ASSESSING FACTORS ASSOCIATED WITH CD4 CELL ABSOLUTE COUNT IN PATIENTS AT GULU REGIONAL REFERRAL HOSPITAL

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ABSTRACT

Background: This study is set to assess individual, enviromental and medication factors associated with Cd4 cell count in patients attending HIV/AIDS treatment and care clinic in Gulu Regional Referral Hospital. Gulu Regional referral hospital is located in the northern district of Gulu in Uganda. Gulu regional referal hospital performs CD4 cell counts to monitor HIV +ve patients

Methodology: A cross sectional study, with study population of Gulu and target population being HIV +ve Patients attending HIV clinic in Gulu regional referal hospital. Systematic random sampling will be used. Questionaires will be administered to patients after informed consent.

Results: will be presented in Texts, Tables, Graphs.

INTRODUCTION

1.0 BACKGROUND

Gulu Regional Referral Hospital (GRRH) is located in Gulu town, Gulu District in northern Uganda. Gulu has 4 hospitals: St mary's hospital Lacor, Gulu Independent Hospital, 5th division military hospital and GRRH. GRRH is one of the 13 RRHs in Uganda which are mandated and equiped to perform specialised laboratory tests. GRRH has an Infectious Disease Clinic (IDC) which is for diagnosis and care of HIV/AIDS patients. Amongst other tests, GRRH laboratory performs CD4 cell counts for the monitoring of patient trearment and cilinical staging of HIV infection.

HIV infection is known to reduce the CD4 cell counts but there are other factors like stress, nature of work, medication, diet, drug (alcohol) use and age which also influence the CD4 cell count. CD4 cell count on the other hand influences the disease outcome in HIV infection. Some

environmental factors may also modify the disease outcome during the low CD4 cell count status.

1.0 PROBLEM STATEMENT

Currently there is no documented evidence of factors associated with CD4 cell count in HIV plositive patients attending IDC at GRRH.

STUDY QUESTIONS

1. What are the CD4 cell count sample statics (Mean, Range) of the HIV positive patients attending Idc at GRRH?
2. What are the individual factors associated with Cd4 cell count in patients attending IDC in GRRH?
3. What are the medication factors associated with Cd4 cell count in patients attending IDC in GRRH?
4. What are the environmental factors associated with Cd4 cell count in patients attending IDC in GRRH?

1.2 GENERAL AND SPECIFIC OBJECTIVES

General Objectives: to assess the factors associated with CD4 absolute cell count in HIV positive patients attending IDC at GRRH.

Specific objectives: The puropose of this study id to:

1. Assess the CD4 cell absolute count (meman, range) in HIV positive patients attending IDC at GRRH
2. Assess the individual factors asscoicated with CD4 cell count in HIV positive patients attending IDC at GRRH
3. Assess the medication factors associated with CD4 cell absolute count in HIV positive patients attending IDC at GRRH
4. Assess the environmental factors associated with CD4 cell absolute count in HIV positive patients attending IDC at GRRH
5.

1.3 RATIONALE OF THE STUDY

There is no documented evidence of factors associated with CD4 cell count in HIV positive patients attending IDC at GRRH. It an assumption that HIV sero-status is the determinant but

other factors could be playing a role yet no one has done any work to prove yet. The findings of this study may give a recomendation for a larger study country wide. The data obtained fro this study will also avail information which can inform policy and influence the HIV/AIDS care in GRRH and nationwide.

METHODOLOGY

2.1 STUDY DESIGN

This is a cross-sectional study which will utilise both qualitative and quantitative method of data collection.

2.2 STUDY AREA

The study area is going to be GRRH and the catchment areas.

2.3 STUDY POPULATION

The study population is going to HIV positive patients and the target group is going to be HIV positive patients who are attending IDC at GRRH.

2.4 SAMPLING AND SAMPLE

A sample size of 60 has been purposely selected due to the scope of the study and time limit. Sixty patients will be sampled from amongst those attending Idc at GRRH. A systematic random sampling will be done. Every 3rd patient will be enrolled in to the study. To determine which patient to start with, the last digit on a currency note serial number will be used.

2.5 DATA COLLECTION AND MANAGEMENT

Pre-tested semi-structured questionnaires will be used to collect data from the patients in a face to face interview. The results of the Blood samples collected for CD4 cell counts will be collected from the clinical laboratories registration book.

2.5.1 QUALITY ASSURANCE

All questionaires will be checked for completeness. The research assistants will be trained before data collection begins.

2.5.2 DATA ANALYSIS

Datasheet will be prepared in EpiIfo. The data will entered in EpiInfo.cleaned. Data will then be exported to SPSS, cleaned and analysis will be done using SPSS version 17.0. Frequencies and and odds ratios will be determined. The results will be presented in texts, graphs and tables.

2.6 ETHICAL ISSUES

A writen informed consent will be sought from the patients before enrolling into the study. The participants will be informed of the purpose of the study, possible risks, confidentiality and thwe right to pull out any time they feel like without any loss. The data will be backed up and restricted from those who are not involved in the study.

2.7 LIMITATION OF THE STUDY

The study will consider only a limited number of patients because of the scope of the study and time. There is likely to be a selection bias because this data will represent those who come for care and treatment at GRRH but not Gulu town or district.