA will work closely with its constituents to create awareness regarding screening, care treatment, and appropriate referrals for patients with lung cancer. KEHPCA has a national palliative care curriculum that will be used to train on palliative care.

1.3: PROJECT BACKGROUND

The *Collective Hope and Quality Life for Lung Cancer Patients* Project in Uasin Gishu County, Kenya is being implemented by KEHPCA and NCD Alliance Kenya. The goal of the project is to expand the scope and consolidate strategies to improve the quality of life of persons living with or at risk of lung cancer in Kenya, building on advocacy gains, improved capacity, and application of innovative best practices based on the pilot phase.

Table: Summary of Project Goals and Objectives

Project Goal	Project Objectives
The project's purpose is to expand the scope and consolidate strategies to improve the quality of life of persons living with or at risk of lung cancer in Kenya, building on advocacy gains, improved capacity, and application of innovative best practices based on the previous grant.	To build the capacity of 60 multidisciplinary healthcare professionals for effective diagnosis, treatment, rehabilitation, and palliative care of lung cancer at six (6) level IV facilities in Uasin Gishu County.
	To empower persons living with lung cancer and their caregivers to effectively engage in community awareness and advocacy at all levels.
	To document and share best practices for lung cancer interventions that support scale-up, integration, and sustainability, leveraging on patients' and caregivers' lived experiences.

1.4: ABOUT THE KAP SURVEY

A Knowledge, Attitudes, and Practices (KAP) survey is a quantitative method that assesses what people know, believe, and do in relation to a specific topic[2]. These surveys are designed to gather data on the knowledge (awareness and understanding), attitudes (feelings and perceptions), and practices (behaviours and actions) of a target population on a particular topic i.e., lung cancer for this case[3]. KAP surveys not only constitute fundamental parts of the needs assessments that must underpin design and planning but also support the identification of additional issues that may act as either opportunities or barriers to achieving what KEHPCA and NCD Alliance Kenya set out to expand the scope and consolidate strategies to improve the quality of life of persons living with or at risk of lung cancer in Kenya, building on advocacy gains, improved capacity and application of innovative best practices based on the previous grant.

This KAP survey used a mixed-method approach by combining desk research with data collection through key informant interviews and household survey questionnaires. The primary objectives of this survey are:

a) To evaluate the level of knowledge and awareness about lung cancer among the residents of Uasin Gishu County.
b) To gain insights into the attitudes of the public towards lung cancer, its risk factors, prevention, and treatment.
c) To understand the practices related to lung cancer prevention and care within the community.
d) To identify the challenges and barriers faced by individuals in accessing lung cancer care and treatment.

[2] Sharma, R., Verma, H., & Khandekar, J. (2020). Knowledge, attitudes, and practices regarding COVID-19 among Indian citizens: A cross-sectional survey. *Journal of Public Health Research, 9*(2), 165-173.
[3] Jones, H., Smith, A., & Brown, L. (2018). Evaluating the impact of a sexual health education program on adolescents' knowledge and behaviors: A KAP survey. *Journal of Adolescent Health, 62*(3), 253-260.

- To provide data-driven recommendations for improving lung cancer education, prevention, and care in Uasin Gishu County.

METHODOLOGY

2.1: SURVEY DESIGN

The KAP survey was designed to collect quantitative and qualitative information from primary and secondary sources with triangulation for quality control and ensure completeness of data; balance and objectivity, and reliability of the data as well as validity of the results. The survey was organized and conducted in three phases: beginning with a preparatory phase, followed by fieldwork and data collection, and ending with data processing, analysis, and report writing. In conducting the survey, the consultant employed a collaborative and participatory approach that promoted the engagement of relevant stakeholders including lung cancer patients, survivors and their caregivers, healthcare professionals, policymakers, media, and other non-state actors. This approach was grounded in the commitment to upholding critical principles of research excellence, including data integrity, objectivity, and credibility. Of particular significance, the study placed a strong emphasis on upholding data validity and reliability to guarantee that the information gathered mirrors the current knowledge, attitude, and practices on lung cancer in Uasin Gishu County.

A KAP survey is a representative study of a specific population to collect information on what is known, believed, and done in relation to a particular topic — in this case, lung cancer. In KAP surveys, data are collected orally by an interviewer using a structured, standardized questionnaire. These data then can be analyzed quantitatively or qualitatively depending on the objectives and design of the study.

2.1.1 Survey Population and Sampling

The sampling approach integrated purposive, and systematic random sampling to ensure a representative view from diverse stakeholders to inform the study findings. For the key informant interviews, a purposive sampling method was used to identify individuals strategic in terms of their involvement, knowledge, and experience in cancer and health policy framework in Uasin Gishu County. For the household survey, a systematic random sampling approach was used ensuring representation across various demographics within each sub-county.

According to the 2019 KNBS census data, the total number of households in Uasin Gishu County is 304,943 (including both conventional households and group quarters). Using the sample size formula for a finite population with a 95% confidence level and a 6% margin of error, we calculated the sample size as follows:

$$n = \frac{N}{1+N(e^2)}$$

Where:

- n = sample size
- Total number of households (N) = 304,943
- The margin of error (e) = 0.06

Calculation:

$$n = \frac{304{,}943}{1+304{,}943(0.06^2)}$$

=277.5

Therefore, to achieve a 95% confidence level with a 6% margin of error, we administered the survey questionnaire to a total of 277 households across the five sub-counties in the County.

2.1.2 Field Team Recruitment and Induction

Suitable enumerators were recruited to help administer the household surveys. For the Key Informant Interviews (KII), the process was undertaken by the consultant. In selecting the enumerators, attention was given to ensuring that they possessed the requisite skills, experience, and characteristics to effectively administer the questionnaire.

Once recruited, the enumerators underwent an induction where they were briefed on the study objectives, trained on the Open Data Kit (ODK) platform, and guided through the process of downloading the app and using the project credentials to access the survey questionnaire. They were also familiarized with the survey questionnaire within the ODK platform to ensure they were well-prepared for fieldwork.

2.1.3 Geographical Location

Data collection took place in Uasin Gishu County, Kenya[4]. The county also hosts the only referral national hospital in western Kenya, Moi Teaching & Referral Hospital, which serves the population drawn from Nyanza, North Rift, and Western parts of the country. This has made the county known as a destination for specialized healthcare and medical services in the region. Administratively, the County is divided into six sub-counties namely Soy, Turbo, Moiben, Ainabkoi, Kapseret, and Kesses[5]. Data collection took place in all six sub-counties.

2.2: DATA COLLECTION

In keeping with the approach described above, the following methods were applied in collecting both primary and secondary data to inform the survey. This approach and methodology ensured

[4] Uasin Gishu County is one of the 47 counties in Kenya situated in the Rift Valley region. The county has its headquarters in Eldoret town. The county is cosmopolitan, with the Kalenjin community majorly inhabiting it.
[5] Uasin Gishu County CIDP 2023-2027

cross-validation, where diverse sources converged to create a clear and accurate representation of the knowledge, attitude, and practices on lung cancer within the population.

2.2.1 Primary Data

Primary data was collected through the following methods:

a) **Key Informant Interviews (KIIs):** The interviews were based on an interview guide containing a set of open-ended questions. Key Informants were purposively selected based on their involvement, knowledge, and experience in lung cancer in Uasin Gishu County as well as desk research on the project documents. The KIIs serve to probe deeper wider range of discussion points, including KAP, stigma surrounding lung cancer, access to screening and diagnosis services, treatment and palliative care, support systems for patients and caregivers, and the policy framework for lung cancer care in the county. Additionally, interviews identified priority areas for intervention, stakeholder engagement strategies, and opportunities for collaboration to drive meaningful improvements in lung cancer outcomes in Uasin Gishu County. (A list of key informants is annexed).

b) **Household Survey:** A survey questionnaire was administered to obtain information from adult members of the general public who are 18 years and above. The sample was stratified to incorporate gender (male/female), sub-county, and socio-economic class of the respondents. Trained research enumerators assisted the consultants in conducting face-to-face interviews with respondents. With the questionnaire programmed into SurveyCTO, data was collected from a sample of 271 respondents across the six sub-counties. were interviewed in the six sub-counties[6]. The surveys were conducted between 1st and 3rd July 2024.

The survey questionnaires and key informant schedules were drafted based on the desk review of the project concept. This was done in consultation with the NCD Alliance Kenya program officer to solicit feedback, address concerns, and iteratively refine the survey instruments to meet the highest standards of quality and precision.

2.2.2 Secondary Data

The consultant reviewed key project documents including project proposal and evaluation reports for phase I of the project, National Cancer Control Strategy 2023-2027, and National Palliative Care Policy 2021-2030, Uasin Gishu County Integrated Development Plan (CIDP)-2023-2027. Other document reviewed include peer review journals and grey literature on lung cancer, reports from organizations specific to lung cancer. Secondary data was reviewed on an ongoing basis throughout the KAP survey process as data was made available through desk research.

[6] Soy, Turbo, Moiben, Ainabkoi, Kapseret, and Kesses.

2.3: RESEARCH ETHICS

The entire KAP survey process was based on ethical principles and human rights standards. Survey questionnaires and key informant interviews were conducted with informants aged 18 or above only. All informants participated voluntarily and were given the option of non-response. The consent statement was reviewed by NCD Alliance and included as part of the introductory section of the household questionnaire and interview schedules. Respondents were made aware before beginning the interview of the purpose of the research and that their responses would be kept strictly confidential. Data was stored in secure computer files after it was transmitted to the server. Permission to interview was requested before beginning interviews.

