Kenya, - Healthcare and Socio-economic Impacts of COVID-19 on Patients with Diabetes in Selected Counties in Kenya, GECO-Kenya

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Overview

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Overview

ABSTRACT
Background

The COVID-19 pandemic has resulted in socioeconomic hardships and disrupted healthcare for people with type 2 diabetes (T2D) particularly in sub-Saharan Africa. The project aims to explore the experiences of people with T2D and healthcare providers on managing T2D during COVID-19.

Methods

This is a mixed methods cross-sectional study which will be delivered through five interrelated work packages (WPs). In WP1 we will administer questionnaires (N=500) and in-depth interviews (N=30) to T2D patients to explore their experiences of healthcare access, and T2D self-management, socio-economic challenges and knowledge, attitude and practices related to COVID-19 in rural and urban Kenya. WP2 will use a desk review and field research on individual and societal economic burden of T2D. WP3 will explore the perspectives of local healthcare providers (N=30) on T2D management during COVID-19. WP4 will analyze policy landscape using desk review and key informant interviews to identify policy gaps and action for T2D during the pandemic. WP5 will synthesize evidence from WPs1-4 to develop policy recommendations and health education messages for T2D management during COVID-19 using a multi-stage participatory process. Quantitative analysis will determine differences between rural and urban settings using descriptive statistics and a hierarchical modelling using WHO framework on social determinants of health and wellbeing will be employed to explore factors associated with care disruption. A thematic content analysis will be used for qualitative data. For policy analysis Walt and Gilson's policy triangle framework, will be used.

UNITS OF ANALYSIS
Individula;

-People with type 2 diabetes (T2D) in rural and urban areas of Kenya.

-Healthcare providers managing T2D patients.

Scope

NOTES
The scope of the survey include:

- SOCIO-DEMOGRAPHIC VARIABLES: age, gender, place of current residence, marital status, education, occupation, diabetes

history, household head religion.

- PERCIEVED RISK AND ACTIONS IN RESPONSE TO COVID-19: Heard, close contact with infected person, symptoms, infromed by health worker, test outcomes, vaccinated.

- HEALTHCARE RESOURCES USE AND EXPENDITURE: Place of blood sugar test, changes, how the test was done, how often, cost of test, mode of payment during COVID and pre-COVID period.

- MEDICATION: type of medication, medication prescribed, use of medication, frequency, cost of medication, ability to obtain all medication, reasons for not being able to afford.

- HOSPITAL ADMISIONS AND OUTPATIENT VISITS: hospital and outpatient visits, admisions, number of admisions, number of nights spent, type of hospital facility, reasons for admision, cover for medication during and before COVID.

- NON-HOSPITAL VISITS: Healthcare recieved, non-hospital visits to the special doctor, primary care doctor, nurse, pharmacit, health educator, medical assistant, community health worker and traditional healer or faith dwelling, the number of visits, type of institution, total fees, charges, reasons for visiting, the cover for medication during and after COVID-19 period.

- DIABETES SELF-CARE: Factors affecting diabetes self-care.

- ACCESS TO HEALTHCARE: Type and level of healthcare facilityl, succesful visits, phone and in-person consultations, reason for not seeing the healthcare providers, journey to the facility, mode of transport, paid for transport during and before COVID-19.

- IMPACT OF COVID-19 ON INCOME, IMPOVERISHMENT AND AVAILABILITY OF FOOD: health insurance cover, type, reasons for joining an insurance scheme, income, cost of healthcare, effect of COVID-19, laws on access to healthcare, household necesities, financial hardship during and pre-COVID period.

- IMPACT OF COVID ON PRODUCTIVITY: Days, mised work, work at home or school, changes in activities during COVID and pre-COVID period.

- IMPACT OF COVID ON FORMAL AND INFORMAL CARE: Hire formal and infromal caregiver, changes, amount paid, caregiving days spent before and during COVID.

KEYWORDS
COVID-19, Type 2 Diabetes, Socioeconomic impact, Healtcare access, Self management, Rural and Urban Kenya, Healt prividers, Health education, Economic burden, Social determinant of health

Coverage

GEOGRAPHIC COVERAGE
National: The study was conducted across four counties in Kenya: Nairobi, Kiambu, Nyeri, and Vihiga.

UNIVERSE
The survey covered all individuals diagnosed with type 2 diabetes (T2D) receiving care at selected health facilities in Kenya, including both urban and rural residents, as well as healthcare providers involved in the management of T2D patients.

Producers and Sponsors

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Sampling

Sampling Procedure

500 patients with T2D were recruited from health facilities across four counties (Nairobi, Kiambu, Nyeri, Vihiga). The sample was selected based on existing patient databases from these facilities, ensuring representation from both urban and rural populations.

Deviations from Sample Design

N/A

Response Rate

The sample size was adjusted for non-response by oversampling by 30%, leading to a total sample size of 500.

Weighting

N/A

Questionnaires

Overview

The questionnaires were the T2D patient experience and Healthcare providers perspective questionnaires.

The T2D patient experience questionnaire assessed the patients expereince, acess to healthcare, self-management practices and the challenges they faced during and before COVID-19. The healthcare providers questionnaire assessed the view on how the healthcare managed the patients with type 2 diabetes, the challenges and strategies employed.

The questionnaires were written in English and Swahili to accomodate the linguistic diversity of the respondents.

The questionnaires were developed based on the standard model questionnaire for chronic disease management, adding elements from previous studies on diabetes care. The process was reviewed by stakeholders and feedback was provided on the draft version. The questionnaires were piloted prior to the main study to ensure clarity and relevance.

All questionnaire and module are provided as external resources.

Data Collection

Data Collection Dates

Start	End	Cycle
2021-09-16	2023-02-28	18 months

Data Collection Mode

Face-to-face [f2f]

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Supervision

Enumerators were organized in teams that included experienced research assistants. Each team had supervisors overseeing data collection. The main roles of the supervisors included ensuring data quality and adherence to protocols. There was no specific mention of upper management visits to the field.

Data Processing

Data Editing

Data was collected electronically using the SurveyCTO program. After each interview, the data was synchronized to the APHRC servers. Data quality checks included spot checks and automated routines to ensure completeness and consistency. There was no specific mention of hot deck or cold deck techniques used for data editing.

Other Processing

N/A

Data Appraisal

Estimates of Sampling Error

N/A