

**STAGE AT DIAGNOSIS AND SURVIVAL RATE OF
STOMACH CANCER AMONG PATIENTS DIAGNOSED IN
KIGALI CITY BETWEEN 2014 AND 2018**



THESIS

To fulfill the requirements to achieve a Master's Degree in Epidemiology

CYUZUZO Callixte

SIN: 30000221419031

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THESIS

STAGE AT DIAGNOSIS AND SURVIVAL RATE OF STOMACH CANCER
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By:
Cyuzuzo Callixte
SIN 30000221419031

This thesis was tested and declared to have passed the thesis examination on July 20, 2023, by a team of examiners for the Epidemiology Master Study Program, Graduate School, Diponegoro University

Semarang, July 20, 2023

Acknowledged by:

Examiner I

Dr. dr Budi Laksono M. HSc
EIN. 8812523419

Examiner II

Dr. dr. Bagoes Widjanarko, MPH
EIN.196211021991031002

Advisor I

Prof. Dr. dr. Suhartono, M. Kes.
EIN. 196204141991031002

Advisor II

Dr. dr. Selamat Budijitno, M.Si.Med., Sp.BK(Onk)
EIN.19710807200812100

Dean of
Graduate School

Dr. R.B. Sularto, S.H., M. Hum
EIN 196701011991031005

Head of Epidemiology Master
Study Program

Dr. drh. Dwi Sutningsih, M.Kes
EIN 197203081998022001



DECLARATION OF ORIGINALITY

The one who is
Undersigned below:

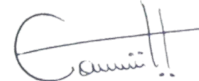
Name: CYUZUZU Callixte

SIN: 30000221419031

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Semarang, July 20,2023



CYUZUZU Callixte

CURRICULUM VITAE

Name : CYUZUZU Callixte
Place and date of birth : Ruhango, January 01,1992
Religion : Christian
Formal Education History : BSc (Hons)., M. Immun.
Employment History : Teaching and Learning Fellow
Organization History : University of Global Health Equity, Rwanda

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ABSTRAK

Kanker lambung merupakan masalah kesehatan masyarakat yang signifikan di Kota Kigali, dan kelangkaan informasi yang akurat mengenai stadium saat diagnosis dan tingkat kelangsungan hidupnya menjadi hambatan utama dalam meningkatkan hasil klinis pasien. Penelitian ini bertujuan untuk menganalisis hubungan antara stadium saat diagnosis dengan status vital, dan hubungan antara stadium saat diagnosis dan kelangsungan hidup di tahun ke-1, tahun ke-2, dan tahun ke-3 pasca diagnosis pada pasien kanker lambung di kota Kigali. Data sekunder mengenai tahap diagnosis, status vital, dan informasi demografi pasien diperoleh dari Pendaftaran Kanker Nasional Rwanda. Uji Chi-square digunakan untuk menentukan hubungan antara stadium saat diagnosis dan status vital pasien, sedangkan metode Kaplan Meier digunakan untuk menghitung tingkat kelangsungan hidup. Hasil penelitian menunjukkan bahwa 68,80% pasien didiagnosis dengan tahap lanjut dan 31,20% didiagnosis pada tahap awal. Hasil penelitian juga mengungkapkan bahwa 135 subjek masih hidup dan 115 pasien meninggal. Hubungan antara stadium saat diagnosis dan status vital signifikan pada satu tahun ($p=0,035$), tiga tahun ($p=0,026$) dan lima tahun ($p=0,025$) setelah diagnosis. Tingkat kelangsungan hidup kanker lambung pada 1, 3, dan 5 tahun setelah diagnosis pada pasien yang didiagnosis di Kota Kigali antara tahun 2014 dan 2018 adalah 77%, 51%, dan 15%, secara berturut-turut. Tahap diagnosis secara signifikan berkontribusi terhadap tingkat kelangsungan hidup kanker lambung pada 1 tahun setelah diagnosis ($p=0,038$), 3 tahun setelah diagnosis ($p=0,011$), dan 5 tahun setelah diagnosis ($p=0,042$). Dapat disimpulkan bahwa tahap diagnosis berkontribusi secara signifikan terhadap status vital pasien dan kelangsungan hidup pasien

Kata kunci: Kanker lambung, Status vital, Stadium saat diagnosis, Kelangsungan hidup

ABSTRACT

Stomach cancer is a health concern in Kigali city and the scarcity of accurate information on its stages at diagnosis and survival is a major hindrance to improving patients' clinical outcomes. This research aimed to determine the relationships between stage at diagnosis and vital statuses, and between stage at diagnosis and survival in first year, second year, and third year post- diagnosis in gastric cancer patients in Kigali city. The secondary data about stage at diagnosis, vital statuses and other patients' demographic information were obtained from Rwanda National Cancer Registry. Chi-square test was employed to assess the relationship between stages at diagnosis and patients' vital statuses and Kaplan Meier method was used to calculate the survival. The results showed that 68.80 % of the patients were diagnosed with advanced stages and 31.20% were diagnosed at early stages. The results revealed that 135 subjects were alive and 115 patients died. The relationships between stages at diagnosis and vital statuses are significant at one year ($p=0.035$), three years ($p=0.026$) and five years ($p=0.025$) after diagnosis. The survival rate of stomach cancer at 1, 3 and 5-years post diagnosis among patients diagnosed in Kigali city between 2014 and 2018 were 77%, 51 % and 15%, respectively. The stages at diagnosis have significantly contributed to the survival rate of stomach cancer at 1year post-diagnosis($p=0.038$), 3 years after diagnosis($p=0.011$) and 5 years' post- diagnosis ($p=0.042$). It is factual to conclude that stages at diagnosis contribute to the stomach patients' vital statuses and their survival.

Keywords: Stomach cancer, Stage at diagnosis, Vital statuses, Survival

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LIST OF ABBREVIATIONS

CRVS:	Civil Registration and Vital Statistics
GC:	Gastric Cancer
HICs:	High Income Countries
LMICs:	Lower- and Middle-Income Countries
NCDs:	Non-Communicable Diseases
PSA:	Prostate Specific Antigen
RBC:	Rwanda Biomedical Centre
RNCR:	Rwanda National Cancer Registry
SSA:	Sub-Saharan Africa
TNM:	Tumor Node Metastasis
WHO:	World Health Organization