Factors contributing to the delay in distribution of ARV and other related treatments for HIV positive patients during follow up at the ARV clinic of the Rundu State Hospital.

by

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Declaration

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December 2012
Abstract

It is believed and observed by many that the clinics or hospitals that administer ARV are congested and patients wait for a long time for services thus the study undertook to determine the factors contributing to the delay in distribution of ARV and other related treatments for people living with HIV during follow up at the ARV clinic of the Rundu State Hospital.

The researcher conducted a mixed approach whereby qualitative and quantitative data was collected, the researcher conducted two qualitative methods, a document analysis of the National Guidelines for Antiretroviral Therapy for the Republic of Namibia (Ministry of Health and Social Services) and unpublished government documents of the clinic and a semi structured interview with the immediate supervisors of the clinic. This was finished with questionnaires for CDC health workers and patients that have been using the centre for at least 4 months and more.

It was found that the CDC clinic is truly congested with patients and all the participants acknowledged the long waiting time and long queues of the patients at the clinic. This issue has been highlighted as the main challenge within the clinic, along with few health workers and no enough counseling and consulting rooms. Recommendations are provided for both the clinic and the nation at large or the line ministry to assist collectively in finding a way forward in reducing the long queues and long waiting time of the patients at the CDC clinics in Namibia.
Opsomming

Daar word geglo en waargeneem dat baie klinieke en hospitale wat ARV administreer, baie besig is en dat pasiente vir ‘n baie lang tyd moet wag vir dienste. Die studie onderneem dus om vas te stel wat die factore is wat bydra tot die vertraging in die verspreiding van ARV en ander verwante behandeling van mense wat met MIV saamleef, gedurende opvolg-besoeke by ARV-klinieke van die Rundu Staatshospitaal.

Die navorser het ’n gemengde benadering gevolg waardeur kwalitatiewe en kwantitatiewe data is ingesamel was. Die navorser het twee kwalitatiewe metodes, ’n dokument analise van die National Guidelines for Antiretroviral Thearapy vir die Republiek van Namibië (Ministerie van Gesondheid en Maatskaplike Dienste) en ongepubliseerde regering dokumente van die kliniek en ’n semi-gestruktureerde onderhoud met die onmiddellike toesighouers van die kliniek gevoer. Dit was opgevolg met vraelyste vir CDC gesondheidswerkers en pasiënte wat die gebruik van die sentrum vir ten minste 4 maande en meer geniet het.

Daar is gevind dat die CDC-kliniek werklik oorvol is met pasiënte en al die deelnemers het die lang wagtye en lang toue van pasiënte by die kliniek bevestig. Hierdie probleem is uitgeldig as die grootste uitdaging in die kliniek, saam met ‘n tekort aangesond heidswerkers en nie genoeg berading en spreekkamers nie. Aanbevelings vir beide die klinieke en die hele bevolking word hiermee gegee om kollektief te help met die vind van ’n pad vorentoe in die vermindering van die lang toue en lang wagtye van die pasiënte by die CDC-klinieke in Namibië.
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Thanks to my friend Reginald Ndokotola for her endless assistance and guidance for giving me the courage and the inspiration to carry on. Thanks for being there for me throughout my studies and for giving me a lift when I stumbled.
## List of Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC</td>
<td>Antiretroviral treatment</td>
</tr>
<tr>
<td>ANC</td>
<td>Antenatal Care</td>
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<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
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<td>ARV</td>
<td>Antiretroviral</td>
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<tr>
<td>CDC</td>
<td>Centre for Disease Control</td>
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<tr>
<td>CD4</td>
<td>Cluster of Differentiation 4</td>
</tr>
<tr>
<td>HAART</td>
<td>Highly active Antiretroviral Therapy</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immune Deficiency Virus</td>
</tr>
<tr>
<td>IMAI</td>
<td>Integrated Management of Adolescent and Adult Illness</td>
</tr>
<tr>
<td>IRIN</td>
<td>Integrated Regional Information Network</td>
</tr>
<tr>
<td>MSF</td>
<td>Medecin Sans Frontieres</td>
</tr>
<tr>
<td>MISA</td>
<td>Media Institute of Southern Africa</td>
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<tr>
<td>MOHSS</td>
<td>Ministry of Health and Social Services</td>
</tr>
<tr>
<td>OPD</td>
<td>Outpatient Department</td>
</tr>
<tr>
<td>PLWHA</td>
<td>People Living With HIV/AIDS</td>
</tr>
<tr>
<td>RSH</td>
<td>Rundu State Hospital</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counseling and Testing</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Table of Contents

Abstract ............................................................................................................. i
Opsoming ........................................................................................................... ii
Acknowledgements ............................................................................................ iii
List of Acronyms .................................................................................................. iv
Table of Contents ................................................................................................ iv
List of tables ........................................................................................................ vii

CHAPTER 1: INTRODUCTION................................................................. 1
1.1. Aims and objectives of the research study ....................................................... 1
1.2. Background of the study .............................................................................. 2

CHAPTER 2: LITERATURE REVIEW......................................................... 5
2.1 The purpose for monthly ARV follow ups....................................................... 5
2.2. Waiting time ................................................................................................ 6
2.3 Trained personnel ......................................................................................... 6
2.4. The burden of work in ARV clinics and long queues .................................... 7
2.5 Infrastructure of the clinics .......................................................................... 7
2.6. Profile of the Centre for Disease Control clinic at the Rundu State Hospital ... 8
2.6.1 The process that patients follow when they visit the clinic ....................... 9
2.6.2 National Guidelines for Antiretroviral Therapy for the Republic of Namibia (MHSS) ................................................................. 10
2.6.3 Methods to achieve readiness to start HAART and maintain adherence .... 11

CHAPTER 3: RESEARCH PROBLEM AND RESEARCH QUESTION ...... 11

CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY ..................... 13
4.1 Data collection .............................................................................................. 13
4.2 Population and Sampling ............................................................................ 14
4.3 Ethical consideration .................................................................................. 15

CHAPTER 5: RESULTS AND FINDINGS .................................................. 15
5.1. Introduction ................................................................................................ 15
5.2. Health workers ........................................................................................................... 16
5.2.1. Health Workers: Are patients spending long hours at RSH CDC clinic waiting for services? ........................................................................................................... 16
5.2.2. Health Workers: the needs of patients ........................................................................ 18
5.2.3. Health workers: Suggestions for improvement of service ........................................ 19
5.3. Patients ..................................................................................................................... 20
5.3.1 Patients: How long do you stay at the clinic? ............................................................... 20
5.3.2. Patients: The effects of long hours on patients’ lives? .................................................. 22
5.3.3. Patients: Suggestions to improve services at the ARV clinic, Rundu State Hospital ...... 24
5.4. Interviews with the immediate supervisors ................................................................. 27
5.4.1. physical environment at the CDC ............................................................................ 27
5.4.2. Challenges that lead to the delay at the clinic ........................................................... 28
5.4.3. Supervisors: Suggestions for improvement of service at the CDC clinic ................... 29

CHAPTER 6: RECOMMENDATIONS .................................................................................. 30
CHAPTER 7: CONCLUSION ............................................................................................ 37
REFERENCES .................................................................................................................. 38

Addendum A: Interview schedule for immediate supervisors .............................................. 40
Addendum B: Questionaire form for patients ...................................................................... 41
Addendum C: Questionaire form for staff .......................................................................... 46
   Addendum D: Permission request letter to the Ministry of Health .................................... 50

   Addendum E: Permission letter from the Ministry of Health ............................................ 52
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1.1</td>
<td>Map of Namibia</td>
<td>2</td>
</tr>
<tr>
<td>Table 5.1</td>
<td>Reasons that causes delay at the clinic</td>
<td>16</td>
</tr>
<tr>
<td>Table 5.2</td>
<td>How long do patients stay at the clinic?</td>
<td>20</td>
</tr>
<tr>
<td>Table 5.3</td>
<td>Patients reasons for discomfort while waiting</td>
<td>20</td>
</tr>
<tr>
<td>Table 5.4</td>
<td>Effects of waiting long hours on patients’ lives</td>
<td>22</td>
</tr>
<tr>
<td>Table 5.5</td>
<td>Patients suggestions to improve services at the clinic</td>
<td>24</td>
</tr>
<tr>
<td>Table 5.6</td>
<td>Patients arrival time versus starting time at the clinic</td>
<td>26</td>
</tr>
</tbody>
</table>
CHAPTER 1: INTRODUCTION

In 2003, Namibia introduced and launched national guidelines and training programs for antiretroviral therapy in the public sector. Since then, The Namibian Government has committed to providing ample treatment, Antiretroviral Therapy (ART) and care for (PLWHA) people living with HIV/AIDS (World Health organization 2005), though still some have to undergo the cost of travelling long distances in order to have access to ART.

Over the years, the government saw the need to open up CDC’s (Centre for Disease Control) in every state hospital where people living with HIV could go for counseling, regular health checkups and ARV treatment. This was due to the number of patients that were on ART and were using general hospital to have access to their medication (World Health Organization 2005).

The Rundu state hospitals’ (RSH) CDC was opened in 2003 and it started with only 36 patients of which 2 were referrals from the other clinics (unpublished government document). By July 2012, the clinic had 7379 patients who utilize the clinic. Throughout the years, the clinic has been very busy and patients wait for a long time before being attended to. It has therefore become a heartfelt issue thus it feels necessary to look at the factors that lead to the delay of ARV dispatching, refill or any other related follow ups to the ARV clinic of the RSH. The key concept of the study is to identify the factors that lead to the delay during follow ups or refill at the RSH CDC clinic.

