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FACULTY OF HEALTH SCIENCES DEPARTMENT OF COMMUNITY AND PUBLIC HEALTH

RESEARCH DISSERTATION

CHARACTERISTICS, TREATMENT OUTCOMES, AND EXPERIENCES OF COVID-19 PATIENTS UNDER HOME BASED CARE MANAGEMENT IN KAPELEBYONG DISTRICT

A CROSS-SECTIONAL STUDY

By

EUDU JAMES

This Research Dissertation is submitted to the Directorate of Graduate Studies, Research and Innovation in partial fulfillment of the requirement for the award of the degree of Masters of Public Health of Busitema University

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FINAL YEAR PROJECT REPORT

CHARACTERISTICS, TREATMENT OUTCOMES, AND EXPERIENCES OF COVID-19 PATIENTS UNDER HOME BASED CARE MANAGEMENT IN KAPELEBYONG DISTRICT

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ABSTRACT

Introduction: Uganda recorded the first case of COVID-19 virus in March 2020 and there was a rapid increase in community transmission across the country. The increased burden of COVID-19 in Uganda created a big challenge to Uganda's health system. The Ministry of Health adopted the Home-Based Care strategy for confirmed COVID-19 cases that were asymptomatic or those with mild symptoms. However, since its adoption in Uganda, to the best of our knowledge, no study has been done to evaluate the characteristics, treatment outcomes and experiences of COVID-19 patients under home-based care particularly in rural settings.

Objective: This study aimed at determining the characteristics, treatment outcomes and experiences of COVID-19 patients under home-based care in Kapelebyong District, Eastern region.

Methods: We conducted a sequential explanatory mixed methods study. The quantitative part was a cross-sectional study that determined the treatment outcomes of COVID-19 patients under home-based care and the qualitative part borrowed upon the phenomenological strategy of inquiry to elicit lived experiences of these patients. Due to the limited number of patients that were under home-based care management in Kapelebyong district, we included all patients and this gave us a sample size of 303. Data were collected electronically using a questionnaire designed in Kobo Toolbox (Cambridge, Massachusetts, USA). The data submitted daily in Kobo Toolbox were checked for completeness and accuracy. Data were also collected using in-depth interviews to explore the experiences of COVID-19 patients managed under Home based care. We conducted multivariable logistic regression to determine factors associated with poor outcomes using Stata v.15.0 (Stata Corp LLC, College Station, Texas, USA) and thematic analysis using NVivo 12 (QRS International, Cambridge, MA) for qualitative data to explore lived experiences of COVID-19 patients managed at home.

Results: Majority of the patients [96.0% (289/301)] cured at home, [3.3% (10/301)] were admitted to a health facility and [0.7% (2/301)] died. Cured at home was considered a good outcome [96.0% (289/301)] while being admitted to a health facility and/or dying were considered poor outcomes [4% (12/301)]. Patients above 60 years of age were 17.4 times as likely to have poor treatment outcomes as those below 60 years of age (AOR: 17.4; 95% CI: 2.2-137.6). Patients who spent more than one month under home care were 15.3 as likely to have poor treatment outcomes as those that spent less than one month under home care because most of them were elderly and they had associated comorbidities (AOR: 15.3; 95% CI: 1.6-145.7). Participants identified stigma, fear, anxiety, rejection, not being followed up by health workers and economic loss as negative experiences encountered during home care. On the other hand; being close to family and friends, fear of contracting other diseases from hospital, easy access to food, being able to manage their family even when in isolation, and enjoying the freedom in their spacious home were identified as positive lived experiences during home care. Conclusion: Majority of COVID-19 patients managed under home-based care had good treatment outcomes. The determinants of poor treatment outcomes were advanced age (>60years) and comorbidities in those that had long stay in-home care (>1 month). We therefore recommend that; home care for COVID-19 patients be done while sparing the elderly for hospital management, community sensitization on COVID-19 and home-based care to address stigma and rejection be prioritized and more systematic follow up of patients under home care by health workers be done.

Key words: Home Based Care, COVID-19, Uganda, treatment outcome, stigma.

DECLARATION

I the undersigned, declare that this research Dissertation is my original work, except where due acknowledgement has been made. I declare that this work has never been submitted to this University or to any other institution for funding/ for partial fulfillment for any award.

I, therefore, present it for the award of a Master of Public Health Degree of Busitema University.