2.4: DATA PROCESSING AND ANALYSIS

The quantitative data was analyzed using SPSS and Excel, while the qualitative data will be analyzed using a content analysis[7]. Quantitative data in the ODK server platform was extracted, scrutinized, and cleaned. The SPSS statistical package and Microsoft Excel software were then used in the analysis of the data. Descriptive statistical analysis was undertaken to generate pie charts and graphs to provide a snapshot of key variables. Qualitative data has been analyzed using thematic and content analysis. The content and thematic analysis in this case entailed analysis at both basic and higher levels thereby ensuring that both descriptions and meanings are drawn from the data. Thus, the process of data collection, organizing the results into themes, reflecting on it, classifying, describing, and interpreting, and presenting a clear picture of the situation on the ground – reflecting the knowledge, attitude, and practices regarding lung cancer in the county.

2.5: CHALLENGES TO THE SURVEY

The KAP survey process faced some restraints, and the findings in this report should therefore be viewed in the light of these restraints. A few challenges were encountered during the data collection for the survey. These comprised:

a) Interviewing some of the sampled key informants proved challenging due to their busy schedules.
b) External factors like heavy rains impacted the study's progress.
c) Some of the selected respondents for the household questionnaire administration were reluctant to participate in the survey being suspicious of the survey's purpose.

[7] Content analysis involves coding and classifying qualitative data into particular themes to make sense of the data collected.

SURVEY FINDINGS

This section presents the findings of the KAP survey, providing a detailed analysis of the data collected on various aspects related to lung cancer. It covers key insights into knowledge and awareness, attitudes, practices, and the impact of lung cancer within Uasin Gishu County. The findings provide an understanding of the current state of lung cancer awareness and care, highlighting areas of strength and identifying critical gaps that need to be addressed.

3.1: PROFILE OF RESPONDENTS

This section provides an overview of the demographic and socio-economic characteristics of the survey respondents. It includes information on gender distribution, age groups, educational attainment, and income levels.

a) Gender of the Respondents?

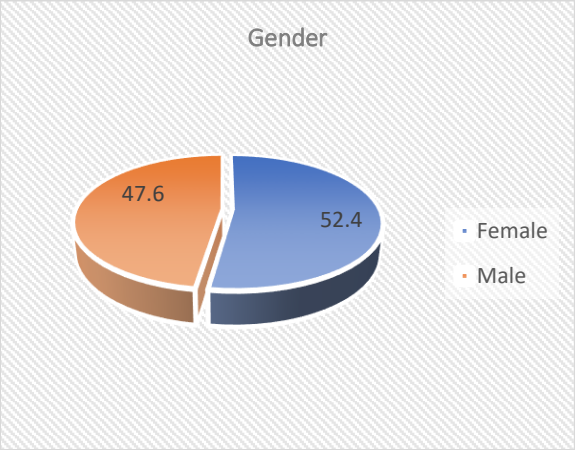


Figure 1: Gender Composition

Figure 1 depicts the gender composition of the surveyed respondents. The gender composition of the respondents was nearly balanced, with 47.6% male and 52.4% female, with no respondents identifying as belonging to diverse groups. Like many other surveys, the dominance of female respondents is consistent with typical household surveys, where women are primarily responsible for managing household affairs and caregiving. This responsibility makes them more likely to be available for participation in surveys. Having a mix in gender composition for the KAP survey is key in ensuring that the findings of the report are informed by perspectives across both genders.

b) Age of the respondents?

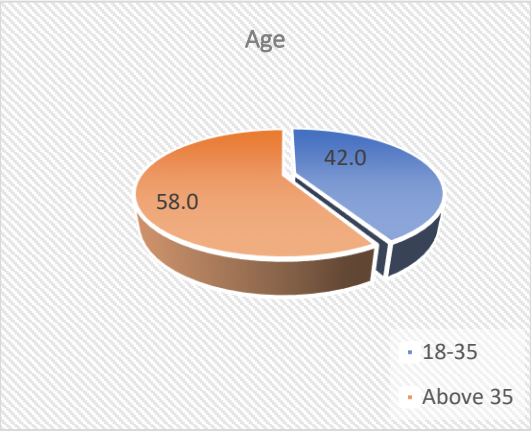


Figure 2: Age Composition

Regarding age (Figure 2), shows that the largest proportion of respondents falls within the age above 35 years constituting 58% of the surveyed respondents. On the other hand, the respondents aged between 18-35 years constituted 42%. This distribution ensures that the survey captures a wide range of perspectives, with a representation of older adults who may have more experience with health issues, including lung cancer. The inclusion of younger respondents is also important for understanding awareness and preventive behaviours in this demographic.

c) Highest level of education completed?

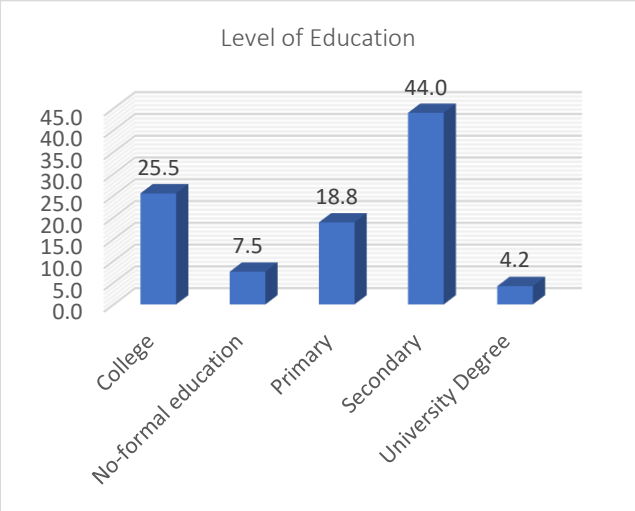


Figure 3: Literacy Level

Regarding literacy level within the surveyed respondents, Figure 3 shows that a majority had completed secondary education (44%), while 25.5% have attained a college-level education. Those with no formal education and primary education represent 7.5% and 18.8% respectively. Only a small percentage, 4.2%, hold a university degree. The distribution highlights a diverse educational background among respondents. Such varied educational levels are essential for understanding the knowledge, attitudes, and practices regarding lung cancer, as education often influences health literacy and access to healthcare resources.

d) Current occupation status

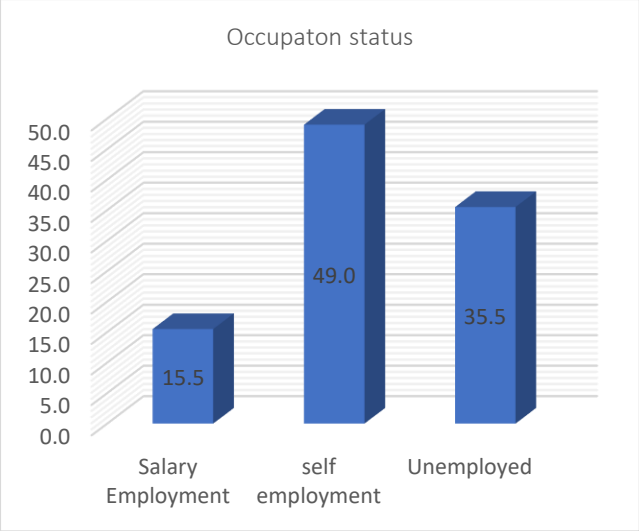


Figure 4: Occupation Status

The data presented in Figure 4 provides findings of the economic profiles and sources of livelihood of the surveyed respondents. A majority of the respondents (49%) were self-employed i.e. engaged in business ventures, trade, farming, etc. as their main sources of income while 15.5% were in salaried employment. Additionally, 35.5% of the respondents were unemployed. This unemployment rate is notably high and reflects broader economic challenges, as corroborated by the desk review which reported unemployment rates of 29.5% for males and 32.0% for females in the County[8]. The high unemployment rate also highlights potential challenges in accessing healthcare and resources related to lung cancer. Unemployment in Kenya has been linked to decreased health-seeking behavior due to financial constraints and stress[9]. People without stable employment are less likely to seek medical attention due to the high cost of healthcare services and a lack of financial resources[10]. Therefore, understanding the sources of livelihood of respondents for the KAP survey is important as it provides insights into the

[8] Uasin Gishu County Integrated Development Plan 2023-2027

[9] Kibwana, S. (2020). *Economic Challenges and Health-Seeking Behavior among Unemployed Individuals in Kenya*. Journal of East African Health Research, 14(3), 45-58.

[10] Ochieng, J. (2019). The Impact of Unemployment on Health Care Utilization in Kenya. *African Health Review, 23(4), 78-90.*

socioeconomic factors that may influence access to healthcare and health-related behaviors. For instance, employment status can impact individuals' awareness of lung cancer, their ability to seek timely medical care, and their engagement in preventive practices.

3.2: KNOWLEDGE AND AWARENESS ON LUNG CANCER

Understanding the levels of knowledge and awareness about lung cancer is crucial for developing effective public health strategies. This section presents an analysis of the levels of knowledge and awareness regarding lung cancer in Uasin Gishu County. It draws on findings from both quantitative data collected through surveys and qualitative insights gained from key informant interviews and a desk review.

a) Understanding of the term lung cancer

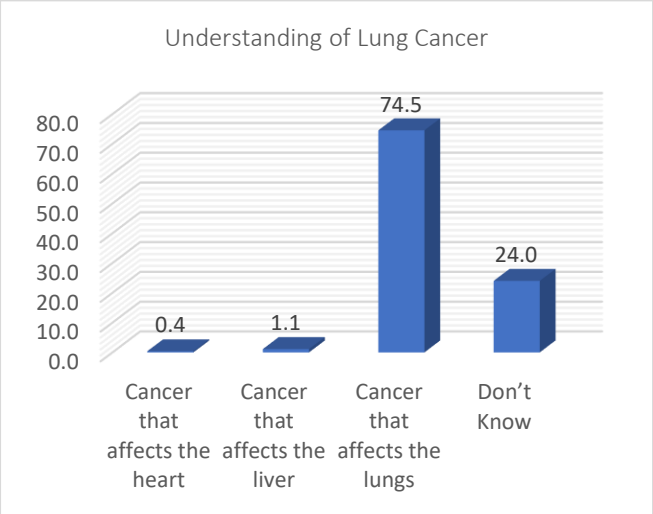


Figure 5: Understanding of Lung Cancer

Figure 5 shows the knowledge level of the community on the term "lung cancer". Respondents were asked what their understanding of the term "lung cancer." A majority, 74.5%, correctly indicated lung cancer as a cancer affecting the lungs. However, 24.0% of respondents indicated they did not know what lung cancer is, while 0.4% and 1.1% incorrectly associated it with the heart and liver, respectively. While the question, 'What do you understand by the term 'lung cancer'?' may have influenced respondents to provide correct answers, qualitative data from key informant interviews reveal a generally low level of awareness.