1.1. Aims and objectives of the research study

The aim of the research study was to identify factors that lead to long waiting hours for ARV drugs and other related treatments and refill by patients during follow ups in order to identify ways to improve the accessibility of ARV drugs and treatment to patients without delay.

The objectives of the study were as follows:
- To analyse the existing services of the ARV distribution at the CDC clinic at the Rundu state hospital.
- To establish the needs of the ARV drug patients on ARV distribution services at the RSH ARV clinic.
- To analyse the factors that lead to the delay of ARV drug distribution to ARV patients at the ARV clinic of the RSH during follow ups.
- To provide guidelines and recommendations for easy access to the available ARV drugs at the RSH ARV clinic without delay.

1.2. Background of the study

Table 1.1

![Map of Namibia](http://www.namibiabookings.com)

1. Map of Namibia courtesy of Namibia Bookings (http://www.namibiabookings.com)

The Rundu state hospital has a CDC (Centre for Disease Control) clinic that deals with the patients that attend for voluntary counseling and testing (VCT), HIV positive patients
that attend for their CD4 counts follow ups and those that are on ARV drugs to collect their monthly medication.

At that clinic, many have experienced and observed that the hospital has a tendency of delaying the distribution of ARV drugs to the patients that go for ARV follow ups on their individual specified dates and as well as other related treatments. Patients wait for long hours or basically the whole day to receive their monthly ARV drugs or to receive any medical attention for that matter. On top of that, some patients go very early before the clinic is open to secure a place for them to be treated on time, and, despite the effort, they would still leave the clinic in the afternoon upon receiving treatment.

Despite that, it is reported that nurses may still take prolonged lunch hours and leave the clinic prior to attending to all sick patients still in the queue. Some seriously sick patients leave to go home due to long waits and that make them miss some days of taking their daily pills that they were supposed to collect on that specific day or not to attend to their illness that is perhaps hindering their daily work or duties at home or workplace.

The patients go there with the intention of being treated and receive medical attention on time just like any other patient that visits the hospital at other departments. Moreover, patients on ARV drugs are required to visit the clinic once a month to receive their ARV drugs and have their CD4 counts checked. These exclude the stable and adherent patients that are given a prescription of up to 2 months or more. The Republic of Namibia has edited their ARV clinical guidelines and has noted that patients on ART need close monitoring to assess their adherence to the prescribed regimen, tolerance and side effects of the medications and efficacy of the treatment. Once someone starts ART treatment, a schedule for follow-up and monitoring should be drawn up (Katabira, 2003). That makes it already tough for those particular patients having to visit the clinic every month and then they still have to spend or suffer the consequences of waiting for hours before they are attended to. Patients stay at the clinic for more hours than expected without any food consumption. Patients on medication need regular food intake especially those that are on ARV treatment.
The clinic is not spacious and most of the patients have to queue up outside the clinic. Upon queuing up outside, a lot of people pass by to go to other departments of the hospital or to the wards closer to the clinic and that make them feel insecure about their status as they may then be identified as people living with HIV. The area is well known to people that it is an ARV clinic where people go and get their medication and other related treatments. The Media Institute of Southern Africa (MISA) NAMIBIA of May 20, 2010 interviewed a nurse at the Katutura ARV clinic who said that the location of ARV clinic was also a problem for people who do not want their status to be known by members of the public. The longer they stay there, the more insecure they will be.

On the other hand, health workers are perhaps working under pressure because of the numbers of the patients that they see every day during working hours. In the ARV clinic, there are 6 nurses, 2 doctors, 1 pharmacist and 3 counselors. One then asks if the clinic has enough health workers to attend to all the patients that they see per day within the limited hours of their specified working hours excluding lunch. The clinic during week days is always full to its capacity and the queue extends to the outside of the clinic. Could this be that health workers receive a lot more patients per day than they are able to handle and that in the end prolong the hours of the patients waiting for their turn to be attended to? Could this be that the health workers are too few to handle a lot of patient at a time? All these are issues that need to be looked at thoroughly. The clinic hours of operation do not include weekends which may also have an impact on patient numbers and waiting time.
CHAPTER 2: LITERATURE REVIEW

The study investigated factors contributing to the delay in distribution of ARV and other related treatments for HIV positive patients during follow up at the ARV clinic of the Rundu State Hospital. The main objective of the study is to identify the causes of delay at the clinic for patients to have access to treatment, refill and counseling services on time. It has been observed that patients stay very long at the clinic before they are attended to hence they need to go and attend to other daily duties or go back to work since leave days has become a crucial concern in the workplaces due to disparities in proper sick leave policies. RSH has a lot of feeder clinics that cannot administer ARV due to lack of staff and training in order to administer the distribution of ARV without monitoring. Therefore the hospital has more patients than expected.

This study focuses on patients that have been using the services for the past four months, the health workers that specifically have been working in the clinic and the supervisors of the clinic concerned. The leading factors to the delay of ARV distribution, refill and other related follow ups will be examined during the study, and an understanding of such delays is relevant for further comparison, analysis and recommendations.

2.1 The purpose for monthly ARV follow ups

The Republic of Uganda have edited their ARV clinical guidelines and have noted that patients on ART need close monitoring to assess their adherence to the prescribed regimen, tolerance and side effects of the medications and efficacy of the treatment and that once someone starts ART treatment, a schedule for follow-up and monitoring should be drawn (Katabira, 2003). This has become a well-known concern for everyone who goes through proper counseling to undergo ARV treatment and this in the end becomes a concern of where one should go and get the treatment every month. The Republic of Uganda’s clinical guidelines of 2003 for monitoring ART have stated that regular patient evaluation and monitoring of ART is important to assess effectiveness of this intervention and to ensure safety.
It still further states that clinical assessment should include thorough history on all events that may have taken place since the patient started on ART. This may include any illnesses or new infections, hospitalization and any other medications including traditional herbs and remedies (Katabira, 2003). If patients are not closely monitored, side effects or opportunistic infections won’t be detected early. Clinical assessment is regarded as very important in order to check how each individual is responding to the treatment.

2.2. Waiting time

Studies conducted around the globe determine that waiting time is one of the factors related to poor ART adherence and it is also one of the factors which are viewed as challenges to ART in Africa (Maokisa, March 2011). A study undertaken in Tanzania also found out that long waiting time was a major challenge to adherence. The study states that the patients spent an average of eight hours waiting for services and thus could have affected clinic attendances and adherence (Nsimba, 2010).

2.3 Trained personnel

Dr. Hamunime, Head of HIV/AIDS case management in the Ministry of Health and Social Services in Namibia told IRIN PlusNews that ARVs were available at all 36 of the country’s district hospital and some of the larger health centres in Namibia. He added that the shortage of medical personnel is a problem in the country throughout regions (IRIN PlusNews, April 8, 2011). This could be one of the factors that contribute to the delay of ARV distribution to patients during follow-ups at ARV clinics. The research study done by Nsimba (2010) has also indicated that staff shortage was also one of the challenges faced by the clinics in ARV distribution.

2.4. The burden of work in ARV clinics and long queues

When ARV patients increase and the number of staff stay constant, the workload rises. Their enrolment figures also dropped after nurses were stopped from initiating ARVs in
early 2006 (A dialogue on ART delivery, September 2006) which in the end resulted in long waiting hours by patients before they were treated as nurses were no longer able to initiate ARV treatment. The longer the patients wait at the ARV clinics, the more drop out of ARV treatment because of long waits. This also shows that, the more patients they have at the clinic, the more work they have and the longer the patients might wait. MISA NAMIBIA did a short report on the Katutura ARV clinic in Windhoek and interviewed several people and staffs. One academia resident in the waiting room said that many nurses become emotional when patients in the queue complain about the delay (MISA NAMIBIA, 20 May 2010). Patients are always disturbed by the long queues they encounter when visiting the clinic and for some; it might be a discouragement to attend for the next visit.

2.5 Infrastructure of the clinics

One nurse in the Katutura ARV clinic who was interviewed by MISA NAMIBIA of May 20, 2010 said that the location of the ARV clinic was also a problem for people who do not want their status to be known by members of the public. Boyce (2009) also noted that even after 20 years of public education, HIV still stigmatized greatly as people may be concerned about being seen at the ART clinic or disclosure to family, friends or even the workplace. When patients feel insecure about being at an ARV clinic as putting their status at risk, being delayed at the clinic again will be another problem that will make them not want to wait for long to avoid being seen by the public. Even the ARV clinical guidelines that were edited in Uganda in 2003 also acknowledged that in adequate infrastructure, the high cost and complexity of administering ARVs and a small number of well trained personnel continue to be critical barriers in implementing increased access to ARVs in Uganda (Katabira, 2003).

2.6. Profile of the Centre for Disease Control clinic at the Rundu State Hospital

Rundu State Hospital CDC clinic has about 7379 patients on ARV treatment that visit the clinic whereby the clinic receives about +200 patients on less busy days to +300
patients on busy days. The clinic has 6 nurses, 2 doctors, 1 pharmacist, 3 counselors and 3 data clerks. The clinic only operates during week days and off on weekends. The clinic opens from 8 am to 5 pm which has the total of 8 working hours. On a daily basis, health workers have day to day contact with their patients that either goes for follow ups, tests on CD4 counts, ARV treatment follow ups, counseling when a patient has lost to follow up or new intakes on treatment for adherence counseling and so on. A lot goes on in one day visit by different patients with different needs and complains.

