

**TRAINING OF HEALTH CARE WORKERS IN ADHERENCE COUNSELLING FOR
COMPREHENSIVE, CARE, MANAGEMENT AND TREATMENT CLINICS**

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Date: 2011 January 06

ABSTRACT

“Treatment failure, defaulter rate, patients lost to follow up”

These are the words usually spoken by health care workers at the CCMT clinics in the country. These are words that they try at all times to come with solutions to, without much success. Much as both the health care workers and patients know the importance of taking medication, often medication is not taken as required.

Adherence is defined as the degree to which a patient follows a treatment regimen which has been designed in the context of a consultative partnership between the client and the health care worker. This obligation is comprehensive as it tends to examine all factors that can affect adherence. It includes characteristics such as the treatment regimen, the provider behaviour, social and environmental factors that may hinder adherence on the patient.

There are several factors that lead to non-adherence to treatment. The factors may be classified as Biomedical, Psychological and Social factors. The major tool that can be used to address such issues is adequate training of all staff members working at the CCMT clinics. The researcher explored training needs and gaps at a CCMT site that will assist to combat problems of non-adherence to treatment. Health care works at an identified site where questioned on the level of training they have received and on what they need to improve their management of patients and adherence.

It was realised that some categories of staff at the clinic do not receive training as expected and that others do not receive adequate training that will assist them in adherence counselling. Recommendations made by staff members were that training should be readily available to all staff members and that it should also be rolled out to other departments and sections within the hospital so there is continuum of care of HIV positive patients. Non adherence to antiretroviral treatment is a challenge faced by health care providers as well as patients themselves. It results in treatment failure, a decrease in the quality of life of the patient and an increase in morbidity and mortality. Non-adherence means any reason where the patient is not taking recommended doses, not sticking to the recommended time or not taking it in the recommended way.

OPSOMMING

Navolging word gedefinieer as die mate waarop die pasiënt die behandeling wat voorgeskryf is in samewerking tussen die pasiënt en die gesondheidsorgwerker, nakom. Hierdie vepligting is omvattend omdat dit geneig is om alle faktore wat die nakoming kan beïnvloed, ondersoek. Dit sluit eienskappe in soos die behandeling regimen, die verskaffersgedrag, sosiale en omgewingsfaktore wat 'n struikelblok kan wees vir die nakoming van die pasiënt.

Daar is verskeie faktore wat kan lei tot nie-nakoming van behandeling. Die faktore kan geklassifiseer word as bio-mediese, sielkundige en sosiale faktore. Die belangrike instrument wat gebruik word om sulke sake aan te spreek, is voldoende opleiding van alle personeellede wat by CCMT klinieke werk. Die navorser ondersoek opvoedkundige behoeftes en leemtes by 'n CCMT perseel, wat sal help om probleme van nie-nakoming van behandeling sal bestry.

Gesondheidsorgwerkers by 'n geïdentifiseerde perseel, was ondervra oor die vlak van opleiding wat hulle ontvang het en wat hulle nodig het vir beter bestuur van pasiënte en nakoming van behandeling deur pasiënte. Daar is gevind dat sommige kategorieë van personeel by die klinkiek nie die opleiding ontvang het wat nodig is nie en dat ander personeellede nie voldoende opleiding ontvang het wat hulle sal help met nakoming van berading nie. Personeellede het aanbeveel dat opleiding geredelik beskikbaar gemaak moet word aan alle personeel en dat dit na ander departemente en afdelings binne die hospitaal uitgebrei moet word om die voortsetting van sorg vir MIV/VIGS-positiewe pasiënte te verseker. Nie-nakoming van antiretrovirale behandeling is 'n uitdaging vir beide gesondheidsorgwerkers en pasiënte. Dit lei tot die mislukking van behandeling, 'n afname in die kwaliteit van die pasiënt se lewe en 'n verhoging in morbiditeit en mobiliteit.

LIST OF ABBREVIATIONS

AIDS – Acquired -Immunodeficiency Syndrome

ART – Antiretroviral Therapy

ARV – Antiretroviral

CBO – Community Based Organisation

CCMT – Comprehensive Care Management and Treatment

HAART – Highly Active Antiretroviral Therapy

HAST – HIV; AIDS; STI and TB directorate

HBC – Home Based Care

HIV – Human Immunodeficiency Virus

HCT – HIV Counselling and Testing

NGO – Non-Governmental Organisation

OPD – Out Patient Department

PHC – Primary Health Care

PLWHA – People living with HIV and AIDS

PMTCT – Prevention of Mother to Child Transmission

SA – South Africa

TB – Tuberculosis Bacilli

WHO – World Health Organisation

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1. BACKGROUND INFORMATION

Adherence means taking medications and sticking to the treatment plan exactly as prescribed. It involves taking correct doses of medication at the correct time and in the correct way. Missing even a few doses of prescribed medication can cause treatment failure and more opportunistic infections. Drug resistance may also occur and it thus becomes difficult and even costly to treat and manage such a patient. The main aim of the ART programme is to improve people's quality of life by ensuring that the patient experience fewer HIV related illnesses.

The SA government's CCMT (HIV & AIDS Comprehensive Care, Management and Treatment) programme was rolled out in April 2004 with the aim of improving the quality of life of people infected by HIV. It has been well researched and is regarded as one of the most comprehensive programmes in the world. It encourages people to test for HIV with the hope that they will be provided with treatment if they are found to be positive and require such treatment. However, there are challenges that are associated with the taking of medication. Despite the good intentions that are found, the issue of non-adherence and defaulter rate still remain a challenge to provision of treatment. The SA National ART guidelines define adherence to treatment as taking 95% of treatment as prescribed. This means that if a patient's taking of treatment is below 95% of the prescribed schedule, then the patient is not adhering to such treatment. Some patients decide to default on treatment on their own without consulting with the health care provider. Defaulting on treatment means failure to collect treatment as scheduled for a period of three months and more (SA National ART guidelines). Adherence has been advocated as one of the measures that may help reduce the impact of the disease and even make the programme successful. Several measures have been put in place at treatment centres to ensure that patients do adhere to their treatment. The programme has been structured in such a way that it becomes a holistic approach to care. Several disciplines of health care providers have to be put in place before a site can be accredited to provide treatment. The patient is also seen by the multi-disciplinary team before they are started on treatment. This is to ensure that all aspects of adherence are being covered and that the patient is actually ready to be put on treatment.

Treatment should be taken for a life time and as such all these measures have to be taken into consideration and patients made ready for such commitments.

There are however several factors that may be associated with non-adherence of treatment. The following are some of the reasons for non adherence.

- ✚ Forgetting to take some doses as prescribed
- ✚ Patient may be busy at the time of taking treatment
- ✚ Some patients may be depressed at that time and may forget to take treatment
- ✚ Being away from home and with no treatment at your disposal at that time
- ✚ Being out of a person's normal routine such as working night shift at the particular time
- ✚ Patients may have side-effects that are unbearable to deal with
- ✚ Regimen may be too complicated to stick to. In this case patients are expected to take their treatment at the exact time twice a day for the rest of their lives. This may be too difficult and tiring too
- ✚ Pill burden as in the case of HIV/TB co-infection where they are expected to take both TB and HIV treatment
- ✚ Some patients have strong anti-treatment health beliefs
- ✚ Concurrent health practices that may have effects on ARV
- ✚ Taking of traditional medicines with ARV may decrease the effects of the treatment
- ✚ Transport and distance to the treatment centre
- ✚ Stigma associated with HIV positive status
- ✚ Attitudes of health care providers

It can be seen from the above that there are many challenges that people on ARV come across in their everyday lives. These may be some of the reasons for non-adherence and there may be others that are never recorded or reported. The main focus in this study will be for the multi-disciplinary health care workers involved in management of HIV positive

patients to take note of and work on to promote adherence. The reasons mentioned above show that there are several factors affecting adherence to ARV treatment in patients. These factors may be classified into the following categories:

-  Psychological factors
-  Physiological/biological factors
-  Social factors

Counselling plays a major role in ensuring adherence to treatment. The issue may be the manner used to structure such counselling to ensure that all factors mentioned above are been addressed. For the purpose of the research topic, the researcher will only dwell on the social factors that affect adherence to ARV and the role that need to be played by the health care workers in such scenarios. It will also focus on training needed by the health care workers to address adherence to ART.