Corroborated with findings from KIIs, the findings indicated that despite some knowledge and awareness of lung cancer due to the education level and the cosmopolitan nature of certain parts of the county, gaps remain. Qualitative interviews reported that efforts by the county government's NCD department to create awareness through trained community health promoters (CHPs) who create awareness within the communities and the interface between the community and healthcare providers trained on lung cancer within the health facilities are helping improve the knowledge on lung cancer. Additionally, health promotion talks and continuous medical education (CME) are progressively leading to improved levels of knowledge on lung cancer among the healthcare providers and patients/community. The findings align with the findings from the desk review that showed that the general awareness and knowledge of lung cancer among the Kenyan population are relatively low. Many people lack

> *"…., some individuals still confuse lung cancer with tuberculosis or pneumonia. Consequently, many seek treatment in private clinics for these conditions. This indicates that knowledge and awareness of lung cancer are still low for early detection and effective management of the disease"~ NCD Coordinator*

adequate information regarding the risk factors, symptoms, and prevention strategies for lung cancer (Said NS, Degu A (2023)[11]. According to Bristol-Myers Squibb. (2020), lung cancer is the most prevalent cancer globally, accounting for nearly 58% of occurrences, and it disproportionately affects poorer nations. On the other hand, low incidence rates of lung cancer recorded in Africa stand in stark contrast to this. This apparently "low burden" of lung cancers in the context of critical lack of accurate data, likely reflects enormous underestimations of the true burden, considering the high prevalence of some major risk factors for lung cancer such as pulmonary tuberculosis and HIV infection[12].

b) Sources of information about health issues, including lung cancer

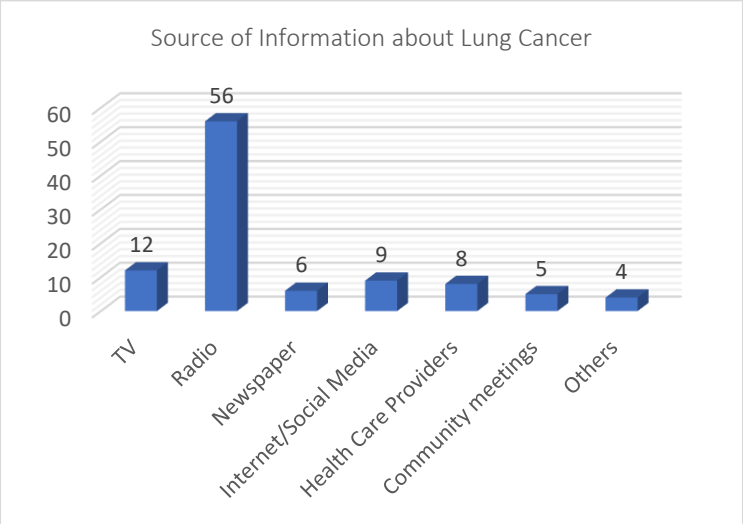


Figure 6: Source health information about including lung cancer?

As shown in Figure 6, the survey identified various sources through which respondents obtain information about lung cancer. The findings revealed that radio remain significant sources of health information for many people, 56% of the surveyed respondents. Other sources included TV (12%), newspapers (6%), internet/social media (9%), health care providers (8%), community meetings (5%), and other sources including friends and family, places of worship etc., (4%). This distribution indicates a reliance on traditional media for health information highlighting an opportunity for awareness creation. This is corroborated by interviews with the media that reported they often cover lung cancer topics at least twice a month on print median and weekly on radio.

Qualitative interviews also reported that trained CHPs are key in passing on information to the communities. Nonetheless, because CHPs have to address both communicable and non-communicable diseases, there is limited coverage of lung cancer due to the competing topics of awareness they have to cover.

[11] Said NS, Degu A (2023). Assessment of survival outcomes among lung cancer patients at the National and Referral Hospital in Kenya. Cancer Med. 2023 Apr;12(8):9194-9201

[12] https://aaopenplatform.accessaccelerated.org/resource-library/sites/default/files/Secure%20the%20Future%20-%20Lung%20Cancer%20in%20Kenya.pdf

c) Understanding of common symptoms of lung cancer

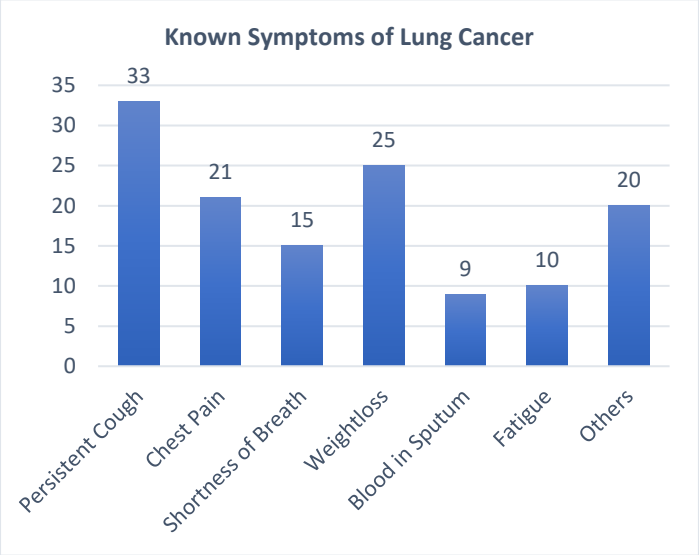


Figure 7: Awareness of Lung Cancer Symptoms

As shown in Figure 7, respondents were asked to identify common symptoms of lung cancer. Persistent cough was the most commonly recognized symptom, cited by 33% of respondents. This was followed by chest pain (21%), weight loss (25%), shortness of breath (15%), fatigue (10%), and blood in sputum (9%). These findings indicate a varying degree of awareness about the different symptoms associated with lung cancer among the surveyed population. These findings indicate a relatively low level of awareness about the various symptoms associated with lung cancer among the surveyed population. This low awareness level is further corroborated by qualitative interviews, which revealed that the community's general lack of understanding about lung cancer extends to its signs and symptoms. Many people do not recognize the symptoms of lung cancer, often confusing them with those of other respiratory illnesses such as tuberculosis and pneumonia.

d) Knowledge of risk factors of lung cancer

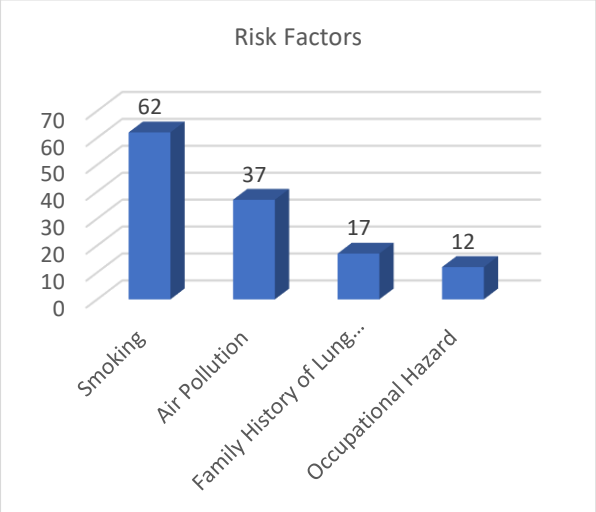


Figure 8: Perceived Causes and Risk factors of lung cancer

The survey explored respondents' perceptions of the main causes and risk factors associated with lung cancer. As shown in Figure 8, the findings reveal that the community's understanding of the main causes and risk factors for lung cancer is varied. As shown in Figure 8, the majority of respondents (62%) identified smoking as a primary cause of lung cancer. Air pollution was identified by 37% of respondents as a risk factor, indicating some awareness of environmental contributors to the disease. Additionally, 17% acknowledged a family history of lung cancer as a risk factor, and 12% pointed to occupational hazards. Qualitative interviews corroborate these findings by revealing that the community is aware of smoking as a significant risk factor for lung cancer. Additionally, the interviews highlighted occupational hazards, particularly the use of pesticides within flower farms and large agricultural operations, as notable risk factors.

Moreover, while there is a growing awareness about the potential risks posed by inhalation of pesticides and herbicides, which is a positive development, the community generally lacks knowledge about the importance of early detection of lung cancer. However, some misconceptions about lung cancer persist. A small number of individuals still equate a lung cancer diagnosis with superstitions, leading them to seek alternative treatments from traditional healers rather than pursuing conventional medical care. Desk review show that there exist a gross under-representations of the burden of the disease due to lack of proper diagnostic work-up and overlap of symptoms of lung cancer and Tuberculosis that is still prevalent in this Uasin Gishu County (Bristol-Myers Squibb. 2020).