The patients arrive at the hospital before seven and make sure that they are early in order to finish a little earlier. Upon the patients arrival, before they reach the CDC clinic, they should get a date stamp at the reception where the queuing up starts already and go to weigh and other related checkups or screening to be done by the nurses at the OPD for some patients that goes with other complains before they reach the intended clinic. When they reach the clinic, they put their hospital cards at the counter on top of each other and queue up to wait for their files to be looked up by the data clerks. The data clerks take the hospital cards from the counter and start looking for the patients’ files and take the files to the nurses consulting room where the nurses will do the roll call for the patients to start seeing the doctors or the nurses. The clinic opens at 8 am which will then start with sorting out files for the patients before they are attended to, that on its own will make the health workers to start a little late and not exactly at 8 am.

The patients go very early to secure the first places despite the fact that the clinic only starts operating from 8 am. All patients intending to see the nurses or the doctors sits in one queue and only those that come straight for refills sits in the queue going straight to the pharmacy. The roll call starts few minutes before 9 am or few minutes after 9 am. When the first 10 patients are called and given their files to hold, they still sit for some time before they are called by the doctors or the nurses in their consulting rooms. In this case starting time is somehow delayed in one way or another. There is only one counseling room with 3 counselors in it and thus they have to do the counseling in one room attending to one or more than one patient at a time. The patients that missed their follow ups are not attended to in the morning; they are told to wait till after 2 pm before they are
attended to. There is only one pharmacy that handles all the drug distribution from the doctors to all patients including those that only comes for refills.

2.6.1 The process that patients follow when they visit the clinic

- Patients who come for refill, go straight to the pharmacy, no date stamp needed. They just go straight to the pharmacy and wait for the pharmacist to open and collect their refill.
- Those that go for follow up and other related issues, start queuing up at outpatients to get the date stamp on their passports at the reception and weigh them by outpatient nurses before going to the CDC clinic
- Vital signs and screening is done at OPD
- The patients then place their passports on the counter at the CDC clinic and queue up outside to wait for their files to be searched by the data clerks
- Then the passports accompanied by their files are taken to the nurses consulting room where they will do the roll call for patients and start seeing the doctors or nurses.
- Patients are then called and given their files to queue up inside the clinic and start seeing the doctors or nurses upon calling the patients’ name
- A Patient is seen by a doctor or a nurse depending on the patients needs. Consultation room 9 is for blood tests, results and other specimens done by the nurses, and the counseling room is used per follow up or as part of the processes.
- Screening can be done at both the OPD and at CDC depending on the patients concerns. Sometimes the counseling room gets busy with patients that missed their appointment dates or the new intakes
- After being in the consulting rooms with doctors, the patient then goes to pharmacy to collect medicine if any prescribed by the doctor
- Prescriptions are mostly written by the doctors
2.6.2 National Guidelines for Antiretroviral Therapy for the Republic of Namibia (MHSS)

The National Guidelines for ART for the Republic of Namibia states that Namibians who receive a positive HIV test result, wherever and whenever the test is done, shall be evaluated for the need to begin highly active antiretroviral therapy (HAART). In the public sector, HIV-positive individuals should be referred to the nearest communicable disease clinic (CDC) or, in cases of pregnancy, to the nearest antenatal clinic (ANC) providing HAART, as a matter of urgency. At this clinic, the HIV-positive person will be evaluated for eligibility to begin ARVs. This assessment includes a complete medical history and HIV disease directed physical examination to determine a CD4 cell count, and a review of social eligibility criteria following the WHO criteria outlined in the guide. At this first visit, all patients will be registered into the Antiretroviral Management Information System (ARV MIS) to assist with follow-up tracking and record-keeping for overall programme management. In the private sector, HIV-positive individuals should be assessed similarly by their healthcare providers and started on HAART per these guidelines, preferably by an HIV experienced clinician.

The National Guidelines for ART indicates that adolescents and adults should start HAART when they have:

- WHO Clinical Stage 3 or 4 HIV disease, irrespective of CD4 cell count, or
- CD4 cell counts ≤ 200 cells/mm3 (≤ 250 cells/mm3 for pregnant women), irrespective of WHO Clinical Stage, and
- Meet social eligibility criteria.

2.6.3 Methods to achieve readiness to start HAART and maintain adherence

Negotiate a plan or regimen that the patient understands and to which he/she commits himself/herself.

- Take time needed, >2 visits at least 2 - 4 weeks apart, to ensure readiness before 1st HAART prescription.
- Recruit a family member, a friend, peer and community support for treatment supervision.
• Educate patient regarding goals of therapy, proper dosing, medication interactions, food effects and side-effects.
• Assess adherence potential before HAART. Monitor at each visit.
• Treat side-effects.
• Ensure access at off-hours and weekends for questions or addressing problems.
• Utilize entire healthcare team.
• Consider effect of new diagnoses and events on adherence.

(National Guidelines for ART, revised May 2008)
CHAPTER 3: RESEARCH PROBLEM AND RESEARCH QUESTION

The study revealed factors that lead to long hours of waiting for treatment or receiving ARV drugs at the CDC clinic of the Rundu state hospital for HIV positive patients and those that visit the clinic for Voluntary Counseling and Testing (VCT) purposes.

The study helped identify specific strategies which will specifically target the effects of waiting for long periods at the CDC clinic before the patient is being attended to. The findings will also help to identify other areas of research with regard to ARV drug distribution at other hospitals in the region or country wide and as well as for the clinic to find other ways to reduce the tension on health workers and patients on the way ARV programme is being run in the vicinity of Rundu and those far by patients that use the service of the Rundu state hospitals ARV clinic. The study will benefit both the health workers and the patients at large once the problem is identified which will perhaps be used to improve the condition at hand.

The research question of this study is stated as:

*What are the factors that contribute to the delay in the distribution of ARV and other related treatments for HIV positive patients during follow up at the ARV clinic of the Rundu State Hospital?*

In order to find answers to the question, the following factors were assessed:

- Average length of waiting time
- Patients and staff numbers
- Patients and staff perceptions and attitudes
- Treatment procedures/protocols
- Incidence of treatment interruption due to not receiving treatment
- Geographical position of clinic
- Work hours
The aim of the research study was to identify factors that lead to long waiting hours for ARV drugs and other related treatments and refill by patients during follow ups in order to identify ways to improve the accessibility of ARV drugs and treatment to patients without delay.

The objectives of the study are stipulated as:

1. To analyse the existing services of the ARV distribution at the CDC clinic at the Rundu state hospital.
2. To establish the needs of the ARV drug patients on ARV distribution services at the RSH ARV clinic.
3. To analyse the factors that lead to the delay of ARV drug distribution to ARV patients at the ARV clinic of the RSH during follow ups.
4. To provide guidelines and recommendations for easy access to the available ARV drugs at the RSH ARV clinic without delay.

The research problem is the delay of ARV drug distribution and other related treatments for HIV positive patients at the Rundu state hospitals’ ARV clinic. The Rundu state hospital has a CDC (Centre for Disease Control) programme clinic that attends to patients requiring voluntary counseling and testing (VCT), patients that attend for their CD4 counts follow ups and those that are on ARV drug to collect their monthly medication. It has been witnessed that patient’s wait for long hours (up to an entire day) to receive their ARV drugs or other related treatments from the Rundu state hospitals’ ARV clinic. It is important to understand which factors lead to such delays during patients visit to the clinic.
CHAPTER 4: RESEARCH DESIGN AND METHODOLOGY

Mixed methods research is the approach in which quantitative and qualitative data or techniques are combined (Christensen et al, 2011:380). A mixed approach was used whereby qualitative and quantitative data was collected.

4.1 Data collection

The Ministry of Health and Social Services’ ARV distribution guideline document will be analyzed to identify any procedures that are followed during patients’ consultation. Content analysis was done.

Additional information will be collected through questionnaires from patients, social workers, nurses, doctors and pharmacist. Structured interview with questionnaires will be used by the doctors (in case they are busy) and some patients that do not read or understand English. While self-administered questionnaires will be used by the nurses, patients who can read and understand the language, social workers and the pharmacists.

The self-administered questionnaires were given to the selected participants to complete on their own in a given time frame. The people who were in charge were the nurses and the counselors as they are the people whom they can easily confide in. The researcher also did an open observation with a checklist at the clinic for 3 days. The researcher with the help of the health workers selected patients randomly to record their time of arrival and the time they finished. Patients were given cards which had arrival time on it of which they handed in when they were done and record the finishing time. In this case, mixed methods were used.

4.2 Population and Sampling

The target population of this study was the patients of all ages and the health workers (that have been) attending or working at the clinic during the past 4 months. 10 patients
and 8 health workers (these consists of nurses, doctors, pharmacists, data clerks, social workers) and 2 immediate supervisors that have been working at the centre were selected. Ten individual patients were selected randomly, unfortunately the researcher discovered that it was very difficult to use filling system and do the sampling accordingly because of different dates they ought to visit the clinic. Therefore, convenience sampling was used instead. 10 patients, 8 health workers and 2 immediate supervisors were selected.