2. RESEARCH QUESTION

Are Health care providers adequately trained to address some social factors that affects adherence to antiretroviral treatment?

2.1 AIM

To establish the level of knowledge and skills of health care providers in counselling to address social factors that affect adherence to antiretroviral treatment.

2.2 OBJECTIVES

-  To assess the level of skills of health care workers when they counsel patients on adherence
-  To determine the level of knowledge of ART adherence issues of staff tasked with counselling of patients

- ✚ To identify gaps that need to be filled in order for ART adherence counselling to be effective
- ✚ To provide guidelines for training of counsellors

2.3 SIGNIFICANCE OF THE STUDY

The study will help identify gaps that may be found in the ART programme and to further assist health care workers in this programme to better manage their patients and promote adherence to ART. This is the time to start accepting that, despite the good intention that the ART programme has and the benefits thereof, people still fail to take their treatment as prescribed and others decides to stop treatment on their own. It thus becomes more costly to treat such patients and it brings along low morale for the health care providers as they feel like they are fighting a losing battle with HIV and AIDS. HIV programmes in government sector have been structured in such a way that patients need to be treated for any opportunistic infections before they are started on treatment. They have three visits to the health centres where they are managed for these opportunistic infections. Counselling is undertaken for the patients and this includes education on taking treatment including side effects associated with the disease. Patient's readiness to treatment is assessed during these three visits. The multidisciplinary team is involved in the readiness programme of the patient.

The SA National ART guidelines state the following as recommendation to start a patient on treatment:

- ✚ Patient's demonstrated reliability during the treatment readiness programme
- ✚ No active alcohol or other substance abuse
- ✚ No untreated active depression
- ✚ Disclosure of HIV status to a friend or family member i.e. support system
- ✚ Insight and information of HIV condition

✚ Acceptance of one's HIV positive status

The guidelines further state that the final decision to treat will be taken by the multi-disciplinary team at the ART centre who will initiate treatment. The patient and caregivers must be involved in this decision.

The researcher wants to investigate what healthcare workers are doing or not doing that lead to failure of the above-mentioned considerations as stipulated in the guidelines.

3. LITERATURE REVIEW

The issue of non-adherence to treatment has been extensively researched yet significant challenges still remain. HIV management is a huge challenge on its own and is costing relevant stakeholders significant amounts of money to deal with those challenges. A defaulter rate of more 15% was reported by one CCMT clinic in Pretoria in 2008. Some patients become lost to follow-up and they are never found when clinics embark on defaulter tracing project. (Kalafong Hospital Clinic records March 2009)

The International AIDS Alliance state in their adherence document that most patients are started on treatment without being ready. This is usually 'to push numbers' rather than looking at the quality of care. It states that involving patients in treatment is the most crucial aspect of adherence. This is usually not properly done due to factors such as number of patients and shortage of staff at treatment centres (www.aidsalliance.org, 2007). Adherence to treatment means that the patients need to be involved in the decision making regarding their own health. Both the health care worker and the patient have to come up with the best decision to ensure that treatment is taken. This will also establish good relationships between the patient and the health care worker. The treatment plan for the patient should be made to suit his/her own circumstances. Healthcare workers need not impose decisions on the patients as these may break the trust and it may also not ensure adherence to treatment. Cultural factors that may be found to have an impact on adherence should be discussed and the patient should be the one making a decision about them. This will assist the patient to be motivated to talk to their health care workers regarding their

health and social matters that affect their treatment. Where it is possible, treatment planning should involve a wide range of people such as family, and other significant people in the patient's life. A work supervisor may assist to monitor the patient's progress and health in relation to his/her work activities. It is still imperative to assist the patient to use any method that will help her remember to take treatment. Health education should be used to emphasise important matters such as side effects and to report to the healthcare worker if they experience them.

The WHO 2003:3 (World Health Organization) strategy for developing countries indicates that successful adherence is dependent on proper assessment of the patients before initiating therapy. This includes basic information about HIV and its manifestations and basic information on side-effects of the medication. WHO continues to make note of fitting antiretroviral into the patient's lifestyles and involving relatives and friends. This may be difficult to achieve considering the issue of stigma and disclosure of one's status. Ongoing adherence support is essential even after starting the patient on treatment.

Adherence is more complex and dynamic and it requires inputs from different stakeholders. There are several dimensions in adherence as mentioned in Foundation for Professional Development's hand book on Adherence in ART. They are:

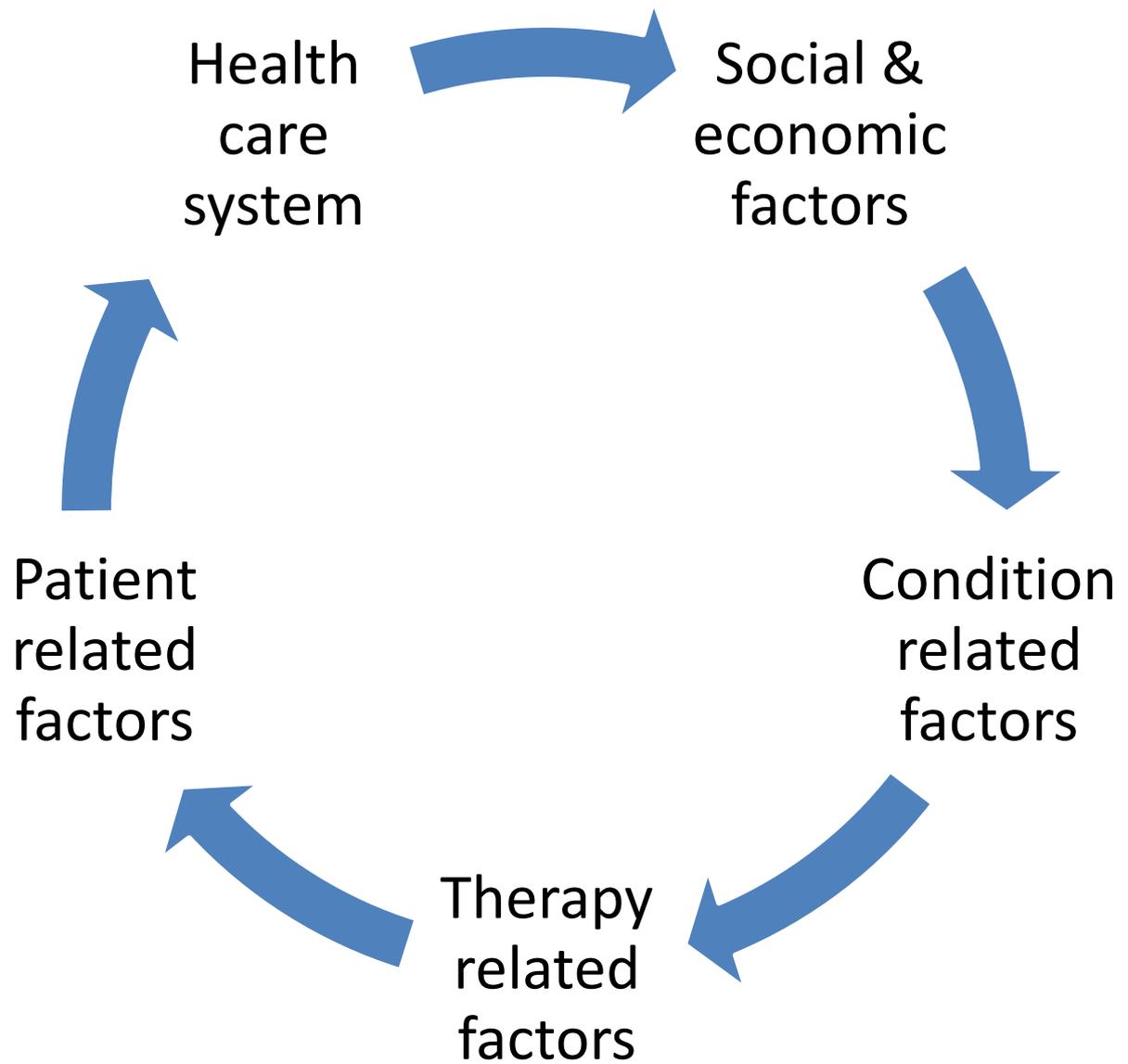
- ✚ Health Care team and system – This can be attributed to poorly developed health services and patients provider relationships such as negative attitudes of providers. The relationship between the health care provider and the patient should be intact and beneficial. Any untoward behaviour portrayed by the health care provider may also hinder adherence to ART. The systems may also pose a challenge to adherence on patients. Poorly developed and managed systems must be guarded by the health managers and addressed accordingly. Shortage of staff in health care facilities brings along overburdening and an increased workload to the healthcare providers. Medication shortages should be avoided at all costs. A system to educate patients, follow them up and support them should also be put in place.