''…. smoking is the prime one. however, exposure to pesticides/herbicides for agricultural use needs to be studied extensively being an agriculturally rich area. The other risk factors like exposure to materials in paint e.g. chromium is largely unknown. Increasingly, the risk posed by inhalation of pesticides/herbicides is in question by the community- which is a good thing" …. KII with a physician

e) Knowledge of early detection improving survival rates

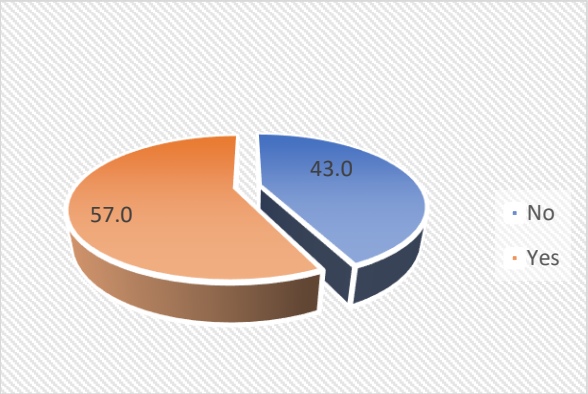


Figure 9: Awareness of early detection and survival rate

The survey assessed respondents' awareness of the impact of early detection on lung cancer survival rates. The findings revealed that 57% of respondents were aware that early detection can improve survival rates, while 43% were not aware of this fact. This indicates that while a majority of the community understands the importance of early diagnosis in improving lung cancer outcomes, a significant portion remains uninformed. Key informant interviews support these findings, attributing the lack of awareness to the generally limited understanding of lung cancer within the community. Additionally, key informants noted that factors such as the cost of screening and the distance to healthcare facilities further hinder the community's ability to access timely screenings.

f) Knowledge of the frequency of screening for individuals at risk for lung cancer

The survey explored respondents' knowledge regarding the recommended frequency of lung cancer screening for individuals at high risk. As shown in Figure 10, 67.8% of respondents were unsure about the appropriate screening intervals. In contrast, 21.8% believed that screenings should be conducted only when symptoms appear, 7.1% suggested annual screenings, and 3.3%

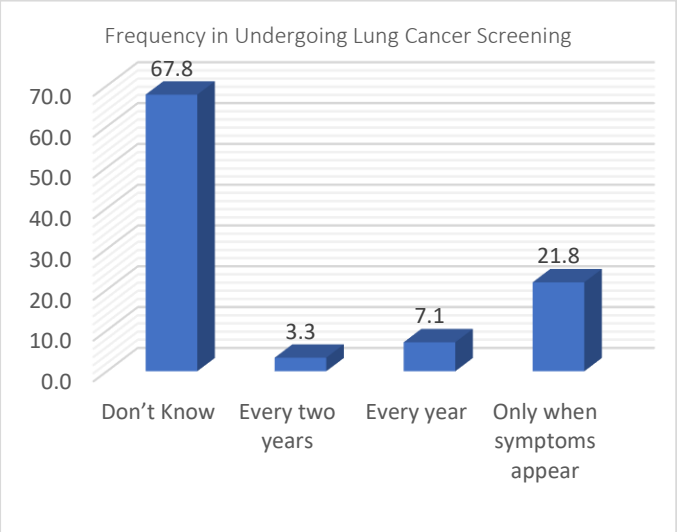


Figure 10: Frequency of Screening Tests for High-Risk Individuals

recommended screenings every two years. Desk review shows that the U.S. Preventive Services Task Force (USPSTF) recommends annual screening for lung cancer with low-dose computed tomography (LDCT) for individuals aged 50 to 80 years who have a 20-pack-year smoking history and currently smoke or have quit within the past 15 years (Moyer, 2014)[13]. This recommendation is based on evidence showing that annual LDCT screening reduces lung cancer mortality in this high-risk population (National Lung Screening Trial Research Team, 2011)[14]. The American Cancer Society (ACS) also supports annual LDCT screening for high-risk individuals, specifying a starting age of 55 years for those with a 30-pack-year smoking history (Smith et al., 2014)[15]. This guideline aligns with the notion that more frequent screening can detect lung cancer at an earlier, more treatable stage (ibid).

g) Have you ever received information or education about lung cancer prevention and early detection specific to Uasin Gishu County?

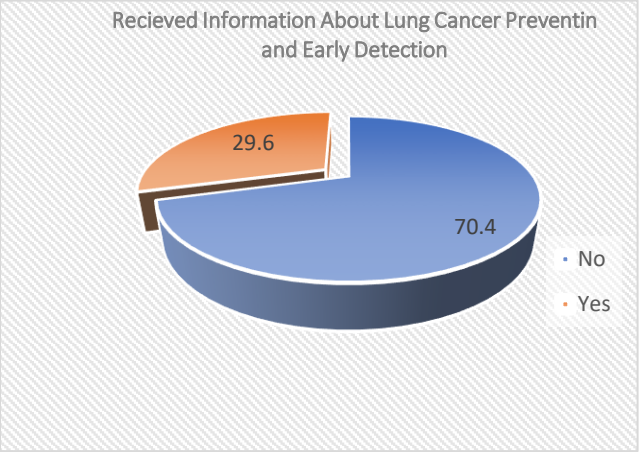


Figure 11: Information on Lung Cancer Prevention and Early Detection

When asked whether they have ever received information or education about lung cancer prevention and early detection specific to Uasin Gishu County, 70.4% of respondents stated that they had not received such information, while 29.6% had received information as shown in Figure 11. A qualitative interview with the NCD coordinator revealed ongoing efforts to increase awareness through Community Health Promoters (CHPs) who engage with local communities. The NCD coordinator also highlighted various strategies implemented by the county health department, including health promotion talks and continuous medical education (CME). For

[13] *Moyer, V. A. (2014).* Screening for Lung Cancer: U.S. Preventive Services Task Force Recommendation Statement. Annals of Internal Medicine.
[14] National Lung Screening Trial Research Team. (2011). Results of the National Lung Screening Trial (NLST). New England Journal of Medicine.
[15] Smith, R. A., & Andrews, K. S. (2014). Cancer Screening in the United States, 2014: A Review. CA: A Cancer Journal for Clinicians.

instance, healthcare providers trained in lung cancer participate in CME sessions to train other medical professionals. Additionally, efforts by NGOs such as the Non-Communicable Diseases Alliance Kenya (NCDAK) and the Kenya Hospices and Palliative Care Association (KEHPCA) are contributing to capacity-building within the healthcare system, which in turn aids in community education, including for patients.

h) Awareness of existing lung cancer screening programs

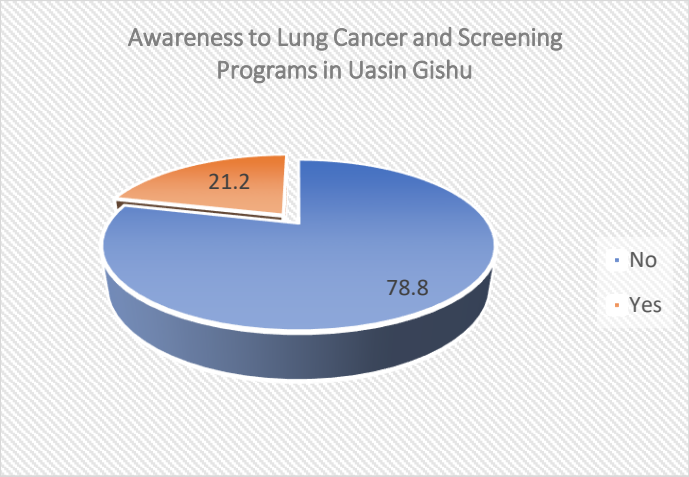


Figure 12: Awareness of Lung Cancer Screening Programs

The survey assessed respondents' awareness of lung cancer screening programs in their sub-county or county. As shown in Figure 12, 78.8% of respondents were not aware of any such programs, while only 21.2% were aware. This significant lack of awareness points to a gap in the dissemination of information regarding available screening programs. A desk review of the CIDP 2023-2027 identifies key health sector priorities and strategies aimed at strengthening the capacity for screening and management of NCDs, including lung cancer. It also includes the plan to integrate disease surveillance and response, highlighting a commitment to enhancing the overall approach to disease management and prevention within the county. However, qualitative interviews indicate that there is a competing demand for resources among different departments, which limits the annual allocation specifically for cancer-related initiatives. This competition for resources affects the extent to which lung cancer awareness and screening programs can be effectively implemented and sustained. Therefore, there is a huge area of unmet need in cancer screening, early diagnostics and treatments for patients living in the county.

i) If yes, by which entity/organization?

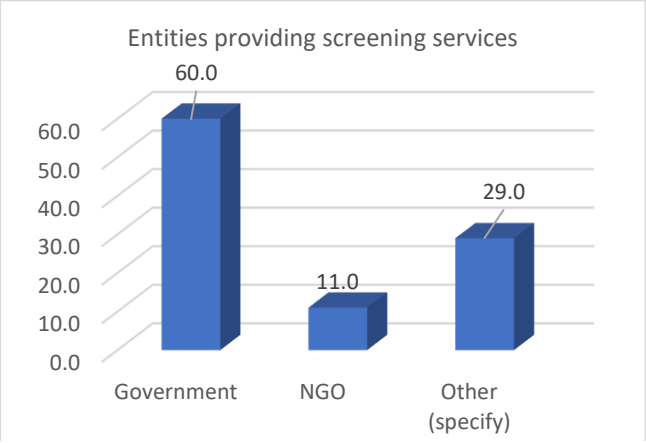


Figure 13: Entities Providing Lung Cancer Screening Programs

For the respondents who were aware of lung cancer screening programs in their sub-county or county, the survey asked which entities or organizations were responsible for these programs. The findings indicated that 60.0% of respondents identified the government as the provider, 11.0% attributed the programs to NGOs, and 29.0% mentioned other entities including private healthcare as shown in Figure 13. Qualitative

interviews reveal that screening services for lung cancer are available in all six Level 4 healthcare facilities within the county. Additionally, some Level 3 facilities offer these screening services to the population. While screening equipment is present, there are no extensive, viable programs for widespread screening implementation. The process for CT scans is often lengthy, with turnaround times for radiology reports being notably quicker at nearby private hospitals. The According to National Cancer Control Strategy (2023–2027), lack of knowledge and awareness about cancer among the general population in Kenya contributing to poor health-seeking behaviors, has been identified as a major barrier to cancer screening, early diagnosis, and effective treatment.

j) Awareness of the treatment options available for lung cancer

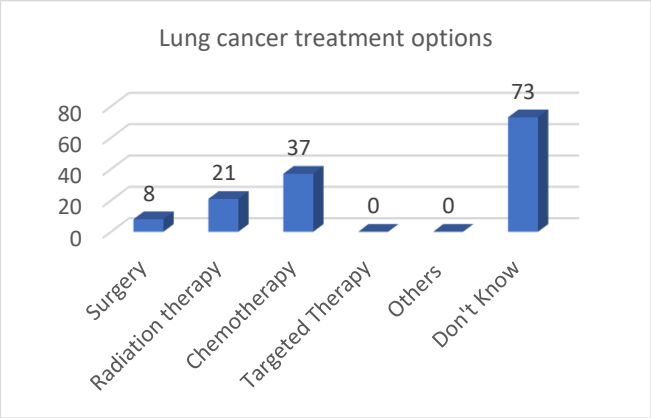


Figure 14: Awareness of Lung Cancer Treatment Options

The survey assessed respondents' awareness of available treatment options for lung cancer. The findings indicate that 73% of respondents are unaware of the treatment options, while 37% are aware of chemotherapy, 21% know about radiation therapy, and 8% are aware of surgical options. Notably, none of the respondents identified targeted therapy or other treatment options as shown in Figure 14. The lack of prompt intervention in lung health care leads to late-stage presentation, late diagnosis, less effective treatment interventions, and poor outcomes in the management of lung cancer[16].