According to Christensen (2011:354) convenience sampling is a non-probability sampling method and makes use of people who are readily available, volunteer, or are easily recruited for inclusion in the sample. Social workers and health workers were very helpful in identifying patients that were using the centre for at least four months or more. They were able to identify them and patients were very cooperative and volunteered to be part of the study willingly.

4.3 Ethical considerations

Firstly, permission was granted to the researcher by the Ministry of Health and Social Services to undertake this study at the ARV clinic of the Rundu state hospital (RSH). In this research, the researcher made sure that informed written or verbal consent from the participants was achieved before the collection of data. There was a complete assurance to the participants about keeping their information and their identity very confidential. Any information that was obtained from them was and will be treated confidential and no names were obtained during data collection.
CHAPTER 5: RESULTS AND FINDINGS

5.1. Introduction

This chapter represents findings of the study. The study was conducted at the Rundu State Hospital, Centre for Disease Control clinic, in Kavango Region from the 2\textsuperscript{nd} of July 2012 to mid-September 2012. The study intended to find out the factors that lead to the delay of ARV distribution. It has been observed that patients spend hours at the clinic before they are attended to. The research is vital as it will help establish the factors that cause the delay during medication refill and follow ups of the patients at the clinic. This will enable the researcher to make necessary recommendations on how to improve the service at the clinic. Studies conducted around the globe have indicated that one of the factors related to poor ART adherence in Africa is the extended time spent at clinics waiting for services (Maokisa, March 2011). It is very important for the patients to receive good service as this makes them more willing to come for their follow ups.

5.2. Health workers

Eight health workers were interviewed to find the factors that lead to the delay in the follow ups and distribution of ARV to patients at the Rundu CDC clinic. The findings are as follows:

5.2.1. Health Workers: Are patients spending long hours at RSH CDC clinic waiting for services?

In order to find out if patients spend extended time waiting for services at the clinic during medication refill and follow ups, health workers were asked if they were aware that patients wait for long hours in the queue before being attended to. All the respondents (100\%) said they are aware of the long queues and that patients wait long hours for services at the clinic. The question was followed with “what causes the delay?” the respondents had to tick as many reasons as they thought are relevant. The following reasons were given and indicated is the percentage of respondents agreeing with the statement:
Table 5.1

<table>
<thead>
<tr>
<th>Reasons</th>
<th>% of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too many patients</td>
<td>63%</td>
</tr>
<tr>
<td>Few health workers</td>
<td>25%</td>
</tr>
<tr>
<td>The process</td>
<td>38%</td>
</tr>
<tr>
<td>Too many patients and few health workers</td>
<td>63%</td>
</tr>
<tr>
<td>Few working hours</td>
<td>0%</td>
</tr>
</tbody>
</table>

Sixty-three percent (63%) of the respondents said that there are too many patients and few health workers at the clinic, while 38% of the respondents said that it’s because of the processes and 25% said that there are few health workers.

The health worker respondents were asked to substantiate their answers. Twenty-five percent of the respondents reasoned that the number of staff members is few and the work is too much because the patients are too many and they come for different reasons for follow ups. This finding is in line with what Dr. Hamunime, Head of HIV/AIDS case management in the Ministry of Health and Social Services in Namibia, stated that the shortage of medical personnel is a problem in the country throughout regions (IRIN PlusNews, April 8, 2011). This could be one of the factors that contribute to the delay of ARV distribution to patients during follow-ups at ARV clinics.

One respondent stated that “there are really too many patients and worse of all, the space at the clinic is very small and there is no enough waiting space and consulting rooms”. According to the staff establishment of the clinic there are 2 doctors, 6 nurses, 3 counselors and 1 pharmacist. In total, there are 12 health workers. Unpublished government documents indicate that there are 7379 patients on ARV treatment and they come on different dates for medication refill and follow-ups. The clinic receives on average about 200 to 300 patients per day. One respondent indicated that “some days the clinic sees patients close to 200 or 300 which result in too many patients for the health workers available”. According to the literature (A dialogue on ART delivery, September 2006)
nurses were stopped from initiating ARVs in early 2006 which has resulted in long waiting hours by patients before they were treated.

The same respondent added that “the processes that the patients need to follow also contributes to the delay as patients need counseling often especially when starting medications and counseling alone can take up to 2 hours before they are seen by the doctors and later queue up for medication late giving a maximum of 4 hours of wait per patient at the clinic.” One respondent indicated that “the process of withdrawing blood prior to starting medications and reviewing results before they are seen by the doctor also takes up time and it causes the patient to wait a while longer and the laboratory also takes long or hours to process the blood leaving the patient to queue up for more than 4 hours per day.

The researcher asked if the processes discussed above contributed to the delay on follow ups and ARV distribution to patients at the clinic. To sum it up, 57% of the respondents said that it does contribute to the delay while 28% said that they do not and 14% indicated that they do not know whether it did contribute to the delay or not.

The Republic of Namibia’s clinical guidelines for monitoring ART stated that regular patient evaluation and monitoring is important to assess the effectiveness of this intervention and to ensure safety. It prescribed that clinical assessment should include a thorough history on all events that may have taken place since the patient started on ART. This includes any illnesses or new infections, hospitalization and any other medications including traditional herbs and remedies (Republic of Namibia, 2003).

5.2.2. Health Workers: the needs of patients

The health worker respondents were asked if they thought the patients feel comfortable being in the queue at the CDC. Fifty percent stated that patients do feel comfortable and 38% said that patients do not feel comfortable. The reasons stated why patients do not feel comfortable are as follows:

- They are overcrowded since the clinic is small and some have nowhere to sit.
- Due to stigma and discrimination
- Waiting for long hours in the queue
- Stigma is still high to some individuals

A study conducted by MISA NAMIBIA at Katutura ARV clinic in Windhoek concluded that many nurses become emotional when patients in the queue complain about the delay (MISA NAMIBIA, 20 May 2010). The health workers explanation of why patients do not feel comfortable waiting for services at the ART clinic is also in accordance with the explanation given by Boyce (2009); the author explained that even after 20 years of public education, people are still concerned about being seen at the ART clinic or disclosure to family, friends or even the workplace. When patients feel insecure about being at an ARV clinic as putting their status at risk, being delayed at the clinic again will be another problem that will make them not want to wait for long to avoid being seen by the public.

5.2.3. Health workers: Suggestions for improvement of service

The health workers were asked to give suggestions on how services at the CDC clinic can be improved and the following are their recommendations:

- Increase or employ more staffs (health workers)
- Build new big ARV clinic (as the sections that we are using now are too small for proper service delivery) to create enough space
- Rolling out patients to IMAI (Integrated Management of Adolescent and Adult Illness) centres
- The clinic is now offering outreach program services where one doctor and some nurses go out to the nearby clinics and administer ARV to those specified clinics thus reduces the number of patients at the CDC clinic but still the services at the CDC get more slower because of minimal health workers available.
- Health workers should also try to avoid over booking patients to avoid seeing above 200 patients per day.
• Giving patients up to 6 months’ supply of drugs so that we avoid seeing many patients - as they would be spaced out.
• There is a need of a bigger clinic as some health workers are working 2 in every consulting room which delays patients flow if patients’ examination need to be done.
• There is a need for about 3 consulting rooms for every counsellor to work privately as patients have to wait and take turns to be counselled due to confidentiality issues which also delay the process.
• If they will provide a bigger space, everything will move according to the services

5.3. Patients

Ten patients were interviewed to find out what they think are the factors that lead to the delay in the distribution of ARV at the CDC clinic. Questions posed with regard to the duration of stay at the clinic, the waiting areas and suggestions on how to improve service delivery. The findings are as follows:

5.3.1 Patients: How long do you stay at the clinic?

An equal number of patients indicated that they spent three hours (20%) and four hours (20%) at the clinic during follow-ups. Ten percent stated that they spent five hours at the clinic, while 50% indicated that they spent six hours. A study conducted by MISA at an ART clinic in Windhoek made a similar observation that Patients are always disturbed by the long queues they encounter when visiting the clinic. The study concluded that this may discourage some patients from attending for the next visit (MISA NAMIBIA, 20 May 2010).

Table 5.2
Since the researcher has established that patients are at the clinic for a minimum period of three hours, the patients were asked if they felt comfortable while waiting for services. All the patients (100%) interviewed indicated that they do not feel comfortable while waiting. They were then asked to explain what causes the discomfort. Their answers are as follows:

Table 5.3

<table>
<thead>
<tr>
<th>Respondent 1</th>
<th>There is a lot of people and the space is too small</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 2</td>
<td>Because we use to sit for a long time waiting and we are helped very late.</td>
</tr>
<tr>
<td>Respondent 3</td>
<td>Chairs are broken and cannot lean on anything and wait and The queues are very long.</td>
</tr>
</tbody>
</table>
| Respondent 4 | We sit in the queues for hours
Even if you came early, the doctors might call your name last |
| Respondent 5 | Not enough chairs and most patients stand for a long time before they get a chance to sit.
The space is too small to accommodate all the patients comfortably. |
| Respondent 6 | There is a lot of people  
The space is very limited  
Most of the time it is overcrowded as the space is very limited.  
The nurses are too slow. |
| Respondent 7 | Waiting too long  
Spaces are small |
| Respondent 8 | It’s a long queue  
Too many people and cannot feel comfortable  
Spend too many hours at the same place  
We fall hungry while waiting |
| Respondent 9 | Long queues  
Hunger when waiting long  
Health workers are slow and ignorant  
If you leave the queue to go and look for food, your book will be misplaced and the longer you will wait. |
| Respondent 10 | The space and the waiting room are very small and congested. It is hot and others are coughing and it’s not healthy at all. |

Eighty percent of the patients mentioned that the *space* of the clinic is too small to accommodate all the patients and chairs are broken and this is a source of discomfort. Seventy percent (70%) indicated that there are a lot of people which makes it uncomfortable. Fifty percent (50%) indicated that the service is slow and hence they are helped late. Thirty percent (30%) indicated poor customer care on the part of the health workers as a source of discomfort. Hunger is another source of discomfort mentioned by 20% of the respondents. Lack of proper management of patients while waiting is another source of
discomfort mentioned by 20% of the patients. The researcher asked patients whether they are aware of the limited number of health workers. All the patients interviewed indicated that they are aware of the shortage of health workers at the CDC clinic.