- ✚ Social and economic factors – Patients in low socio-economic groups may have to choose between taking of medication and buying of food and clothes. HIV positive patients receive social grants from the Department of Social Development due to ill health. This social support is discontinued as soon the patients' CD4 count and health status improve. The social problem with HIV is that an improvement in CD4 count does not mean the patient will ultimately be able to work. Cost of transport and the distance to the health care facility may pose a challenge. Patients may not be able to attend the scheduled visit due to the above-mentioned social factors. These will lead to missed dosages then non-adherence. The impact of the social issues affecting adherence is huge and need collaboration by different stakeholders such as the family, HBC, the community and even the workplace. HIV is not only a health issue but also a social issue affecting all spheres on life.
- ✚ Condition related factors – Illnesses related factors may affect adherence to ART. Some patients start treatment when they are very sick and are unable to take care of themselves. They rely on their family to make informed decisions for them and assist them to take treatment. Others may feel that they have not accepted their HIV status and this may pose a challenge on the way they take their medicines. Immune-reconstitution syndrome may occur to people who start their treatment late and it may be fatal. There are lot of co-morbidities associated with HIV and these may have negative effects on the decision to continue with the treatment.
- ✚ Therapy related factors – This includes the complexity of the drug regimen and the side effects associated with ARV treatment. Side effects may be intolerable to most patients that they may even decide to stop treatment if they do not receive support from the health care providers. The complexity of the drug regimen also plays a part. With HIV/TB co-infection, patients find themselves taking lots of drugs at a given time. They may have difficulty dealing with pill burden and the tight schedule of medicine taking.
- ✚ Patients related factors – These may include lack of motivation and negative beliefs about medication as well as non-acceptance of the HIV status. Forgetfulness is human nature and all possible means will have to put in place to assist the patient to

take treatment. Patients may have their own psychological problems such as stress and anxiety related to their condition. They may lack adequate knowledge on the treatment and their condition. They may also misunderstand treatment instructions. Stigma associated with the disease is a serious factor that cannot be ignored.

All these factors will lead to poor adherence if they are not well managed. The factors are grouped in such a way that they may be tackled differently.

Figure 01: Factors affecting adherence to ART



These factors are inter-related and should be addressed as such.

Anderson (2001: 139) states that it is difficult but still critical to ensure adherence in HIV infection because the virus itself has a very high replication and mutation rate. When resistance to one class of drugs occurs, it usually occurs to all the drugs in that class. The purpose of the ARV is to work on the virus itself, suppressing the replication. HIV can multiply into millions of copies after an infection has occurred. Adherence does not relate to gender, language barriers, literacy level or even culture. Certain elements may act as a guide to predict poor adherence. Lack of patient education on the disease and the expected outcomes may be the leading factors in predicting non-adherence.

Antiretroviral drugs are often associated with toxicity and some patients may decide to stop treatment because they cannot cope with that. Short and long term toxicities have emerged as a further complicating factor in the delivery of ART (Health System Trust 2004).

TB is the main opportunistic infection and the main killer of people who are infected with HIV. A person who is not infected with HIV has 5 – 10 % chances of contracting TB in a lifetime while a person who is HIV positive has 5 – 10 % chances of developing TB in any one year (SA TB Guidelines 2009). It is reported that 75% of all HIV positive patients have an active TB infection. The risk of developing TB rises with worsening immune system. It is therefore of paramount importance that management of HIV and TB is undertaken concurrently. Screening of all HIV positive patients for TB and those infected with TB to be screened for HIV should be done at all health facilities. The SA health system is still fragmented in as far as management of TB and HIV is concern. The CCMT programme should have more fully incorporated TB management with HIV management which would avoid patients attending different facilities for their HIV and TB treatment. TB/HIV collaboration and integrated management can also affect adherence in a remarkable way. Non-integration also leads to a low TB cure rate. WHO recommends TB cure rate of 85% and SA health system only reported an average cure rate of 60% (TB annual report 2009). The TB/HIV co-morbidity makes it difficult for health care workers to diagnose or even manage TB correctly even when TB is a curable disease.

There is reported drug interaction in TB/HIV co-infection that may further cause non-adherence to treatment. Drugs such Isoniazid for TB causes peripheral neuropathy and so do

Didanosine and Stavudin for HIV. The potential drug interaction may result in ineffectiveness of ARV drugs. Patients may have difficulty coping with the pill burden and side effects associated with taking both TB and HIV drugs (WHO TB/HIV Clinical Manual). Adherence in HIV/TB co-infection is a challenge due to the pill burden and side effects associated with drug for both conditions.

Care of HIV infected children remains one of the most challenging problems in HIV management. Children are difficult to diagnose and to manage. Side effects are often missed or left untreated. Good clinical care and assessment of adherence to HAART in HIV infected children and the youth is challenging and labour intense (Zeichner and Read 2006). Poor and inconvenient regimen formulations remain major barriers to adherence in children.

Paediatrics HIV management is complicated because some children are only diagnosed while they are very sick and it may be difficult to manage them effectively. Children depend solely on their care givers for their health. The PMTCT programme, if well implemented, will ensure that children are born HIV negative or they are detected early in the system. The South African Journal of HIV medicine (December 2009) states that HIV management is a family disease and should be managed as such. The comprehensive management of HIV in adults should be holistic and address the other family members. This is not represented in the CCMT system at present as the programme is individualised and adults and children are managed separately. The journal further states that the health care workers should always enquire about the health and status of other family members. Ideally, families should receive treatment simultaneously in the same facility to avoid inconvenience and unnecessary expenses. Given the social problems associated with adherence to treatment, all possible measures should be put in place to combat any predisposing factors to non-adherence. In case of HIV management in children, adherence health education to the parent or the care giver is crucial as the child's life is depended on the care giver at all times. When conducting adherence counselling for a child, health care worker should assess the capacity of the caregiver to understand the treatment plan. The caregiver should also be assessed on acceptance of the child's HIV status and readiness and commitment to start the child on treatment. Other barriers to adherence for children are disclosure of the child's status including how much the child knows about their own status and how much other

household members know. Disclosure to the child should be done with caution and in a language that the child will understand. Disclosure to the educators is also a challenge considering the side effects of treatment and issues of stigma. Health managers should be able to guard against and discourage too many different care givers administering medicine to the child (S.A HIV Journal November 2009).