Qualitative interviews reported treatment options remain largely unaffordable for the majority of the population, with immunotherapy and targeted therapy being particularly inaccessible. Additionally, qualitative interviews revealed that resource limitations significantly impact the management of lung cancer in the county. There is a shortage of CT scan machines, which delays diagnosis and treatment. Additionally, there is a scarcity of qualified and well-trained healthcare professionals to manage patients from diagnosis through to treatment. This challenge is further compounded by the confounding presence of pulmonary tuberculosis (PTB), which can lead to misdiagnosis and complicate the treatment process.

Desk research show that there is a huge area of unmet need in cancer screening, early diagnostics and treatments for patients living in this county despite the proximity of Uasin Gishu to the MTRH Cancer Center.

[16] https://www.ampathkenya.org/news-blog-feed/2022/12/22/awareness-and-support-activities-highlight-lung-cancer-awareness-month

k) Knowledge of support services available for lung cancer patients and their families in Uasin Gishu County

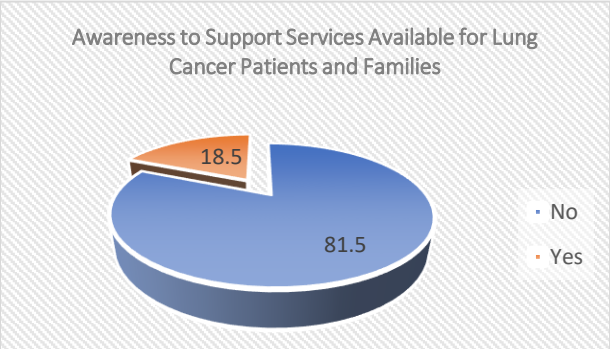


Figure 15: Awareness of Support Services

The survey assessed respondents' awareness of support services available for lung cancer patients and their families. The findings revealed that 81.5% of respondents were not aware of any such support services, while only 18.5% were aware as shown in Figure 15. Qualitative data from interviews with healthcare providers reveal that support for lung cancer treatment is limited at lower-level facilities. Most support is concentrated at MTRH, where palliative care services are provided, and patients and their caregivers receive guidance from palliative care nurses on managing their condition. The most well-organized facilities for palliative care are Living Room Hospital and Kimbilio Hospice. However, the majority of individuals with palliative care needs cannot afford these services. The Kenya palliative care Policy 2021-2030, recognises that majority of adults (69%) in need of palliative care have non-communicable diseases. In adults, the leading conditions that generate most serious suffering requiring palliative care interventions include cancer (28.2%), HIV (22.2%), cerebrovascular diseases (14.1%), dementia (12.2%) and lung diseases (5.1%).

3.3: ATTITUDES TOWARD LUNG CANCER

This section highlights the community's attitudes towards lung cancer, focusing on perceptions of its seriousness, beliefs about early detection, and the preventability of the disease.

a) Perception of the severity of lung cancer is compared to other diseases

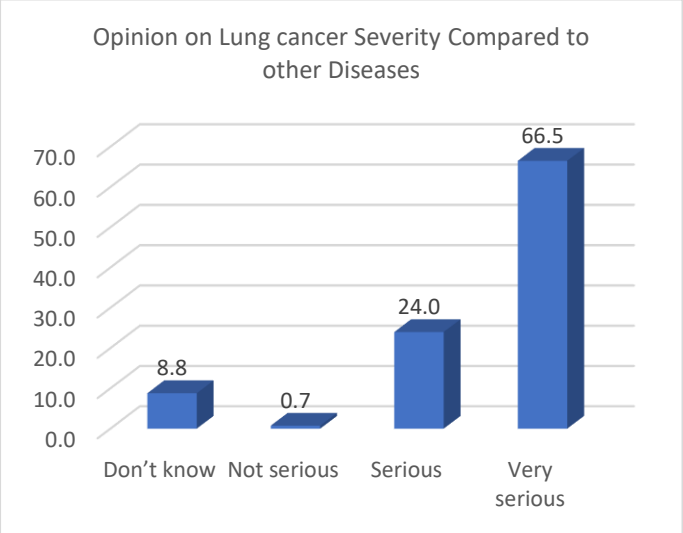


Figure 16: Perception of the Seriousness of Lung Cancer

The survey assessed respondents' perceptions of the seriousness of lung cancer compared to other diseases. The findings show that a majority, 66.5%, considered lung cancer to be "very serious," while 24.0% viewed it as "serious." Only 0.7% believed it to be "not serious," and 8.8% were unsure as shown in Figure 16. Qualitative interviews with Community Health Promoters (CHPs) corroborate these findings, revealing that the community generally takes all forms of cancer seriously. CHPs noted that during home

visits, individuals showing symptoms are referred for screening and often take preventive actions, such as avoiding risk factors, once diagnosed. These findings reflect a strong recognition of the gravity of lung cancer within the community, indicating that most respondents understand its severe health implications. According to the National Cancer Control Strategy (2023–2027), cancer is a major health concern in Kenya, ranking as the third leading cause of death after infectious and cardiovascular diseases. According to GLOBOCAN estimates for 2020, Kenya had 42,116 new cancer cases and 27,092 cancer-related deaths among a population of approximately 53.8 million people[17].

b) Do you believe that lung cancer is preventable?

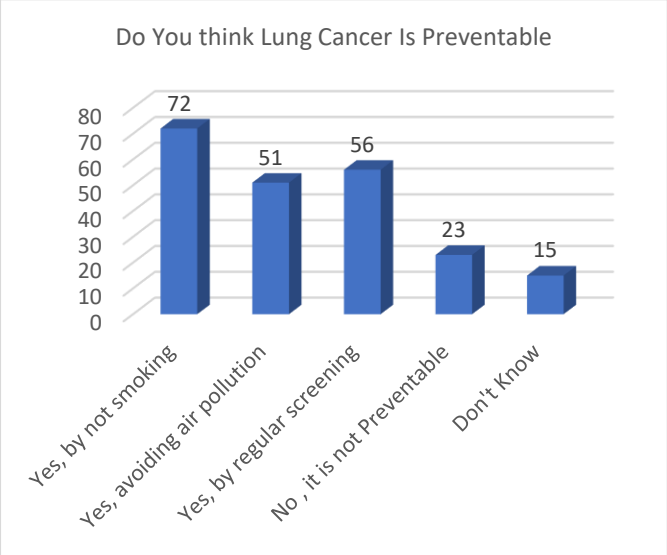


Figure 17: Do you believe lung cancer is preventable?

The survey assessed respondents' beliefs regarding the preventability of lung cancer. A significant majority, 72%, believed that lung cancer is preventable by not smoking, while 51% felt that avoiding air pollution could help prevent the disease. Additionally, 56% recognized regular screening as a preventive measure. Conversely, 23% of respondents indicated that lung cancer is not preventable, and 15% were unsure as shown in Figure 17. This is corroborated by qualitative interviews, which revealed that community members, when educated about the risks, generally support the notion that lung cancer can be prevented through lifestyle changes and early detection. However, qualitative data also highlighted that there are persistent misconceptions about the disease. Some respondents remain uncertain about the extent to which lifestyle changes alone can prevent lung cancer, reflecting a need for more comprehensive public education on the topic.

The National Cancer Control Strategy (2023–2027) focuses on reducing exposure to major risk factors such as tobacco use, alcohol consumption, poor diet, physical inactivity, and infections like HPV and Hepatitis B to reduce the preventable burden of cancer in Kenya. The strategy includes comprehensive screening programs for high-burden cancers such as breast, cervical, colorectal, and prostate cancers, and emphasizes the need for early diagnosis and improved healthcare infrastructure. By integrating cancer prevention into public health programs, increasing vaccination coverage, and building the capacity of healthcare workers, the strategy seeks to achieve significant reductions in cancer incidence and mortality rates.