The findings that inadequate infrastructure is a contributing factor to the delay of service delivery at ARV clinic was acknowledged in addition to the high cost and complexity of administering ARVs and a small number of well trained personnel to be critical barriers in implementing increased access to ARVs in Uganda (Katabira, 2003).

5.3.2. Patients: The effects of long hours on patients’ lives

Seventy percent of the patients indicated that their visit to the CDC clinic affects their work. Only ten percent indicated that it does not affect their work. Twenty percent did not answer the question. Those that indicated that the visit affects their work gave the following explanations:

Table 5.4

<table>
<thead>
<tr>
<th>Respondent 1</th>
<th>We leave children alone at home therefore work is delayed.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondent 2</td>
<td>I am the only one that cooks for the kids and do all the house chores; therefore everything is on hold until I get home.</td>
</tr>
<tr>
<td>Respondent 3</td>
<td>Because sometimes I work 7 to 5 than I have to ask for permission to be released for the hours spent at the clinic and have to go back if I finish before knocking time. Sometime I don’t make it as I stay longer than expected and the work piles up till the next day.</td>
</tr>
<tr>
<td>Respondent 4</td>
<td>Only sometimes when there is a lot to do at work.</td>
</tr>
<tr>
<td>Respondent 5</td>
<td>The work piles up as my adult learners for literacy have to miss those class days that I usually come for my medication or checkups.</td>
</tr>
<tr>
<td>Respondent 6</td>
<td>The work is always left behind because if you miss your appointment date you have to go in the counseling room first before you could be...</td>
</tr>
</tbody>
</table>
assisted and that really delays even more.

| Respondent 7 | Your colleagues want to know why you are always visiting the clinic and they will have questions. Otherwise work left the previous day should be finished before you start on anything new. |

Some of the ways how the delay impacts on their work are that children are left to complete the work, and work is put on hold. The issue of confidentiality is also sometimes compromised as some patients report that because they spent some much time at the hospital, colleagues would ask why they visit the clinic so often.

5.3.3. Patients: Suggestions to improve services at the ARV clinic, Rundu State Hospital

Patients who were interviewed were asked to make suggestions as to how services at the CDC clinic can be improved. The following are the suggestions:

Table 5.5

| Respondent 1 | Let kavango or Namibian people be part of the CDC clinic because there are more foreigners so that language barrier will be decreased. Food is needed at the clinic because the medicine makes patients feel weak because they are strong. They should provide food like they do with TB patients especially when we stay very long at the clinic |
| Respondent 2 | Provide ART at the local or nearer clinics The government should establish some grants to take care of the children that have lost their parents due to HIV/AIDS as the children are really suffering |
| Respondent 3 | ARV should be at all the clinics or nearer clinics. Patients should be able to use medical cards at any clinic or hospital to access ART treatment |
| Respondent 4 | Patients should be divided or separated, those who come for ARV separate from those who come for checkups.  
The space is also too small, it needs to be extended |
| Respondent 5 | More nurses are needed  
Nurses should work a little faster  
The clinic should provide better chairs and waiting rooms  
There should also be rest rooms for weak patients that need to rest while waiting to be attended to |
| Respondent 6 | The CDC health workers to do their service a little faster because I know they can do it though there are many patients that they need to attend to |
| Respondent 7 | There should be proper body checkups for any possible changes in medication due to side effects  
To do x-ray checkups to see how the medicine is affecting the inside parts of the body  
Long waiting hours should be looked at and find a solution  
Starting time should be early than the usual time as they come very late.  
A lot of disturbing noise from the nurses consulting room distracts them from attending to patients accordingly or on time |
| Respondent 8 | If medicine could be distributed at our nearest clinics so that we can rest from travelling and hassling to get transport money  
There is no outreach for our nearest clinics, they only go there for blood tests and that only happens maybe once a year as well  
Not to tell us to always go back and come back the next day unnecessarily because it really takes a lot of our time, going back and forth for no good reason |
| Respondent 9 | The CDC should employ nurses who are truthful to their work and... |
able to assist patients positively with a warm welcoming kind hearted
Some treatments that patients get from the HW make them to stop
going for their ARV
The clinic is too hidden and isolated. It should not be isolated because it gives a negative perception to people and it creates room for discriminatory behaviors
The place is too small and no toilet facilities in the building for patients even HW unless one has to go outside the state general hospital in order to get toilet facilities.
The place is congested and it is very unhealthy

Ninety percent of the respondents gave suggestions on how services at the Rundu CDC clinic can be improved. Ten percent did not give suggestions. Language barrier between health workers and patients is a concern and it’s suggested that it be addressed. Another suggestion from patients is that they should be provided food while waiting as is the case with TB patients. Another suggestion is that the local clinics start distributing ARVs to prevent congestions at the CDC clinic.

Patients also complained about being told to come back the next day. Fifty percent of the patients indicated that they live more than 5 to 25 km away from the clinic. The other fifty percent live within 5 km of the hospital. Sixty percent of the patients walk as a means of getting to the hospital. Forty percent use taxis and private cars. This forty percent also indicated that transport fee ranges from less than N$10.00 to above N$30.00.
Another suggestion given to improve service is to make the CDC clinic bigger to accommodate all patients to sit while waiting for services. Patients also indicated that they come early at the hospital but receive service late. In order to confirm whether the clinic starts late, the researcher carried out a three days observation and noted the time that health workers started attending to patients. This is illustrated in the following table:
Table 5.6

<table>
<thead>
<tr>
<th></th>
<th>Day 1 (01/07/2012)</th>
<th>Day 2 (02/07/2012)</th>
<th>Day 3 (25/07/2012)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time</strong></td>
<td><strong>Time</strong></td>
<td><strong>Time</strong></td>
<td><strong>Time</strong></td>
</tr>
<tr>
<td>Arrival of first patient</td>
<td>06h00</td>
<td>06h30</td>
<td>06h15</td>
</tr>
<tr>
<td>Health workers attending to patients (roll call starts)</td>
<td>09h15</td>
<td>08h43</td>
<td>08h45</td>
</tr>
</tbody>
</table>

The researcher observed that while patients come as early as 06h00, they are only attended to as from 08h43. The patients complained about the delay but the health workers did not offer any explanations to patients as to why they start late and not at 08h00 as is the requirement. Patients complained that in addition to the delay in the morning, they are also attended to late after lunch. Seventy percent of the patients indicated that health workers come back from lunch 30 minutes to an hour late while twenty percent indicated an hour and a half late.

5.4. Interviews with the immediate supervisors

Two respondents at the supervisory level were interviewed to find out the factors that lead to the delay in the distribution of ARV to patients at the CDC clinic. They were asked what factors lead to the slow pace of distributing ARV to patients. The findings are as follows:

5.4.1. Physical environment at the CDC

The two supervisors interviewed agreed that the waiting spaces and rooms for patients are small and cannot accommodate all patients. One of the supervisor stated that *the clinic is congested and no enough air flow. Some TB patients are coughing and are not sup-
posed to be mixed with other patients but we do not have a choice because we only have one waiting passage and one waiting room.

The two supervisors were asked whether patients feel comfortable while waiting. One supervisor replied that it’s a mixture of feelings. Some patients do not want to use their local clinics during outreach programs as they feel the CDC clinic is more private than their local clinics where they feel known. The other supervisor was off the opinion that patients feel at ease because there is privacy but react uncomfortable when somebody else that is not going for the same program or not going for treatment gets in the clinic.

The two supervisors were asked about the waiting time at CDC. They echoed what the health workers explained that waiting time is long due to the process and the procedures that need to be done and the high number of patients. One of the supervisor further explained that the number of patients had reduced since the introduction of outreach programs and IMAI (Integrated Management of Adolescent and Adult Illness) clinics to administer ARV. He added that however there is still a challenge of prolonged waiting time for patients.

The two supervisors were asked how many patients visit the clinic on a day and they both agreed that the clinic receives about 250 to 300 patients. In addition the two supervisors were asked if there are more patients than the health workers can handle. Both supervisors agreed that there are more patients than the health workers can handle.