Adherence counselling in children is difficult because of the nature of the disease and other social issues faced by children living with HIV and AIDS. They have different care takers and the issue of disclosure is still a problem. It is difficult for the child to have just one care giver. It is said that the counsellor has to spend time and have multiple encounters with the care giver to explain goals of the treatment and on adherence. The treatment plan should be planned in such a way that the caregiver can understand it (S.A Paediatric ART guidelines 2004: 98).

Treatment failure can be defined as virological, immunological and clinical factors which occur when treatment fails to suppress viral replication. They can also be described as a continuous drop in CD4 count despite treatment been given to the patient. All these may be associated with progression of HIV disease in a patient on treatment (Foundation for Professional Development 2006). Factors mentioned may be associated with non-adherence to antiretroviral medication. Taking of low doses than prescribed and missing some doses may cause treatment failure.

It is reported that people experience side effect when they start on treatment though the side effects may be minor and temporary. It should also be noted that those side effects may be serious and life threatening. Patients need to be warned about the side effects and be educated about them (Foundation for Professional Development 2004). From the scenario, it is apparent that the counsellor and any staff member dealing with the patients need to have knowledge of the side effects so that they are able to communicate that to the patients.

In HIV/AIDS management, patients need lots of information regarding the disease itself and the change in lifestyle that they have to do in order to live healthier lives and adhere on treatment. Patients need to be counselled on use of condoms, disclosure, smoking and

alcohol abuse and reproductive health counselling (Nurse Clinical Training 2009:156). The factors mentioned require a knowledgeable health care provider as well as good counselling skills.

Adherence assessment should be combined with adherence counselling at each visit. The idea is to identify those patients who are having difficulty with adherence so that assistance can be provided (Ministry of Health, Kenya). As mentioned previously, continuous counselling is essential. Health care providers should not only dwell on those patients who are not adhering to treatment, but also support those patients who are adhering to treatment. It will help boost their morale and avoid losing hope.

The England Journal of Medicine (August 2008) states that there is a close association amongst the disease, the patient, the clinician, the treatment regimen and the patient-provider relationship. This means that the patients need to be cared for holistically. Are our counsellors and other medical team familiar with the holistic approach of care? These are some of the issues that should be examined in relation to counselling..

The University of Pretoria centre for the Study of AIDS journal states the stages that can be followed by the health care workers to address adherence in their facilities. Having those stages will not only assist the health care worker, but most importantly the patients. These stages will clearly show that adherence is a long-term process and not a once off session that can be given to patients at the start of their treatment. The stages are discussed as follows:

- 🚦 Stage 1 - Preparation for treatment. This stage may be used as an acknowledgement of one's HIV status, the acceptance thereof and the plan to deal with the status in order to have a healthy life. This stage is characterised by discussions, HIV and AIDS information including expectation of the treatment. All social factors that may affect adherence should be identified and the patient and the health care worker need to come up with possible approach to deal with such.

- 🚦 Stage 2 – ART initiation and maintenance. The patients need to accept his/her HIV status, make an informed decision to take treatment and show commitment to take treatment. Treatment should be initiated with clear instructions and patient

understands. This stage is crucial as they start to experience side effects and develop some uncertainties to treatment. They need to be supported by health care workers at all times. Patients need to make lifestyle adjustments with support from the health care workers.

- ✚ Stage 3 – Treatment change and re-motivation. Adherence to ART may ultimately diminish with time. Patient will still need motivation to stay on treatment even if they feel better. With time, patients may also develop resistance to some drugs in the regimen. There may be treatment failure or even toxicity and there may be a need for health care workers to relook at the treatment plan. They should be encouraged to seek adherence counselling whenever they feel the need to be re-motivated. Family and friend may come in handy at this period hence the need to disclose to the significant others. The support group may also be beneficial as this will also focus on motivation for its members.

The stages should be used as guidelines to improve adherence in the facilities and should be flexible and accommodative. Lifestyle modification is important so that patients may fit adherence to treatment in their daily activities.

The South Africa government started providing ART in public health sectors in 2004 in what was named the largest roll out plans in the world (SA Operational Plan 2003). Key to the success of the programme is adherence to treatment by the patients.

One of the concerns of the ARV programme is the ability of people living with HIV and AIDS to maintain a near perfect adherence over a long period. Adherence counselling has to meet the following spheres in order for it to be successful:

- ✚ Knowledge – HIV disease, CD4 counts, Viral load medication and side effects
- ✚ Attitudes – Positive believe, perceptions, self efficacy and commitment to treatment
- ✚ Skill – ability to establish rapport, listening and communication skills, family support and disclosure