[17] http://guidelines.health.go.ke:8000/media/NATIONAL_CANCER_CONTROL_STRATEGY_2023-2027_7uTQQP4.pdf

c) Willingness to undergo screening for lung cancer if it was available

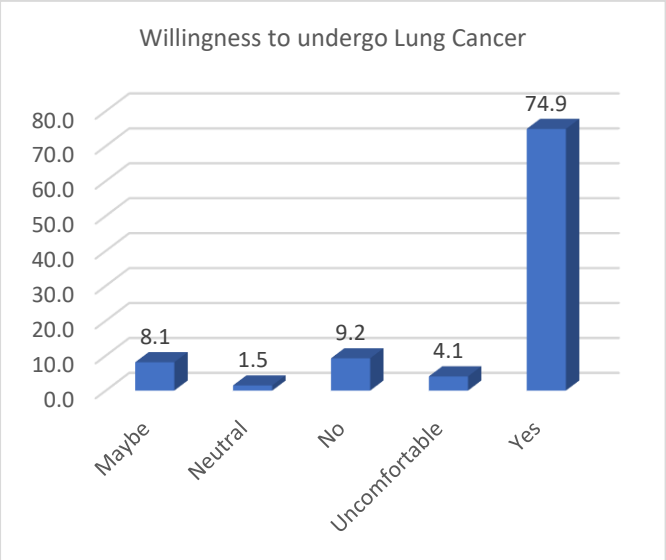


Figure 18: Willingness to Undergo Lung Cancer Screening

The survey examined respondents' willingness to undergo lung cancer screening if it were available. A significant majority, 74.9%, expressed willingness to undergo screening. In contrast, 8.1% were uncertain, 9.2% declined, and 4.1% felt uncomfortable with the idea as shown in Figure 18. This demonstrates a strong overall interest in preventive measures, though there remains a small segment of the population with reservations or discomfort regarding screening. These findings demonstrate a strong inclination among the community towards participating in lung cancer screening initiatives. Qualitative interviews with CHPs corroborate these findings, revealing that community members who are referred for screening due to symptoms generally follow through with the recommendation. However, in a few cases, barriers such as cost and distance to screening facilities pose challenges, impacting their ability to participate in screening programs. This readiness can be leveraged to promote and implement screening programs.

d) Stigma on lung cancer patients.

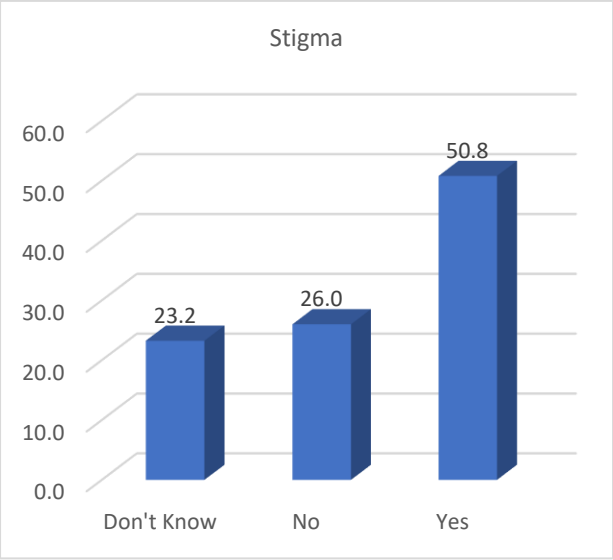


Figure 19: Perception of Stigma Surrounding Lung Cancer

The survey investigated perceptions of stigma faced by individuals with lung cancer within the community. The results revealed that 50.8% of respondents believed that people with lung cancer face stigma. In contrast, 26.0% do not perceive stigma as a significant issue, while 23.2% are uncertain as shown in the figure in figure 19. Qualitative interviews provide mixed insights: some participants acknowledged the presence of stigma, while others reported that stigma is not a prevalent issue in the community. Nonetheless, the interviews also highlighted that limited awareness contributes to stigma, with some community members avoiding families with a history of lung cancer due to misconceptions that the disease is genetic and associated with hereditary factors. This stigma can lead to social exclusion, where individuals from families with

cancer patients are shunned or avoided as potential marriage partners. The National Cancer Control Strategy (2023–2027), identifies a high level of stigma in many societies, with cancer usually considered a life-threatening illness synonymous with suffering and death. Stigma is a widespread and deep cultural concept with significant effects, dimensions, and consequences in the local context. It affects individuals, families, and even the effectiveness of public health programs; hence, it is important to address the methods that can reduce stigma or its effects on those affected through advocacy and communication[18].

e) Level of comfort discussing lung cancer symptoms with a healthcare provider

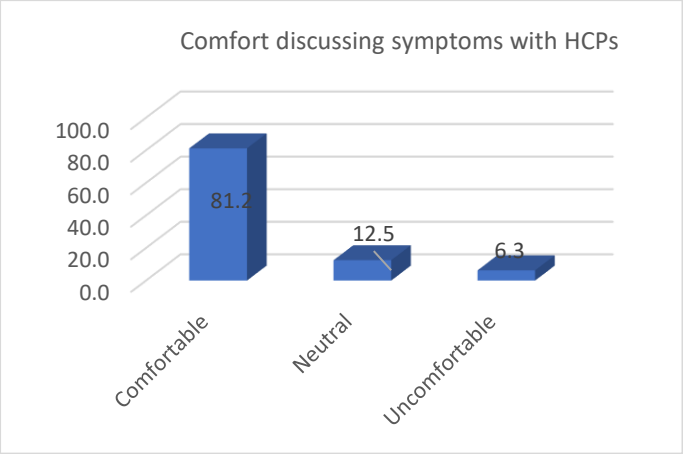


Figure 20: Comfort Level in Discussing Lung Cancer Symptoms with HCP

The survey assessed respondents' comfort level in discussing lung cancer symptoms with healthcare providers. As shown in Figure 19, a significant majority, 81.2%, felt comfortable discussing lung cancer symptoms with their healthcare providers. In contrast, 6.3% reported feeling uncomfortable, and 12.5% were neutral on the question as depicted in Figure 20. Qualitative interviews corroborate these findings, with healthcare providers reporting that community members are generally open to discussing symptoms within healthcare settings. Interviews with CHPs further support these findings, indicating that while most community members are open to discussing symptoms, a few remain uncomfortable. This discomfort is partly attributed to the stigma associated with lung cancer and the tendency to conflate symptoms with other conditions such as HIV.

f) Level of comfort discussing lung cancer symptoms with a friend or family member

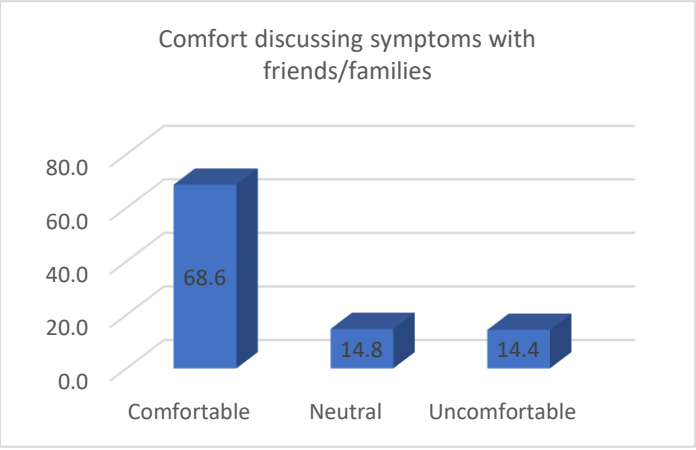


Figure 21: Comfort Level in Discussing Lung Cancer Symptoms with family/friend

Besides comfort in discussing lung cancer symptoms with healthcare providers, the survey explored respondents' comfort level in discussing lung cancer symptoms with friends or family members. As shown in Figure 21, approximately 68.6% of respondents felt comfortable discussing lung cancer and its symptoms, while 14.8% remained neutral and 14.4% reported feeling uncomfortable. This indicates a

[18] Ministry of Health, Kenya. (2023). National Cancer Control Strategy (2023–2027).

generally positive attitude towards open discussions about lung cancer and its symptoms within social networks.

g) Beliefs or cultural factors that influence attitudes toward lung cancer care and management in the community

Additionally, qualitative interviews show that beliefs and cultural factors significantly influence health-seeking behavior concerning lung cancer care and management. The community's cultural beliefs and misconceptions often affect how individuals approach the disease. For example, some individuals may view lung cancer through a lens of superstition or as a form of punishment, leading them to seek alternative remedies rather than medical intervention. This belief system drives them to traditional healers instead of healthcare facilities, potentially delaying diagnosis and treatment.

3.4: PRACTICES RELATED TO LUNG CANCER PREVENTION AND CARE

This section examines the practices related to lung cancer prevention and care among respondents in Uasin Gishu County. Understanding these practices is important in identifying gaps in knowledge and behaviours that may impact lung cancer outcomes.

a) Reaction to experiencing symptoms like persistent cough or chest pain

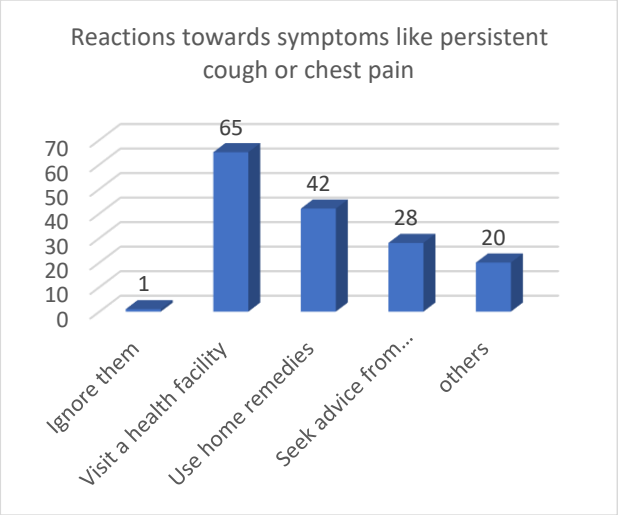


Figure 22: Response to Symptoms like persistent cough or chest pain

The survey explored how respondents would react if they experienced symptoms like persistent cough or chest pain. As shown in Figure 22, a significant majority, 65%, indicated they would visit a health facility, while 42% would use home remedies. Additionally, 28% reported they would seek advice from friends or family, and 20% mentioned other actions. Only 1% stated they would ignore these symptoms. Qualitative interviews revealed that while a significant number of community members prefer visiting a health facility when experiencing symptoms like persistent cough or chest pain, many also resort to self-medication. The presence of many pharmacies leads to cases where people to drugs over the counter to treat the symptoms without testing. Despite this, key informants, especially CHPs, noted that the majority of the community still seeks medical attention from health facilities.

b) If you experienced symptoms such as persistent cough, chest pain, or difficulty breathing, how soon would you seek medical advice in Uasin Gishu County?