The two supervisors were asked about the prolonged lunch hours which health workers are taking which is said to contribute to the delay in service delivery. Both supervisors denied the allegation of nurses going for extended breaks. One of them remarked that “during lunch time they close the clinic. Health workers do not prolong lunch hour because if they do that they will have to spend more hours at the clinic”. However the researcher’s observation noted health workers coming in at four past two till 16 hours. It was noted that some health workers come in from 5-30 minutes late to an hour or two.
5.4.2. Challenges that lead to the delay at the clinic

The two supervisors were asked as to what are the challenges that lead to delay during patients refill and follow ups. The supervisor indicated the following problem areas:

- Pulling out of patients files from the data room
- Searching of patients test results also delays
- The computer at the pharmacy is slow and it causes delay since all the data is required to be entered in the computer.
- Sometimes we attend to clinical meetings before we start attending to patients at the clinic.

5.4.3. Supervisors: Suggestions for improvement of service at the CDC clinic

The two supervisors were asked to make suggestions on how the CDC clinic can be improved.

- The government should make more clinics to administer ARV so that some health workers at some clinics who are not able to administer ARV should do so to improve the quality of service so that health workers will have time to attend to the needs of each individual patient. As the patients are sometimes forced to be dealt with in a group especially counseling and not attend to the individual needs of the patients due to the high number of patients, this include health workers like doctors and nurses as well. The government should build a bigger clinic and support those clinics that are able to administer ARV to do so.

- A big clinic with more consulting rooms is needed to be able to accommodate all the patients. More counseling rooms are needed as there is only one counseling room at the moment for all 3 counselors and it minimizes their working programs as patients have to wait for their turns. More doctors are needed as there are only two doctors at the moment. This are still the same doctors that have to divide and go for outreach programs with 2 or 3 nurses, thus making the work more for the doctors and the nurses left at the clinic on that particular day. More pharmacists are also needed as there is only one that sees all the patients that visits the pharmacy. A big pharmacy for better storage of medicine is also needed.
CHAPTER 6: RECOMMENDATIONS

The following are the reasons for the delay in the distribution of ARV at Rundu Hospital (Centre for Disease Control) as well as recommendations.

6.1. Shortage of equipment’s and rooms

RSH’s ARV clinic has very limited consultation rooms for nurses, doctors, counselors and even for keeping files (Data clerk’s office). There are only 2 consultation rooms for 6 nurses and 2 for the 2 doctors and 1 for 3 counselors. Patients wait to be seen by the staffs available but due to lack of rooms at the health facility, staffs are then unable to attend to patients on time. Both the staff and the patients questionnaire indicates that there is a shortage of rooms and it contributes to poor service delivery or delay at some service points in the clinic. The supervisors that were interviewed acknowledge the fact that the clinic is too small and it therefore contributes to the long waiting time of patients for service. This problem could be solved by providing more consulting rooms for all the health workers in order to see more patients at a time in different consulting rooms.

Another recommendation that was given by the health workers is for the clinic to be made bigger with more consulting rooms as the current clinic is too small for proper service delivery. They believe that the shortage of consulting rooms is a big reason that makes the flow of patients very slow especially when patients examination need to be done.

6.2. Long service time for counseling

As mentioned earlier on that there is only one counseling room for all the 3 counselors available at the clinic makes it very difficult for counseling sessions to be done on time. All three counselors use one room and thus cannot allow them to counsel new intakes in groups or with anyone around. Therefore they counsel all the new intakes one by one, unless it’s default (patients that do not adhere to treatment) counseling were they are al-
allowed to administer group counseling. One of the recommendations that arise from the health workers was the need to have at least 3 consulting rooms that will cater for every counselor to work privately as patients have to wait and take turns to be counseled due to confidentiality whilst delaying the process. In this case, 3 consulting rooms will be open to patients instead of one room available for all the patients. One room can handle the defaulters while the other two can handle the new intakes that need individual or partner counseling.

6.3. One pharmacist for all the patients (refill and follow ups)

There are some stable patients that have prescription of up to 3 months or more that only come for refills at the pharmacy without seeing the doctors. The researcher still observed that the patients arrive before the staff. This mostly happens before the opening time and after lunch. During researcher’s observation, it was noted that the pharmacist is overworked because he was alone and had to help all the patients that went for refill and those that went for consultations. In the end the patients tend to wait for their medication very long as there was only one pharmacist. The last patients in the queue waited in the queue for about an hour or more to get their prescriptions as the patients were too many at a time. This problem can be solved by increasing the pharmacists at the clinic so that they are able to assist the patients on time.

6.4. More patients arriving in a vast number at the same time

According to the researcher’s observation at the RSH ARV clinic, patients come at the clinic mostly in the early hours of the morning. Before the clinic could open, the clinic has already close to 80 patients waiting in the queue. By the time they will start with the first roll call some few minutes before nine or after nine, most of the patients that are booked for that particular day or any that comes for other clinical visits have already arrived.
Marjorie BT Mavuso who did a similar study of patient waiting time at an HIV clinic in a Regional Hospital in Swaziland said that “If many patients arrive at the same time then most of these patients would have to wait a long time as the staff member would be busy seeing the patients who were first in the batch and the rest would be waiting. If 20 Patients arrive at the same time then the first patient would wait zero minutes if the health centre were empty and the second patient would wait for the time it took the staff to see the first patient (let’s say 7 minutes), but the 20th patient would have to wait for the other nineteen to be seen, which would be 19 times 7 minutes or a wait of 103 minutes. (Marjorie BT Mavuso, (MPH) November 2008). That’s about an hour and 43 minutes of wait when the 20th patient is seen.

A vast number of patients coming in at almost the same time is referring to too many patients arriving in a time period than what the health worker are able to see in that time period. This problem can be solved by making bookings or appointments in such a way that a certain group of patients come in at a given time and then the next group follows at a certain time again. In this case, patients will be able to attend to their daily duties at work or at home before they come for their appointments after their appointments are done in a short while. This will also make it possible for those that are working to come in at a given time and perhaps still go back to work. A two hours wait for the last person who came on that time period given will be better than a four to six hours wait when everybody else comes in at the same time or period.

6.5. Opening time of the clinic versus patient arrival

The clinic opens at 08:00 whilst patients arrive earlier then 06:00 at the general hospital and queue up for a stamp before they will proceed to the CDC clinic. The nursing staffs together with the data clerks open the clinic and provide services from 8:00am to 5.00 pm from Mondays to Fridays and the clinic is closed during weekends. This would help if certain points like the data clerk to open earlier and start sorting out the files of the patients that arrives earlier so that the nurses can start immediately as they arrive at the clinic. This is simply because nurses and doctors wait for more than 30 minutes before
they are given the patients’ files to begin the consultations. If the data clerks report at 07:00 in the morning then they can go home at 04:00 pm as by then all the patients’ files are sorted out. Therefore the nurses then finishes off the patients that perhaps came late and close at 05:00 pm.

6.6. Patients file searching

It has been noted that data clerks spend a lot of time searching for the patients’ files in the data room and that makes patients to sit for an extra hour just waiting for their files to be found before everything else begins. This could be solved by placing files in an order that is easily accessible when patients visit the clinic in such a way that less time is spent searching for files.

6.7. A lack of proper organization

It has been noted that at times patients are not efficiently attended to on time at the clinic while staff members are well present at their service points but then they are busy with something else or reporting late for duty. This might mean that the staffs are not prioritizing attending to the patients as their number one priority. This problem can be minimized by making nurses to be aware that their number one priority at the clinic is attending to the patients.

6.8. No reception areas for patients at the CDC clinic

The CDC clinic does not have its own reception to receive its own patients at the time of arrival and the patients’ starts queuing up at the general hospital to get a daily stamp and their weight. The first struggle starts with the queues at the general hospital where they struggle with patients visiting the general hospital before they are to face another long queue at the intended clinic. This problem can be solved if the clinic can have its own reception areas at the clinic site were patients can easily come in and do everything at the same clinic. It would also help if the clinic could have 2 receptionists were by one at-
tends to ART patients and the other one attends to VCT patients like it is the case at an HIV clinic in a Regional Hospital in Swaziland (MPH, November 2008) that has reduced the waiting time of its reception areas.

6.9. Improve staffing levels in service areas by deploying more staff

In all the questionnaires of both the health workers and the patients were asked to say whether there are too many patients than the health workers. 100% of all the participants acknowledged the fact that there are too many patients than the health workers at the clinic. When staffs have too many patients to attend to, patients will end up waiting for long. Patients tend to spend more time at any service point where the staff is overworked because of too many patients. Therefore this was a clear indication that the staffs need to be increased in order to meet the high demand of the vast number of patients that visits the clinics so that the service will be much faster and better and thus will reduce the waiting time of patients at the clinic in one way or another. Another solution could be shifting staffs (task shifting) from facilities with a low workload and assist where more work is needed.

6.10. The need for lunch hour (13h00 – 14h00) service

There is a concern of patients left unattended to during the health worker’s lunch hour between one and two thus contributing to the delay in delivering a fast service to patients. This problem can be solved by introducing turnaround lunch time or shift lunch time. This is meant for health workers not to go on lunch at the same time but rather make one group leave at a certain time while others continue serving patients till at their time of going for lunch and by then the first group has returned to continue delivering the service without a complete close down of the clinic for an hour. This for example, can be started from 12 and the last group then leaves at 13 hours, by 14 hours, everyone is back on their duty stations. This will help patients from waiting for an hour or more without being attended to. At least the other group that will remain will attend to patients unlike closing the whole clinic. That will be an hour saved by the patients.
The National Guidelines for ART has also stated that the CDC centers should be able to ensure access at off-hours and weekends for questions or addressing problems to the patients. It also states to utilize the entire health care team during operation hours. However, it is observed that the clinic does not operate over weekends or off-hours or neither does it utilize the entire health care team because they are still the same HW that has to go for outreach programs to other clinics leaving other HW overloaded. If such guides are somehow implemented it would solve some of the interruptions of the fast service delivery.