4. RESEARCH METHODOLOGY

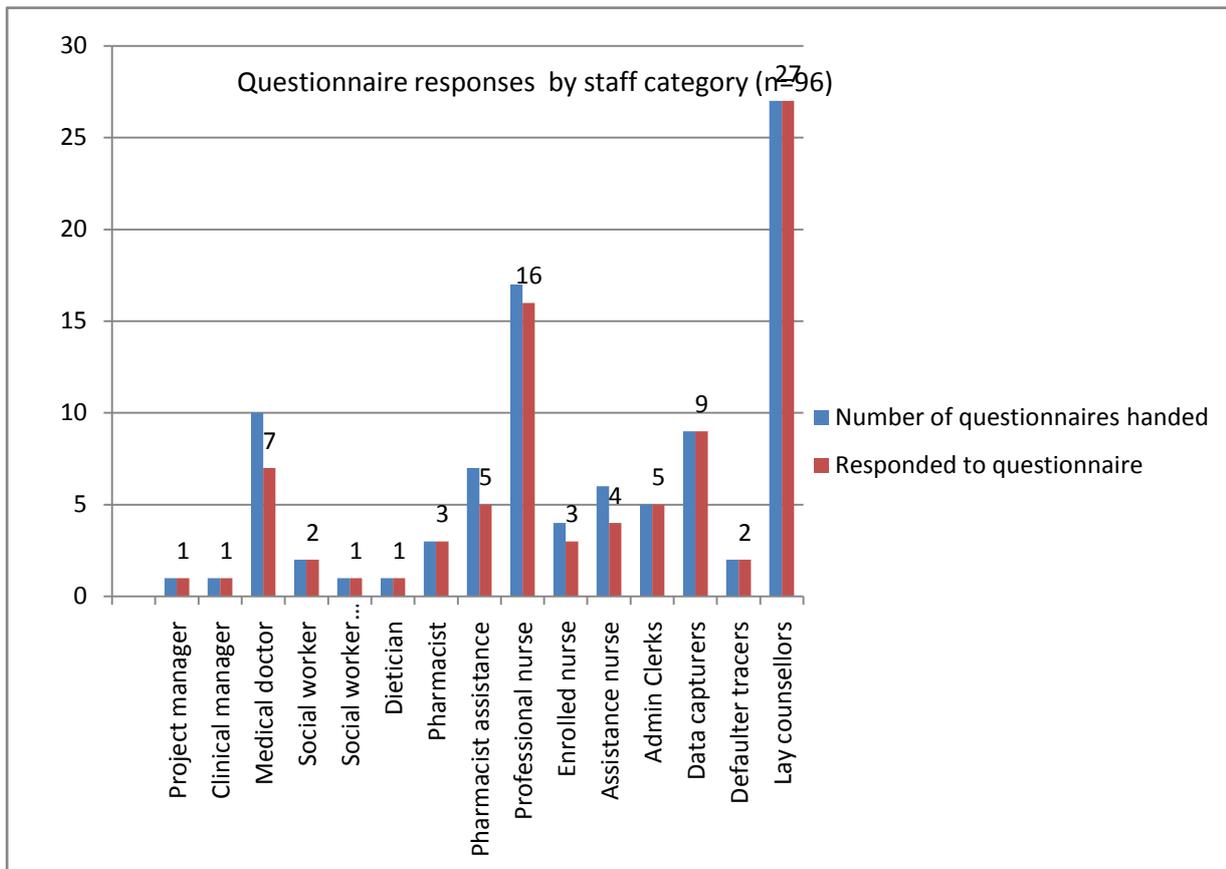
4.1 Data collection

The research was undertaken at Kalafong Hospital CCMT clinic in Pretoria in May 2010. Kalafong CCMT clinic opened its doors on the 1st of April 2004 after the government approval of the ARV roll out programme. It is therefore one of the oldest CCMT clinics in Gauteng. The clinic has the following departments:

- ✚ Adult ART treatment section
- ✚ Paediatric ART section
- ✚ TB /HIV collaboration
- ✚ VCT/HCT
- ✚ PMTCT

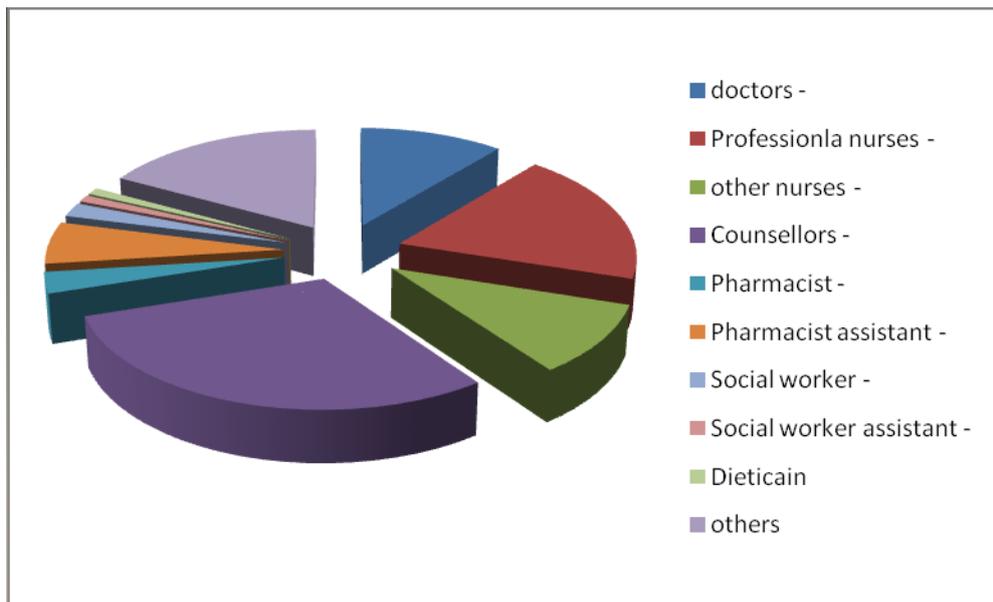
The total number of staff at the site is 101. Target number for the research was 100 participants in an identified CCMT site. Questionnaires were distributed to 96 staff members in a day with collection box placed where all staff members could see it. Consent forms for the research were obtained from all the participating staff. Clear instructions were given to the participants and were told to submit questionnaires the following day. The clinic project manager assisted with distribution of questionnaires to staff members. Questionnaires were collected the following day for counting and analysis. Of the 96 distributed questionnaires, 87 staff members completed the questionnaires (90.60% response rate). The graph below shows the responses by staff categories at the clinic

Figure 02: Responses according to staff category



Participants were asked to indicate their highest completed qualification. Qualifications were grouped together.

Figure 03: Professional Categories



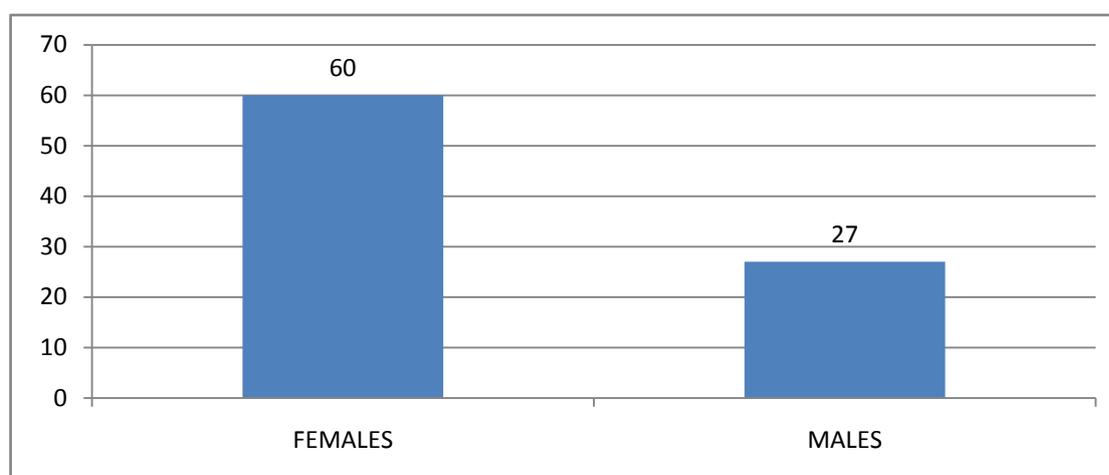
From the responses received, it was evident that counsellors make up 31.03% of the working staff in the CCMT site. Data capturers, admin clerks and defaulter tracers were grouped together as others or support staff for the purpose of reporting and made 14% of all the responses. Of the 13 support staff that responded, 11 (84.61%) have post standard 10 qualifications in computer training. The trainings are either a six months or 12 months basic computer literacy course with respective institutions. Only 2 (15.39%) had post standard qualifications other than computer certificates. A total of 24 (88.88 %) of the counsellors only have grade 12 with 4 of them stated that they have grade 11. Only 3 (11.12 %) of the counsellors have a 6-months or 12 month computer certificates respectively. Recruitment of counsellors may also be a challenge in addressing adherence to treatment on patients. All of the counsellors did not have any health training background.

Questionnaires were distributed in the morning before the daily patients routed started. The questionnaire was based on Linkert Scale range from 1 to 5 where point 1 indicates that the participant strongly disagrees and for point 5 he/she strongly agrees with the question. (See appendices). The questions were structured in such a way as to determine the in-depth knowledge of HIV and AIDS management in respect to adherence counselling and management of patients.

5. DATA ANALYSIS AND RESULTS

The research aimed to determine training needs of staff in HIV/AIDS management including adherence to treatment and how this can have an impact on patients' adherence to treatment. It should be noted that HIV management is dynamic and health care personnel need to keep abreast with the latest development. Adherence plays an important role on management of HIV and AIDS. It therefore becomes important to make certain that health care workers promote adherence at all levels of care. There are several factors that affect adherence to treatment of which health care workers need to take cognisance of. Knowledge of HIV and AIDS is crucial at this point and therefore training need to be geared towards that. HIV positive patients have lots of social, biological and social factors that affect adherence to ART. The demographics of the survey showed that the CCMT clinic employs more females than males. Of the 87 participants, only 27 (31.04%) were males.