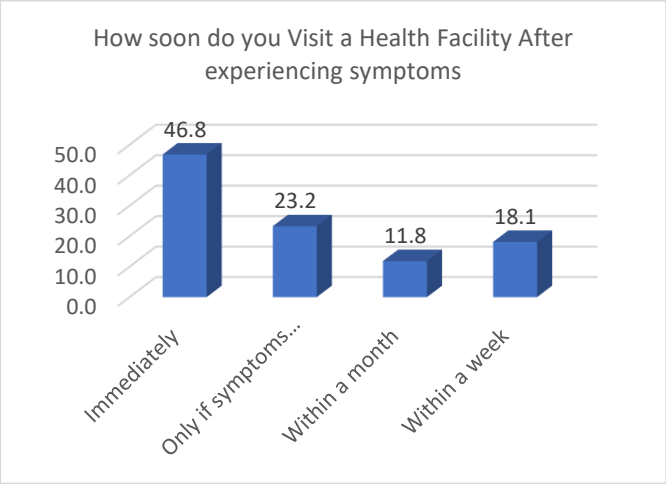


Figure 23: Timeliness of Seeking Medical Advice for LC Symptoms

The survey assessed respondents' willingness to seek medical advice upon experiencing symptoms such as persistent cough, chest pain, or difficulty breathing. Findings revealed that 46.8% of respondents would seek medical attention immediately, while 23.2% indicated they would do so only if symptoms worsened. Additionally, 18.1% would seek advice within a week, and 11.8% stated they would wait up to a month as shown in Figure 23.

c) Have you or any household member undergone screening tests/check-ups for lung cancer in Uasin Gishu County?

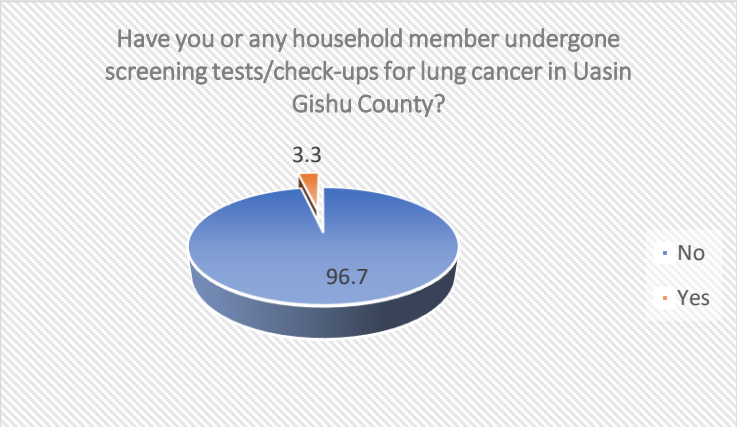


Figure 24: Undergone screening tests for LC

The survey investigated whether respondents or any household members had undergone screening tests or check-ups for lung cancer in the county. As shown in Figure 24, a significant majority, 96.7%, had not undergone any screening tests, while only 3.3% reported having been screened. Qualitative interviews revealed several factors contributing to this low screening rate. These include delays in seeking care due to a lack of financial resources or healthcare insurance, distance to the facilities, poor health-seeking behavior, and the common assumption that symptoms are due to TB or pneumonia. This highlights a considerable gap in lung cancer screening within the community, indicating a need for increased awareness and accessibility to such preventive measures. Addressing the low screening through targeted awareness campaigns and accessible screening programs is essential for improving early detection.

Literature review shows that screening can significantly reduce lung cancer mortality by detecting cancers at an earlier, more treatable stage (National Lung Screening Trial Research Team, 2011). A landmark study in the United States demonstrated a 20% reduction in lung cancer mortality with annual LDCT screening among high-risk individuals, such as heavy smokers aged 55-74 (ibid)[19].

[19] National Lung Screening Trial Research Team. (2011). Reduced lung cancer mortality with low-dose computed tomographic screening.

d) Do you or any household member smoke?

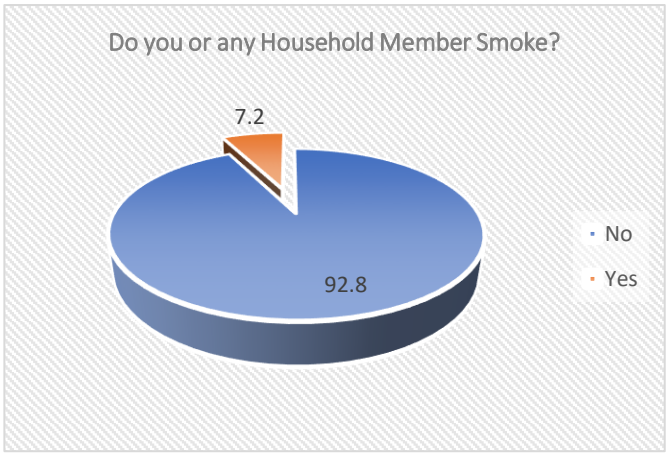


Figure 25: do you or your household member smoke

The survey assessed whether respondents or any household member smokes. As shown in Figure 25, a majority, 92.8% of participants reported no smoking, while only 7.2% indicated that they or a household member smoke. Literature review shows that tobacco is the most common risk factor responsible for one in five cancers and one in three cancer-related deaths globally[20]. Smoking is the primary risk factor for lung cancer in Kenya. Public health initiatives aimed at reducing smoking prevalence and promoting cessation are important for lowering lung cancer incidence and improving screening uptake[21]. As per the STEPS 2015 survey, tobacco use among adults was estimated at 13.3%. The mean age of smoking initiation was 20.8 years and exposure to second-hand smoke is 30% at the workplace and 24% at home.

e) Have you or any household member attended any health education sessions on lung cancer?

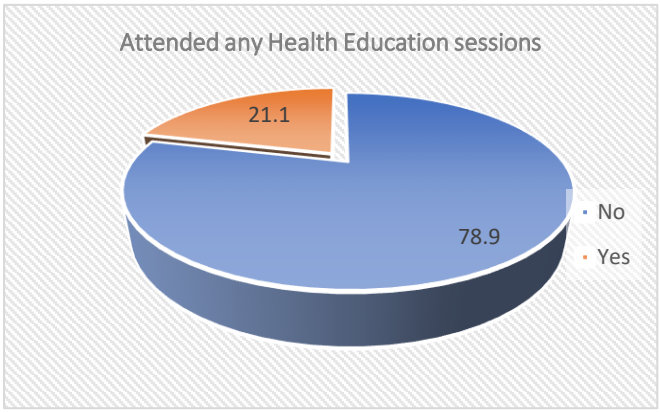


Figure 26: Attended any health education sessions on lung cancer?

The survey explored whether respondents or any household member had attended health education sessions focused on lung cancer. As shown in Figure 26, 78.9% of participants had not attended such sessions, while only 21.1% reported having attended health talks on lung cancer. This finding underscores the need for enhanced efforts to improve awareness and preventive measures for lung cancer within the community. Qualitative interviews corroborate this need, revealing that while there are efforts to increase awareness through various initiatives, substantial gaps remain. CHPs, who are tasked with educating the community on both communicable and non-communicable diseases, often face challenges in dedicating sufficient time to lung cancer due to the broad scope of topics they cover.

f) If yes, who organized these sessions?

[20] National Cancer Control Strategy (2023–2027). Ministry of Health, Kenya
[21] Kariuki, A. S., & Otieno, J. K. (2022). Tobacco Use and Lung Cancer Incidence in Kenya. *East African Journal of Public Health*, 19(1), 76-85

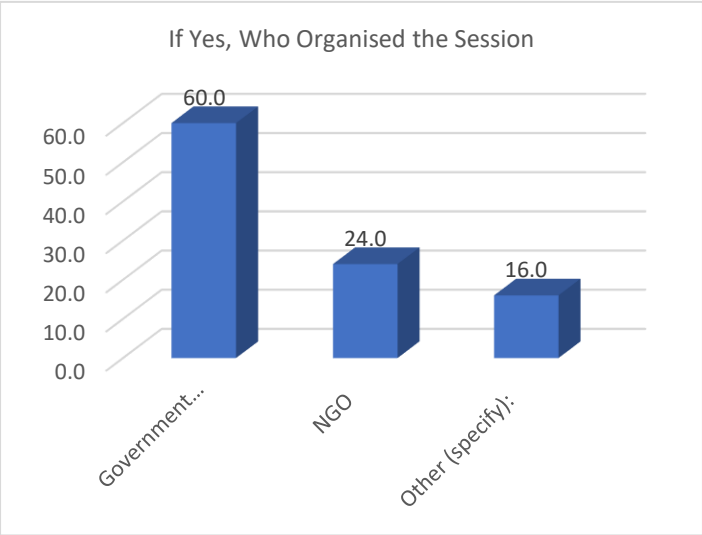


Figure 27: Entities that organized these sessions?

Among those who attended health education sessions on lung cancer, the survey sought to identify the organizing bodies. The survey revealed that 60.0% of the sessions were organized by government entities, both national and county, while 24.0% were facilitated by NGOs. Additionally, 16.0% of respondents noted that other entities were involved in organizing these sessions as shown in Figure 27. The Constitution of Kenya allocates the role of health to both National and County Governments. The County Governments according to the 4th Schedule Part II Function 2 have been allocated County Health facilities and Pharmacies, ambulance services, and promotion of primary health care. Healthcare services are important for promoting and maintaining a healthy population, preventing and managing diseases, and reducing unnecessary disabilities and premature death. In achieving health equity for all, the government is obligated to ensure quality, accessible, affordable, and need-based medical services are provided.

g) Do you practice any of the following to reduce the risk of lung cancer?