6.11. Few urban and rural clinics that roll out ART

Rundu State Hospital ARV clinic is the only clinic that administers ARV in Rundu district and none in the rural areas of the Rundu district. Most of the nearby clinics and those at the rural areas only happen to get ARV treatments on a monthly visit from the RSH ARV clinic staffs. Patients travel as far as 80 km’s and more to come to RSH ARV clinic for ARV or any other related treatments. This is one of the problems that cause long queues and long waiting time by patients at the clinic. This can be solved by opening more clinics in the locations that could administer ARV like other participants suggested so that the number of patients that visits the clinic is reduced. If other clinics close by and those at the villages are made to administer ARV then the health workers at the RSH will be less overloaded and patients will be attended to on time without delay. The clinic is congested because of lack of clinics that administers ARV. If not then more HW are needed to be deployed in order to meet the demand of patients visit at the clinic.

Another suggestion on how to solve this problem is to introduce an ARV club where stable patients that are on ARV can go and collect their medication at the centers where they only give ARV’s instead of going to the clinic and get their medications like it is done by the department of health, the City of Cape Town’s health department, the Institute for Healthcare Improvement and Medecin Sans Frontieres (MSF). “Towards the end of 2010 the department of health, the City of Cape Town’s health department, the Institute for Healthcare Improvement and Medecin Sans Frontieres (MSF) came up with an ingenious solution to unclog the system, reduce staff burnout, and ease the long queues
of those waiting to collect their medication. The solution was the formation of ARV clubs. These were introduced to allow HIV+ patients, who are relatively well and in control of their lives to collect their medication without disrupting their work schedule. This frees up clinics to focus on sick patients by shifting the day-to-day management of stable patients to a non-clinical facilitator (presented by Ms Moorane Sarah Mabitsela, June 2011. Limpopo Province).

Many patients who respond well to medication and who take them regularly and who are fit and healthy should not have to share the same queues with those who are chronically ill, and the ARV Clubs are intended to cater for these patients. The ARV club model enables doctors to spend more time with patients who really need their attention, while reducing the workload of clinicians significantly. Clinic pharmacy staff is now able to spend more time with needy patients and ensure that they receive the correct medication, understand the dosage and reasons for taking the medication. Upon arrival at the club patients weigh themselves, answer questions from a lay counselor regarding their health and sign for and receive their two-monthly drug supply. Their CD4 count is checked annually and when patients become ill, they are referred to the clinic. Depending on the severity of the illness they may be removed from the club (presented by Ms Moorane Sarah Mabitsela, June 2011. Limpopo Province).

“One club member comments that with the club system her employers don’t even know that she has been to the clinic in the mornings. She arrives at 7.40 am to ensure that she is first in the queue for the 8 am club start, and by 8.30 am she is at work, stress-free, without her employers being any the wiser that she had been to the clinic. An employer states: “what a relief it is that visits now only take a short part of the day rather than all day, ARV clubs are a simple yet effective model of relieving the whole system of HIV care for patients” (presented by Ms Moorane Sarah Mabitsela, June 2011. Limpopo Province). This project has proved to be effective, therefore this type of project can surely help reduce the congestion at the ARV clinics nationwide if introduced.
CHAPTER 7: CONCLUSIONS

In 2003, Namibia introduced and launched national guidelines and training programs for antiretroviral therapy in the public sector. Since then, The Namibian Government has committed to providing ample treatment, Antiretroviral Therapy (ART) and care for (PLWHA) people living with HIV/AIDS (World Health organization 2005), though still some have to undergo the cost of travelling long distances in order to have access to ART.

This study has established that there are identifiable factors that lead to the delay in the distribution of ARV. These are long hours spent waiting for medication and follow ups, long queues, lack of infrastructure at the clinic, the insufficient trained medical personnel, the burden of work in ARV clinics and the unmet needs of patients.

The issue of long queues and long waiting time at ARV clinics in Namibia and other sub-Saharan African countries requires proper evaluation of the existing services at the CDC clinic and do a proper patient nurse ratio and revisit the National ARV Guidelines. A greater coordination and collaboration approach is needed among health workers and the line ministry to find ways to offer better services in order to reduce the long hours and the long queues at the CDC clinic.

It is anticipated that the recommendations provided in this study will be able to assist both the Namibian government and the individual clinics that administers ARV to strategically find ways from the recommendations to improve the problem at hand. This will further impel the efforts and capacitate both the Ministry of Health and Social Services under Republic of Namibia and the ARV clinics in finding good practices in ensuring the effectiveness of ARV distribution and other services at the ARV clinics without delay are implemented appropriately.
REFERENCES


A dialogue on ART delivery. (September 2006). Held at Maropeng, Cradle of Human kind, Gauteng South Africa.

Dr Edwin Limbamba et al. (December, 2005) A five year plan for the provision of antiretroviral therapy and good management of HIV – related diseases to HIV – infected patients in Malawi 2006-2010. Ministry of Health, Malawi.


A dialogue on the delivery of antiretroviral treatment in resource limited settings. Held at Maropeng, Cradle of Humankind, Gauteng, South Africa.


Kasonda E.A, DeCelle K, (July-August 2011) Livingstonia Synod AIDS Programme (LISAP) Improving VCT, ARV and PMTCT Services at Embangweni and David Gordon Memorial Hospitals; identifying hospital workers’ and clients’ perspectives on the services.

Moorane Sarah Mabitsela, (28th – 30th June 2011) Celebrating Innovative Management in the Public Sector 2011: The Dr CN Phatudi Hospital Lean Project Experience, Tzaneen District, Limpopo Province

Addendum A: Interview schedule for immediate supervisors

Opening
After the observation at the clinic on patients and nurses, I will then arrange to interview the 2 immediate supervisors of the CDC department or clinic. During the interview I would like to ask some questions about the participant’s working experience at the CDC department and some of his or her observations regarding the service rendered at the CDC clinic for ARV or any follow up patients.

The interview should take about 30 to 45 minutes.

The interview will be semi-structured, guided by the following kinds of questions:

A. General working experience at the centre?
   1. For how long have you been working at the centre?
   2. Have you worked with general health patients prior to working at the CDC?
   3. Is there a difference with the working environment at the CDC and general health and why?

B. General environment of the CDC?
   - Does the clinic have enough waiting spaces or rooms for patients?
   - Does the clinic have rest rooms for weak or serious patients?
   - Do the clinic’s waiting rooms or passages protect the patients’ privacy?
   - Do the patients feel at ease or comfortable being in the queue at the CDC?
   - What would you say about the waiting time of patients at the CDC?

C. Patients records
   1. How many patients visit the CDC for a day?
   2. What are the processes that patients need to follow when they come for their refill or any follow-up?
   3. Are these processes required to be followed even those that only come for a refill? If yes, why?

D. Health workers
   1. Do you believe there are more patients at the CDC than the health workers could handle?
2. Are you aware that patients wait for long hours in queues to be attended to?
3. Do health workers take prolonged lunch hours that could perhaps contribute to the delay?
4. Do you think health workers also contribute to the (long wait/long queues) which patients encounter during follow-up or refill? If so, give a brief explanation?

E. Closing
1. Are there any other matters regarding the CDC that you would like to emphasize?
2. If you were given a chance to change some few things at the CDC, what would you change?
3. According to the experience, what would you say are the most problem areas that cause delay during patients refill and follow-ups? And what would you recommend to reduce the delay?
Addendum B

RESEARCH - STUDY QUESTIONNAIRE FORM
FOR PATIENTS

COMMUNITY HEALTH CENTRE

What is the approximate distance from home to the clinic? Cross in the appropriate box (x)

<table>
<thead>
<tr>
<th>Distance</th>
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</thead>
<tbody>
<tr>
<td>1-5km</td>
<td></td>
</tr>
<tr>
<td>5-10km</td>
<td></td>
</tr>
<tr>
<td>10-15km</td>
<td></td>
</tr>
<tr>
<td>15-20km</td>
<td></td>
</tr>
<tr>
<td>25km or more</td>
<td></td>
</tr>
</tbody>
</table>

How do you get to the CDC clinic? Cross the appropriate box (x)

<table>
<thead>
<tr>
<th>Mode of Transport</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Walk</td>
<td></td>
</tr>
<tr>
<td>By bus</td>
<td></td>
</tr>
<tr>
<td>Mini taxi</td>
<td></td>
</tr>
<tr>
<td>Private car</td>
<td></td>
</tr>
<tr>
<td>Other specify</td>
<td></td>
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</tbody>
</table>

How much does it cost per single trip from home to the CDC clinic? Cross the appropriate box (x)

<table>
<thead>
<tr>
<th>Cost Range</th>
<th></th>
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<tbody>
<tr>
<td>None</td>
<td></td>
</tr>
<tr>
<td>Less than N$10</td>
<td></td>
</tr>
<tr>
<td>N$15 – N$19</td>
<td></td>
</tr>
<tr>
<td>N$20-N$29</td>
<td></td>
</tr>
<tr>
<td>Above N$30</td>
<td></td>
</tr>
<tr>
<td>Length of stay at the hospital during check-up or appointment days? Cross the correct one (x)</td>
<td>Less 2 hrs</td>
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<td>---</td>
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</tr>
</tbody>
</table>

Do you prefer to travel long distance to the CDC clinic and wait for long queues rather than using the one closer to where you live?  
**Yes or No** (Circle the right answer)  
**If yes**, what makes you to prefer the Rundu State hospital CDC more than other local clinics?  
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Are you willing to be down referred (or be changed) to access antiretroviral drugs at local recommended health facility to avoid long waiting period at the states hospitals’ ARV clinic? **Yes or No** (Circle the right answer)  
**If yes**, explain why you are willing to be down referred to a recommended local health facility.  
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**If no**, why?  
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## INTERVIEW TO OPEN ENDED QUESTIONNAIRES

Tell us why you do not want to access your health care services at the local clinic?