Figure 04: Gender proportion at the respondents



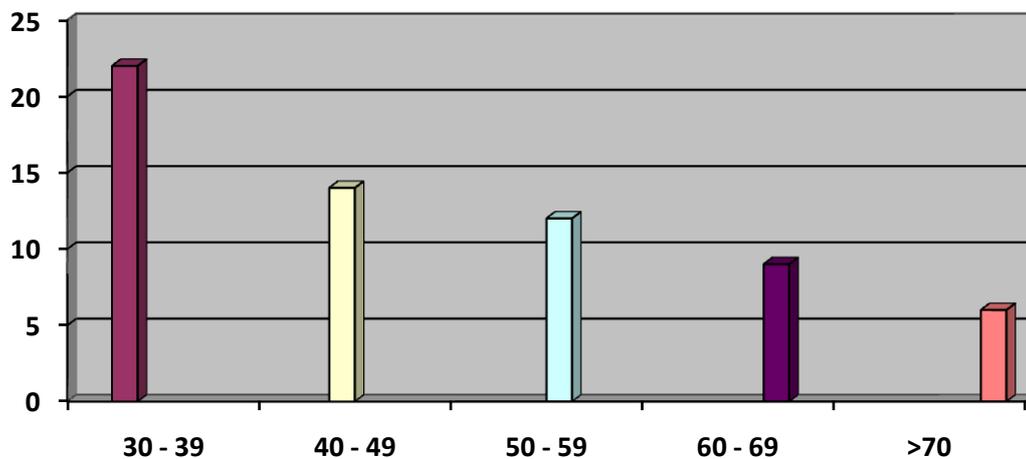
The doctors made up 12% of all the participants and it is a good response from that cadre of staff. A good response was also received from the social workers, dietician and the pharmacists where the response to the questionnaire was 100% for all of these categories. The CCMT clinic employed 20 professional nurses and they also made up 54,54% of the

responses received. A total of 19 questionnaires were distributed to the nurses and 17 were completed which equates to 98.47% completed questionnaire from the professional nurses.

Lay counsellors are the pillars of the programme as they are placed in the preparation section where patients' readiness programme is conducted. Adherence counselling is undertaken for all patients at the pharmacy on all patient visits and there is an ongoing need for more counsellors at the site at any given time. The clinic employed 30 counsellors and 27 were given questionnaires and there was 100% participation from the counsellors that were given the questionnaires.

Age distribution figure 05 was from 21 – 70 years (mean 37 years) and was a matter of concern that's some staff was still working beyond retirement age.

Figure 05: Age distribution of participants

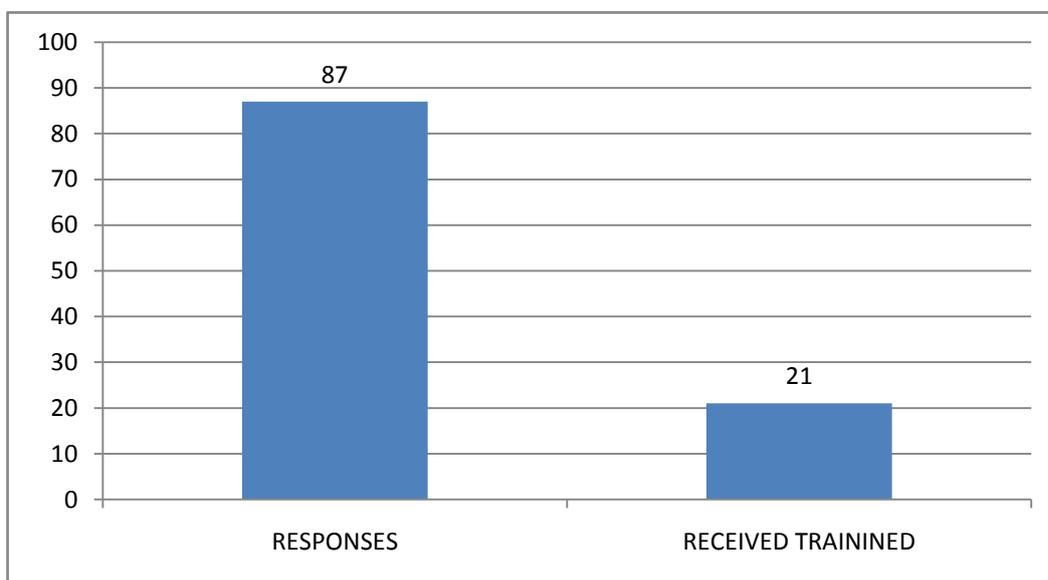


Collected data was analysed using quantitative analysis. The percentage of responses were analysed against the total number of all the participants per staff category.

Received training in HIV/AIDS before starting working at the clinic:-

There are challenges regarding recruitment of health care workers to the CCMT clinic. Only (24.13%) of the responders had training prior to being appointed at the site. The challenge may be due to lack of adequate HIV and AIDS training dedicated to the health professionals Training is usually dedicated to those working in the HIV and AIDS clinics. Only 7 (25.92%) counsellors had training prior to working at the site.

Figure 06: Number of participants trained before start working

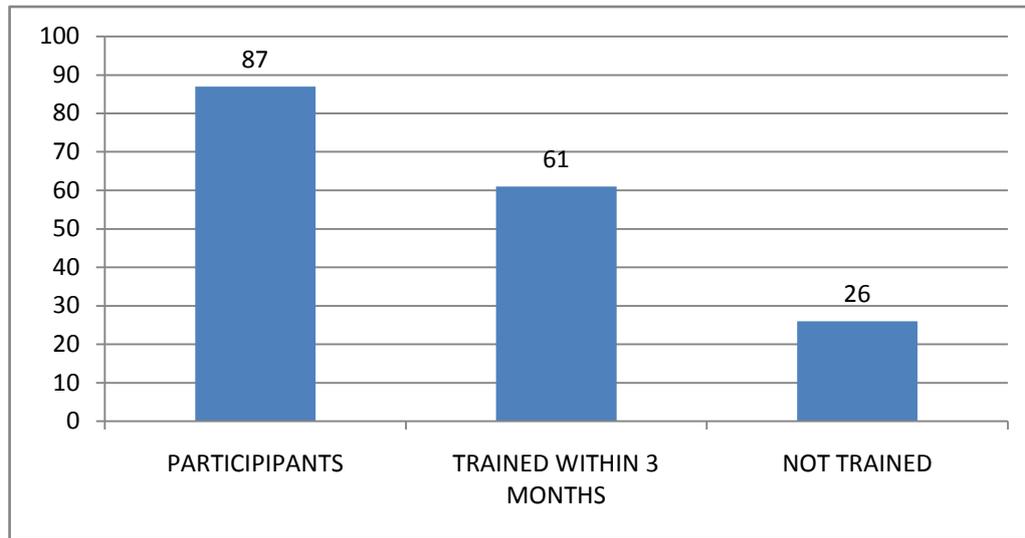


From all participants in the research, 61(71.00%) participants were sent for training within the first three months of working at the CCMT site. HIV and AIDS trainings are offered by the government HAST directorate or an affiliated NGO that do trainings for the department of health and other stakeholders. The response showed that some health care workers will work in the CCMT clinic without training and this may be a challenge to quality health care.