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Signature...... Date 30th/ 04/ 2022

APPROVAL

This research dissertation has been submitted as a partial fulfillment for the award of Master of Public Health of Busitema University with the authorization of the following supervisors:

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Signature..... Date.....

DEDICATION

This research work is dedicated to my late father Mr. Opolon Boniface, my late brother Mr. Olupot George Anthony, my mother Mrs. Apio Joyce Opolon for they laid a foundation upon which our family thrives today.

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LIST OF ABBREVIATIONS

- AFENET: African Field Epidemiology Network
- CAO: Chief Administrative Officer
- CDC: Centers for Disease Control
- CHW: Community Health workers
- COVID-19: Corona virus Disease 2019
- DHO: District Health Officer
- H/W: Health Worker
- HBC: Home Based Care
- HHC: Home Health Care
- HIV/AIDS: Human Immunodeficiency virus/Acquired Immunodeficiency syndrome
- IPC: Infection Prevention and Control
- LMICS: Low- and Middle-Income Countries
- MoH: Ministry of Health
- PCR: Polymerized Chain Reaction
- PPE: personal protective equipment
- SARS-Cov-2: severe acute respiratory syndrome corona virus type 2
- SOPs: standard operating procedures
- VHT: Village Health Team
- W.H.O: World Health Organization

DEFINITION OF KEY TERMS

Home Based Care (HBC) is when a COVID-19 patient is provided the required care directly at home by a care giver who may be a family member, a friend or a member of the local community while cooperating with the advice and support from the trained health workers and strictly following the home based isolation standards and other COVID-19 prevention & control measures. (Safe & Healthy, 2021)

Stigma: Social stigma is defined as negative association related to a person or a group of people or places sharing certain characteristics or specific disease (Chew et al., 2021). Stigma happens when a person defines someone by their illness rather than who they are as individuals. Goffman defines stigma as "an attribute that is significantly discrediting". Within the social process, a stigmatized person possesses an "undesirable difference" or "deviance"

Cured: asymptomatic COVID-19 patients under home-based care for at least 10 days and symptomatic patients who have spent at least 10 days in care plus additional 3 days free from fever and respiratory symptoms (WHO, 2020).

CHAPTER ONE: INTRODUCTION

1.1 Background

Coronavirus disease 2019 (COVID-19) is caused by severe acute respiratory syndrome corona virus type 2 (SARS-CoV-2), a newly emergent coronavirus, that was first recognized in Wuhan, China, in December 2019 (WHO, 2020). The spread of the disease was so sporadic that by mid-March 2020, 114 countries had reported cases of COVID-19 that had resulted in 4,000 confirmed deaths. Following these developments, the WHO declared COVID-19 a pandemic.

As of Dec 31, 2020, African countries had reported 2 763 421 COVID-19 cases and 65 602 deaths, accounting for 3.4% of the 82 312 150 cases and 3.6% of the 1 798 994 deaths reported globally (Salyer *et al.*, 2021). As of 25th April 2022, the continent had experienced a total of approximately 8,724,907 cases and 171,571 deaths, which account for 1.7% of the global cases and 2.8% of the deaths (WHO, 2022). Uganda recorded the first case of COVID-19 virus in March 2020 and by November 2020, 90% of Uganda's reported cases were locally transmitted (AFENET, 2021). In fact, since March 2020 Uganda has experienced a rapid increase in COVID-19 cases standing at 164,058 cases, 3,597 deaths as of 25th April 2022 (WHO, 2022).

During the second COVID-19 wave that occurred between April and June 2021, the health system was overwhelmed with the fast-growing numbers of cases and the ministry of health abandoned its previous recommendation of health facility isolation of all COVID-19 confirmed patients and adopted home-based care for asymptomatic COVID-19 patients or patients with mild symptoms (AFENET, 2021).

COVID-19 home-based Care (HBC) is defined as the provision of required care to a COVID-19 patient at their home by a care giver who may be a family member, a friend or a member of the local community while cooperating with the advice and support from trained health workers and strictly following the home based isolation standards and other COVID-19 prevention & control measures (Safe & Healthy, 2021). Early detection, isolation and management of confirmed COVID-19 cases are critical strategies for prevention and control of the disease (Luba *et al.*, 2021). The World Health Organization (WHO) recommends that all laboratoryconfirmed cases should be isolated and treated in a health care facility (Luba *et al.*, 2021). However, in cases where it is not possible to isolate all cases in a health care facility, groups with the highest risk of poor outcomes should be prioritized (Luba *et al.*, 2021). These include

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