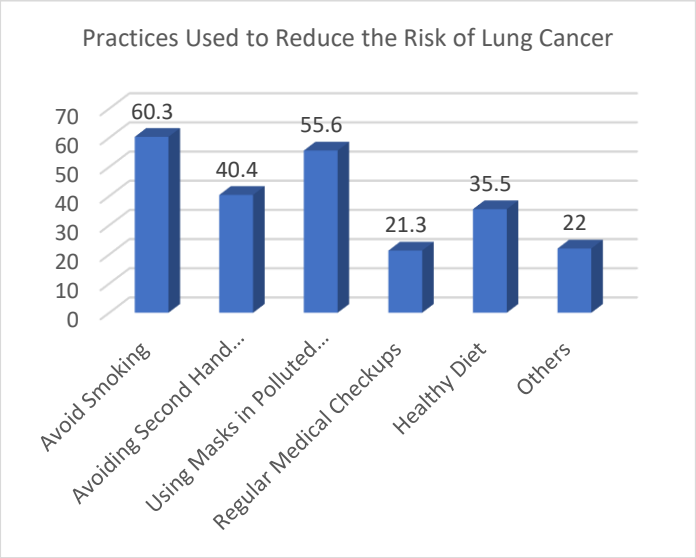


Figure 28: Practices to Reduce the Risk of Lung Cancer

The survey explored the practices respondents engage in to mitigate the risk of lung cancer. As shown in Figure 28, a significant portion of the population adopts preventive measures, with 60.3% of respondents avoiding smoking and 40.4% avoiding second-hand smoke. Additionally, 55.6% use masks in polluted areas as a precaution. However, fewer respondents engage in other preventive practices, with only 21.3% participating in regular medical check-ups and 35.5% maintaining a healthy diet. Other practices, which were specified by 22% of respondents, include various individual strategies to reduce risk such as engaging in regular exercise.

h) How likely are you to adopt lifestyle changes to reduce your risk of developing lung cancer in Uasin Gishu County (e.g., quitting smoking, reducing exposure to air pollution)?

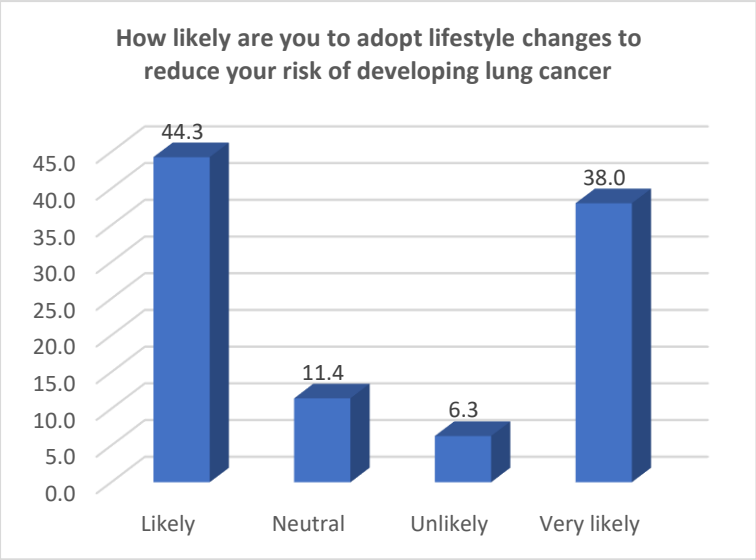


Figure 29: Likelihood of Adopting Lifestyle Changes to Reduce Lung Cancer Risk

When asked a question on the likelihood of adopting lifestyle changes to reduce your risk of developing lung cancer in Uasin Gishu County (e.g., quitting smoking, reducing exposure to air pollution, 44.3% of participants were "likely" to make such changes, while 38.0% were "very likely." Additionally, 11.4% remained "neutral" about making changes, and 6.3% were "unlikely" to do so as shown in Figure 29. This strong inclination towards adopting healthier lifestyles reflects a positive attitude within the community, suggesting that with appropriate education and support, many residents in the county may be motivated to engage in practices that reduce their lung cancer risk.

3.5: IMPACT OF LUNG CANCER

This section examines the impact of lung cancer on individuals and the community in Uasin Gishu County.

a) Lung Cancer diagnosed and challenges in accessing care and treatment

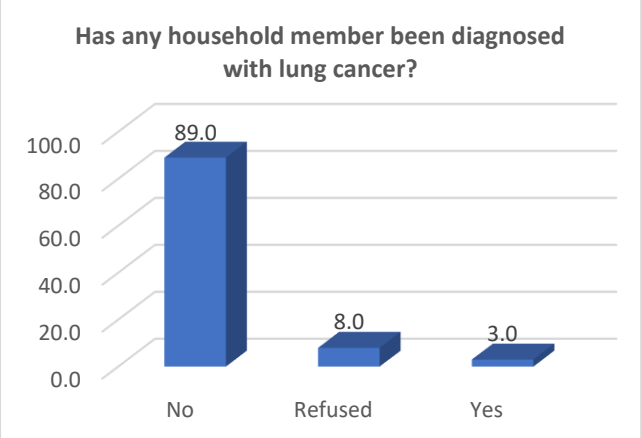


Figure 30: Household Diagnosis of Lung Cancer

The survey explored the prevalence of lung cancer diagnoses within households in Uasin Gishu County. As shown in figure 29, the majority of respondents, 89.0%, reported that no household member has been diagnosed with lung cancer, while 8.0% of respondents refused to provide an answer. Approximately, 3.0 % acknowledged having a household member diagnosed with the disease. This low prevalence of diagnosed cases may reflect the limited engagement with screening services, as evidenced by the survey's finding that only 3.3% of respondents or their household members have undergone screening tests/check-ups for lung cancer. Qualitative interviews support this connection, revealing that low levels of screening and delayed healthcare-seeking behaviors contribute to the underdiagnosis of lung cancer in the community. Without regular screening, many cases remain undetected, further exacerbating the low reported incidence of the disease. Qualitative interviews reveal that financial constraints often limit individuals' ability to

seek timely medical attention or afford treatment. The lack of information on lung cancer and its management compounds this issue, leaving many unaware of available resources or necessary actions. Distance to healthcare facilities further exacerbates delays in diagnosis and treatment, as individuals face logistical challenges in accessing care. Poor healthcare services, including inadequate facilities and long turnaround times for diagnostic tests, also impede effective management.

RECOMMENDATIONS AND CONCLUSION

This chapter outlines the conclusion and the key recommendations from the KAP survey.

4.1 RECOMMENDATIONS

This chapter outlines conclusion and the key recommendations that from the KAP survey.

- Education and training of healthcare providers on the latest advancements in lung cancer screening, diagnosis, and treatment.
- Build the capacity of the CHPs to deliver comprehensive information on lung cancer, ensuring they have the resources and support to effectively cover this topic despite competing health issues. Since CHPs serve as the primary interface with the community, enhancing their training and resources will significantly improve awareness and early detection of lung cancer. This should include providing them with updated materials, regular training sessions, and tools to facilitate community engagement on lung cancer specifically.
- Develop targeted education programs to raise awareness about lung cancer symptoms, risk factors, and the importance of early detection through various platforms including local radio, TV, community meetings, and social media.
- Creation and dissemination of lung cancer awareness brochures and other materials targeted to the general public and healthcare providers to increase awareness and encourage early detection and diagnosis.
- Introduce educational programs in schools to raise awareness about lung cancer from an early age.
- Advocate for the Uasin Gishu County Government to increase resources dedicated to cancer care, with a particular focus on lung cancer. This advocacy should focus on the need for improved funding for screening programs, diagnostic equipment, and treatment facilities. Additionally, call for the allocation of resources to support public awareness campaigns and educational initiatives aimed at enhancing community knowledge about lung cancer and its early detection.

4.2 CONCLUSION

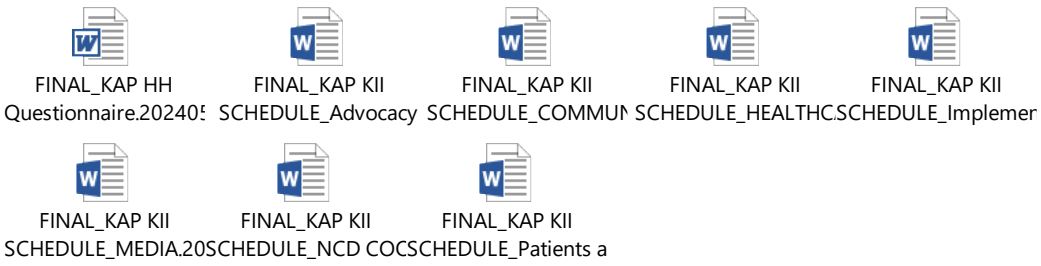
In conclusion, the survey highlights significant gaps in lung cancer awareness, prevention, and care in Uasin Gishu County. While there is general recognition of lung cancer's seriousness and

some willingness to adopt preventive measures, challenges such as limited knowledge, financial constraints, and inadequate access to screening and treatment persist. Qualitative data further underscores the need for improved public education and more robust healthcare infrastructure.

To improve lung cancer care in the county, it is essential to enhance public education, streamline screening processes, and address the financial and logistical barriers faced by individuals. Coordinated efforts involving healthcare providers, community health promoters, and relevant stakeholders are key to bridging these gaps.

ANNEXES

5.1 DATA COLLECTION INSTRUMENTS



5.2 LIST OF KEY INFORMANTS

	Key Informant	Designation	Gender
1	Dr. Kuria Kienyere	NCD Coordinator	M
2	Dr. Gilbert Kilaho	Medical Officer	M
3	Faith Kutere	Journalist, Standard Media Group	F
4	Trizah Maru	CHP, Kesses Sub-county	F
5	Christine Wepukhulu	CHP, Ainabkhoi Sub-County	F
6	Mzee Wanyama	Caregiver (Lung Cancer Patient)	M
7	Musa Barabara	Advocacy Group	M
8	David Musyoki	KEHPCA	M