From the questionnaires received, all categories of staff except for counsellors, support staff and one assistant nurse, were sent for training within the first three month of working at the clinic. 13 (100%) of the support staff were not sent on training with the first three month. The questionnaire did not have provision for staff member to indicate if they were ever sent on training within a specific period. Only 12 (44.4%) Of counsellors were sent on

training within the first three month at the clinic. One assistant nurse was not send for training and the questionnaire did have provision to give reasons for such.

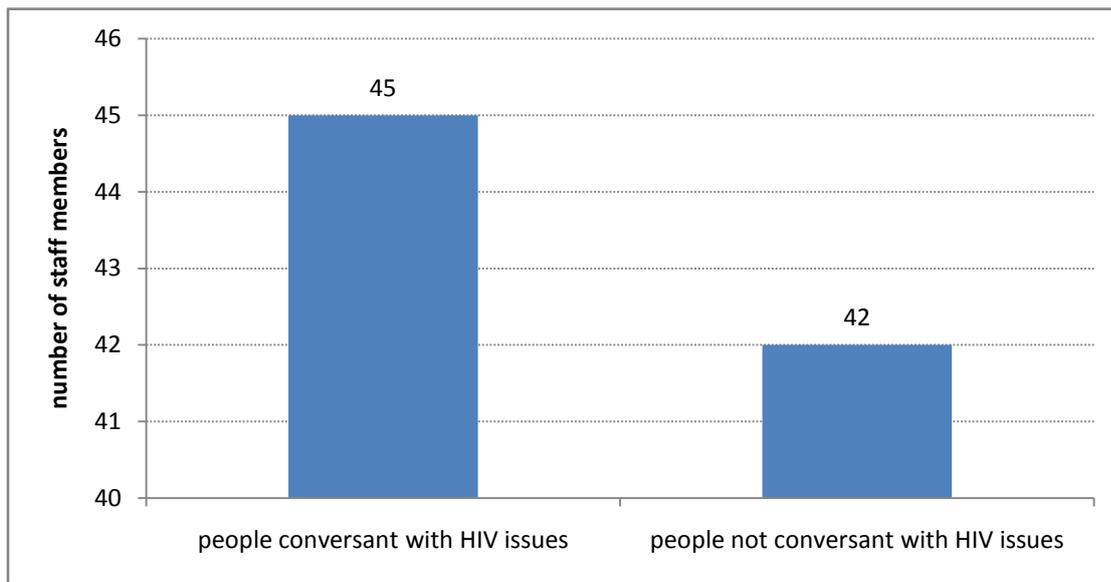
Figure 07: Number of participant and those trained within three months



You are adequately trained to address any issues in HIV/AIDS management:-

This will determine the depth of HIV and AIDS knowledge of participants and the confidence they have with their HIV knowledge. Issues in HIV and AIDS may relate to side effects, adverse effects, drug regimen, stigma associated with the HIV status and certain social issues at home that may affect adherence to ART.

Figure 08: staff members conversant with HIV issues



For this scenario, all of the doctors responded that they are conversant with any HIV issues. The response from counsellors, which are seen as the backbone for adherence counselling in the programme was that they generally agree that they have knowledge in HIV and AIDS management but have a lack of confidence.

You fully understand what is meant by adherence counselling:-

All the participants indicated that they do understand what is meant by adherence counselling. The medical professionals indicated that they strongly agree what is meant by adherence counselling while the other cadre, i.e. support staff and counsellors indicated that they agree what is meant by adherence counselling.

You know of factors that may affect adherence to ART:-

These factors are already mentioned above and health care professionals have to be on the lookout for such. Factors mentioned are not all inclusive and people's circumstances and situations are never the same. Health care workers need not only concentrate on those factors and ignore potential risks that can be identified amongst their patients. The questionnaire was not open enough as it did not give option for health care workers to indentify some of the factors. It may lead to limiting responses as those factors can be more than what are already discussed above. Knowing the factors that affect adherence may not necessarily translate into knowing what to do if faced with a situation. It is necessary for health care to have training in order to address such factors as they arise. A total of 43(49.43%) of participants responded that they are familiar with those factors. This may be used as a starting point for quality health care. This may assist the health care workers to identify those risk factors and refer accordingly.

You are able to assist other multi-disciplinary team to indentify if patients won't be able to adhere to treatment:-

It should be noted that the CCMT programme uses a multidisciplinary approach to patient care hence the employment of all levels of the health team. Patient management is a joint venture with the patients being aware of her/his treatment plan and having a say in the decision making processes considering his health. Continuum of care is maintained by regular referrals, follow-ups and consultations with other health team members. Initiation on ARV is never an emergency and all aspects of adherence need to be taken into consideration at all times. The medical staff indicated they are able to assist other multi-disciplinary team members to identify patients that are not adhering to treatment. 25 (92.60%) of the counsellors agree they are able to assist the multidisciplinary in indentifying such patients. Only 2 (7.40%) of counsellors were neutral on this questionnaire. The support staff was neutral on the questionnaire, indicating their lack of knowledge in adherence and their role in the multidisciplinary team of the clinic.

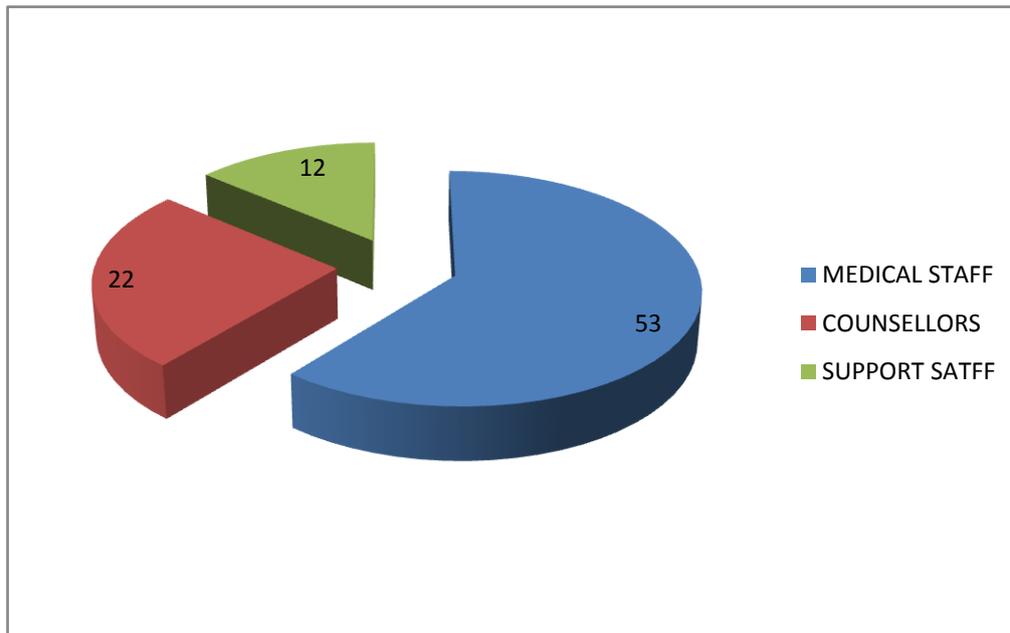
You believe you are good in counselling skills and HIV treatment knowledge for your patients:-

The question aimed to determine the level of confidence of health care workers when they conduct counselling. As mentioned, knowledge and skills are important in management of HIV including counselling. The skills are acquired over period of time and if correctly used, they will improve adherence to ART. For this question, 51 (58.62%) of the respondents indicated that they have good counselling and listening skills for the patients. The remaining 36 (41.38 %) did not believe they have good counselling and communication skills. The 36 respondents comprised the counsellors and support staff. Only 4 (14.82%) of the counsellors indicated that they have good counselling skills. Of the support staff, 13(100%) stated that they do not have any counselling skills.

