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Diagnosis of cancer in Nairobi, Kenya: duration and causes of delay

Submission date
24/03/2025

Recruitment status
No longer recruiting

Registration date
17/04/2025

Overall study status
Completed

Last Edited
15/10/2026

Condition category
Cancer

[X] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[X] Record updated in last year

Plain English summary of protocol
Background and study aims
Cancer is a leading cause of death worldwide. Patients with cancer in sub-Saharan Africa have a higher death rate than patients with cancer in high-income countries. This is largely because the majority of patients in sub-Saharan Africa present with cancer late, when it has done a lot of damage to the body and the chances of a cure are low. It is therefore important that patients are diagnosed earlier so that they can receive treatment before the cancer spreads. This study aims to better understand delays in the pathway to care and the factors contributing to these delays in Kenya. The study is focused on four common cancer types: breast, colorectal, head-and-neck, and cervical cancer. These cancers are treatable if diagnosed early and often present noticeable symptoms.

Who can participate?
Patients aged 18 years and older who have been diagnosed for the first time with breast, colorectal, head-and-neck, or cervical cancer, who present at the Kenyatta National Hospital, a government-owned national referral and specialized hospital in Kenya.

What does the study involve?
The study will involve one-to-one interviews with patients diagnosed with the selected cancers. A semi-structured questionnaire will be used to explore the time to diagnosis in three stages:
The first stage is from when the patient first notices a change in their body/symptom to when they first present to a formal healthcare provider.
The second stage is from when the patient presents to a formal healthcare provider to when they receive a cancer diagnosis.
The third stage is from when the patient receives a diagnosis to when they start treatment.
The study will recruit 40 to 50 patients for each cancer type from Kenyatta National Hospital. A clinician or nurse from the hospital will assist in identifying and approaching the eligible patients. If the patient agrees to participate, their contact details will be shared with the research team, who will then arrange an interview.
All participants will be required to provide written consent before the interviews.
The researchers will examine the information from the interviews to calculate the time between each of the stages and identify the reasons for the delay at each stage.

What are the possible benefits and risks of participating?
There are no direct benefits or risks of participating in the study. However, some patients may find it distressing to discuss their cancer journey. The research team is trained to provide support and refer patients to emotional support services if needed. If a patient becomes too distressed, the interview will be stopped.

Where is the study run from?
The study is a collaboration between the African Population and Health Research Center (APHRC) in Kenya, the University of Birmingham in the UK, and the University of Ibadan in Nigeria.

When is the study starting and how long is it expected to run for?
November 2024 to July 2025

Who is funding the study?
National Institute for Health and Care Research (NIHR) Global Health Programme (UK)

Who is the main contact?
Lyagamula Kisia, lkisia@aphrc.org

Contact information

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National Institute for Health and Care Research (NIHR)
158242

Study information

Scientific Title
The delays in cancer care and the associated causes of the delays in Nairobi, Kenya

Study objectives
The findings will provide preliminary evidence to inform policy and decision-makers in designing and implementing multilevel and holistic approaches to cancer control and improving the overall care pathway. It will also inform subsequent work packages in a programme of work in which this is the first part.

Ethics approval required
Ethics approval required

Ethics approval(s)
1. Approved 05/11/2024, African Population Health Research Center (APHRC) (APHRC Campus, Manga Close, Kirawa road, Nairobi, PO Box 10787-00100, Kenya; +254 (0)722205933; info@aphrc.org), ref: DOR/2024/058

2. Approved 24/03/2025, Kenyatta National Hospital/University of Nairobi (Ethics and Research Committee, College of Health Sciences, Nairobi, PO Box 19676-00202, Kenya; +254 (0) 721257746; uoknh_erc@uonbi.ac.ke), ref: N/A

3. Approved 28/04/2025, National Commission for Science, Technology and Innovation (Off Waiyaki Way, Upper Kabete, Nairobi, PO Box 30623 - 00100, Kenya; +254 (0)204007000; dg@nacosti.go.ke), ref: N/A

Primary study design
Observational

Study design
Mixed-methods cross sectional study

Study type(s)
Other

Health condition(s) or problem(s) studied
Breast, colorectal, head-and-neck, or cervical cancer

Interventions
Semi-structured interviews with patients with a recent diagnosis of cancer to elicit patients' accounts of their cancer care pathway

The study will involve one-to-one interviews with patients diagnosed with the selected cancers. A semi-structured questionnaire will be used to explore the time to diagnosis in three stages:
The first stage is from when the patient first notices a change in their body/symptom to when they first present to a formal healthcare provider.
The second stage is from when the patient presents to a formal healthcare provider to when they receive a cancer diagnosis.
The third stage is from when the patient receives a diagnosis to when they start treatment.
The study will recruit 40 to 50 patients for each cancer type from Kenyatta National Hospital. A clinician or nurse from the hospital will assist in identifying and approaching the eligible patients. If the patient agrees to participate, their contact details will be shared with the research team, who will then arrange an interview.
All participants will be required to provide written consent before the interviews.
The researchers will examine the information from the interviews to calculate the time between each of the stages and identify the reasons for the delay at each stage.

Intervention Type
Other

Primary outcome(s)
1. Duration of delays will be measured using a semi-structured interview instrument at three timepoints that is point 1 (recognition of symptoms to presentation to a formal healthcare provider), point 2 (presentation to a formal healthcare provider to diagnosis), point 3 (diagnosis to resolution).
2. Patient experiences will be elicited using a semi-structured interview instrument at three timepoints that is point 1 (recognition of symptoms to presentation to a formal healthcare provider), point 2 (presentation to a formal healthcare provider to diagnosis), point 3 (diagnosis to resolution).

Key secondary outcome(s)
There are no secondary outcome measures

Completion date
31/07/2025

Eligibility

Key inclusion criteria
1. Patients with a first histologically confirmed diagnosis of breast, colorectal, head and neck, or cervical cancer
2. Patients aged 18 years and above
3. Patients referred from the Nairobi Metropolitan Area (NMA)
4. Patients capable of providing informed consent

Participant type(s)

Patient

Healthy volunteers allowed
No

Age group
Mixed

Lower age limit
18 Years

Upper age limit
110 Years

Sex
All

Total final enrolment
212

Key exclusion criteria
1. Patients with a diagnosis of a cancer secondary to a primary cancer
2. Any patients who are acutely ill or receiving end-of-life care
3. Patients with a recurrent cancer

Date of first enrolment
28/04/2025

Date of final enrolment
05/06/2025

Locations

Countries of recruitment
Kenya

Study participating centre
Kenyatta National Hospital
Hospital Road
Nairobi
Kenya
PO Box 20723-00202

Sponsor information

Organisation
University of Birmingham

ROR
https://ror.org/03angcq70

Funder(s)

Funder type
Government

Funder Name
National Institute for Health and Care Research

Alternative Name(s)
National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type
Government organisation

Funding Body Subtype
National government

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol file		09/09/2024	15/10/2026	No	No