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Tell us why you want to access your health care services at main site (hospital)?

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Does the patient feel at ease or comfortable being in the queue at the CDC?
Yes or No  (Circle the right answer)
If no, explain what causes the discomfort.

Would you still visit the CDC at the state hospital if you had another alternative?
Yes or No (Circle the right answer)
If no, what will make you not to?

Are there delays experienced with transport which may cause missing appointments at the centre? Cross (x)

Where do you leave?

Do you have a clinic closer to where you leave? Yes or No (circle the right answer)

How far from your home is that clinic?

Why don’t you use the clinic closer to where you reside?

Does the patient have a full time job? Cross (x)
No

Does a patient take leave to obtain ARV medication at the clinic? Yes or No (Circle the right answer)

If yes, why do you have to take leave?
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Does the patient find it easy to get time off from work to obtain ARV or attend to follow-up without leave?

Yes or No (Circle the right answer)

If no, how does the patient manage the work schedule and ART program?
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Does the patient feel or treated different when they come for general health at the hospital compare to when they visit the CDC?

Yes
No

If yes, what makes the two sites different?
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Do you believe there are more patients at the CDC then the staff/nurses could handle?

Yes

46
No

Explain your answer

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Cross the appropriate answer in the empty spaces below (x)

<table>
<thead>
<tr>
<th>Do nurses go on lunch at the same or different times?</th>
<th>At the same time</th>
<th>Different times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When do they come back from lunch?

<table>
<thead>
<tr>
<th>When do they come back from lunch?</th>
<th>At the same time</th>
<th>Different times</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Does the visit to the CDC affect your work? Yes or No

How does it affect your work?

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Any suggestion(s) to the CDC/ARV clinic?

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Addendum C:
RESEARCH - STUDY QUESTIONNAIRE FORM
FOR THE STAFF

Have the staff member worked with general health patients prior to working at the CDC?

Yes or No  (Circle the right answer)
If yes, outline some of the differences.
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Is there a difference with the working environment at the CDC and general health? Cross (x)

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</table>

If yes, outline some of the differences.
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How many patients on average do you see per day?
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How many patients on average visit the clinic per day?
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What is the total number of the patients at the clinic (CDC) on ARV treatment?
........................................................................................................................................
On an average, how long do you spend per patient in the consulting room or at the pharmacy?

<table>
<thead>
<tr>
<th>Options</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 min</td>
<td></td>
</tr>
<tr>
<td>7 min</td>
<td></td>
</tr>
<tr>
<td>10 min</td>
<td></td>
</tr>
<tr>
<td>More than 10 min</td>
<td></td>
</tr>
<tr>
<td>Other, specify</td>
<td></td>
</tr>
</tbody>
</table>

Do you all go on lunch at the same time? Cross (x)

<table>
<thead>
<tr>
<th>Options</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

How many hours is the normal working day?

<table>
<thead>
<tr>
<th>Options</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 hours only</td>
<td></td>
</tr>
<tr>
<td>7 hours only</td>
<td></td>
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<tr>
<td>8 hours only</td>
<td></td>
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<tr>
<td>9 hours only</td>
<td></td>
</tr>
</tbody>
</table>

Do you work overtime to attend to patients who might not have been attended to during normal working hours? Cross (x)

<table>
<thead>
<tr>
<th>Options</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td></td>
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<tr>
<td>No</td>
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</table>

**If not,** give reason (s)?

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49
How many staff members attend to patients per day at the clinic? This includes nurses, doctors, pharmacist and counselors.

How many per day?

<table>
<thead>
<tr>
<th>Staff Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurses</td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td></td>
</tr>
<tr>
<td>Pharmacists</td>
<td></td>
</tr>
<tr>
<td>Counselors</td>
<td></td>
</tr>
<tr>
<td>Others specify</td>
<td></td>
</tr>
</tbody>
</table>

Are you aware that patients wait for long hours in the queue before being attended to?

**Yes** or **No** (circle the answer)

If **yes**, what would you say causes the delay? Cross the correct one(s) and give a reason to your answer below.

- Too many patients
- Few health workers
- The processes
- Too many patients and few health workers
- Few working hours
- Other .................................................................

Please expand on the reason for your answer above

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Do you work over the weekend to accommodate those that could not make it during week days?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What are the processes that patients follow when they come for refill or any follow-up?

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Do you think that those processes contribute to the delay on follow-up and ARV distribution to patients?

Yes or No (circle the answer)

If yes, what would be your suggestion

- ..............................................................................................................................
- ..............................................................................................................................
- ..............................................................................................................................
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Do you have stock outs of ARV? Yes or No (circle the answer)

How often does it happen? ..................................................................................

What are the reasons?

- ..............................................................................................................................
- ..............................................................................................................................
- ..............................................................................................................................
- ..............................................................................................................................
Does the patient feel at ease or comfortable being in the queue at the CDC?

Yes or No (circle the answer)

If no, what makes you feel uncomfortable?

According to your experience at the centre, what do you think need to be done in order to reduce the delay or avoid long queues during patients’ visits?
ADDENDUM D: Permission request letter to the Ministry of Health

05 July 2011

Ministry of Health and Social Services
Private bag
Windhoek

Dear Sir/Madam

RE: The intended study pertaining to the factors that contribute to the delay of ARV drug distribution and other related treatments for HIV positive patients during follow ups at the ARV clinic of the Rundu State Hospital.

Ms M.M Shipapo, MPhil-student (Student Number: 16378407), at the Africa Centre for HIV/AIDS Management at Stellenbosch University intends to conduct research in your state hospital in Rundu, Kavango Region on the factors that contribute to the delay of ARV drug distribution and other related treatments for HIV positive patients during follow ups at the ARV clinic of the Rundu State Hospital.

The target group will be the health workers, patients, pharmacists and doctors that have been working at the centre for at least 4 months on either contract or permanent basis. The sample size will be 20 that will be randomly selected. Eligible participants will be provided with a completely anonymous self-administered questionnaire that contains both open and closed ended questions that ask their experience, problems, and attitudes on services rendered to HIV/AIDS patients at the ARV clinic of the Rundu State Hospital. The questionnaire will take at least thirty minutes to complete and will have both the English and Rukwangali version to enable respondents to choose the language they are comfortable with. The completed questionnaires will be collected and all the necessary precautions will be taken to ensure that they are not accessed by any other person that is not involved with the study. The research is primarily academic but the results of this study will be availed to the Rundu State Hospital if requested.
We therefore kindly request permission for Ms. M M. Shipapo to carry out this study at the Rundu State Hospital's ARV clinic. The study should run between August and September to November and December 2011.

Feel free to contact us if you have any further questions.

Kind Regards

--------------------------------------------

Burt Davis
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F: + 27 21 808 3015
C: + 27 82 832 2828
E: burt@sun.ac.za

Industrial Psychology Building  Private Bag X1, Matieland, 7602  South Africa
Tel: (+27) 21 808 3002  Fax: (+27) 21 808 3015  e-mail: pdm@sun.ac.za
www.aidscentre.sun.ac.za
ADDENDUM E: Permission letter from the Ministry of Health

REPUBLIC OF NAMIBIA

Ministry of Health and Social Services

Private Bag 13198
Windhoek
Namibia

Ministerial Building
Harvey Street
Windhoek

Enquiries: Ms. E.N. Shaama
Ref.: 17/3/3
Date: 12 September 2011

OFFICE OF THE PERMANENT SECRETARY

Ms. Mathilde M. Shipapo
P.O. Box 1985
Rundu

Dear Ms. Shipapo

Re: Factors contributing to the delay in distribution of ARV and other related treatments for HIV positive patients during follow up at the ARV clinic of the Rundu State Hospital

1. Reference is made to your application to conduct the above-mentioned study.

2. The proposal has been evaluated and found to have merit.

3. Kindly be informed that permission to conduct the study has been granted under the following conditions:

3.1 The data to be collected must only be used for completion of your MPhil in HIV/AIDS Management;
3.2 No other data should be collected other than the data stated in the proposal;
3.3 A quarterly report to be submitted to the Ministry’s Research Unit;
3.4 Preliminary findings to be submitted upon completion of study;
3.5 Final report to be submitted upon completion of the study;
3.6 Separate permission should be sought from the Ministry for the publication of the findings.

Yours sincerely,

MR. K. MIHIRE
PERMANENT SECRETARY

"Health for All"