You are conversant with possible side effects of ART:-

Knowledge about HIV and skill to conduct counselling alone are not enough to ensure a successful adherence to patients. Most people on ART have problems with side effects and lack of adherence may be associated with them. ARV's have side effects that may be life threatening if not dealt with accordingly. The questionnaire was set to test the staff members' knowledge about common side effects of the ARV's. A total of 53 (60.92%) of the respondents which are the entire medical staff indicated that they are conversant with the side effects associated with ARV's. Only 34(39.08) of the other respondents indicated they are not familiar with the ARV side effects. Of the 34 respondents, 22(64.70%) were the counsellors and the remaining 12(35.30%) were the support staff.

Figure 09: Number of staff that are conversant with ARV's side effects



You are aware of a successful adherence rate required in the management of HIV/AIDS:-

This question was formulated to enable the health care workers at the clinic to rate their adherence performance in respect of what is nationally recommended. The National ART Guidelines 2004 recommend adherence rate of 95% and more. This means that a patient should not miss more than 3 doses of his/her monthly treatment. To achieve this, measures need to be put in place to remind patient to take their treatment. For this question, again the medical staff indicated that they are aware of the successful adherence rate as recommended in the guideline. The discrepancy was again with the counsellors and the support staff. Out of the 27 counsellors that responded to the questionnaire, 15 (55.56%) of the counsellors do not know the recommended adherence rate. This also calls for a call for concern in the counselling that they are conducting. 10 (76.00%) of the support staff do not know the recommended adherence rate.

Health care worker know the meaning of treatment failure and how to detect that:-

Some patients on ARV's will either fail clinically or virologically. Patients may continue to take treatment but their clinical condition still remains the same or even worsens at times. This is termed physiological treatment failure. Other patients may improve clinically but

when routine blood monitoring is done, the viral load may still be high, meaning that the drugs are not working on the suppression of the virus as intended to.

The ability of the health care worker to identify such a patient will ensure prompt management and thus saving a patient. Unfortunately 15 (55.50%) of the counsellors are not conversant with the meaning of treatment failure and this may pose a challenge in identifying such cases.

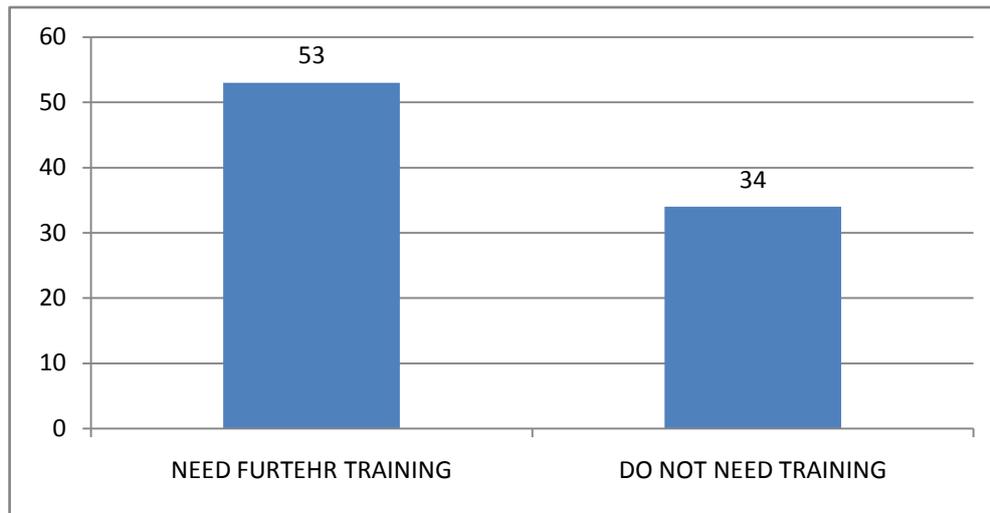
You have good counselling, listening and communication skills: –

This was developed to find out from the health care workers if their counselling skills are good and if they feel confident enough when counselling their patients. Counselling makes the cornerstone for management of HIV positive patients. Most patients have lots of sociological problems and the ability of the health care workers to counsel them effectively; will actually assist to identify such problems. The respondents indicated that they have the skills required of a good counsellor. The entire medical staff strongly agreed that they have all the skills while the counsellors and support staff agreed they have the skills. The questionnaire limitations were that it could not measure level of knowledge on this question.

You still need further training in counselling skills:-

HIV and AIDS management is dynamic and diverse and needs continuous research and information update. There is a need for staff to keep abreast with latest information and developments. New approach to care and treatment keeps changing and so health care workers need to know. There are new treatment guidelines that were released by the NDOH in April 2010 and it is the duty of the health care workers to get familiar with new treatment protocols and regimen. The question was set to determine the level at which health care workers feel they need to equip themselves with knowledge in their workplace. It will also assist to determine future training needs for staff members. Despite the fact that people have been trained, participants showed the need for further training in HIV and AIDS management. From the received questionnaires, 53 (60.92%) indicated the need for further training.

Figure 10: Training needs for participants



The comment section was designed in such a way that staff members can give their honest opinion on the future of adherence counselling training that they feel is needed for the success of the programme. Training and updated information are essential tools in the fight against HIV and AIDS. Health care workers need information to enable their work to be relevant to current situation of HIV and AIDS pandemic.

RESULTS BY OBJECTIVE

The results section focuses on the four main objectives of the research. The section covers the elements in the research questionnaires that were used to determine knowledge and training in HIV and AIDS management including adherence to treatment. The results also show how the different staff categories views the trainings they have received and also on further training that they may need to enhance their counselling skills.

The questionnaire was formulated to cover the entire staff category in the clinic in respond to the questions asked. Respondents were categorised according to their profession and position at the clinic. This was to enable the researcher to assess the needs in HIV and AIDS training according to the staff roles and responsibilities at the clinic. The results will thus be

determined according to available categories at the clinics and the comments that they have made. The results were grouped according to staff categories

The tables below will depict the average score of the Likert scale according to categories that have responded. The scores are average from all the respondents.

1 – Strongly disagree; 2 – Disagree; 3 – neutral; 4 – agree; 5 – strongly agree

Objective 01:- To assess the level of skills of health care workers when they counsel patients on adherence

Research questions	Staff category	Average score
1. Received any training in HIV and AIDS before starting at the clinic	Doctors	4
	Pharmacist	4
2. Received training within the first three months at the clinic	Pharmacist assistant	3
	Professional nurse	4
3. You are adequately trained to address any issues in HIV and AIDS management	Enrolled and Assistant nurses	3
	Social worker	4
	Social worker assistant	3
4. You fully understand what is meant by adherence counselling	Dietician	4
	Counsellors	3
5. You know factors that affect adherence to treatment	Others (clerks, Data capturers)	2
6. You are able to assist other multi-disciplinary team members to identify patients who won't adhere to treatment		

The table above shows that there are cadres of staff that do not receive training and are not prioritised by the clinic and the training coordinators. The results questions also depicts that training in the clinic is usually arranged when people start working at the CCMT clinic. The clinic support staffs are not given priority with HIV and AIDS training and this was also raised in the comment section.

Objective 02:- To determine the level of knowledge of ART adherence issues of staff tasked with counselling of patients

Research question	Staff category	Average score
7. You believe you are good in counselling skills and HIV treatment knowledge for your patients	Doctors	4
	Pharmacist	4
	Pharmacist assistant	4
	Professional nurse	4
8. You are conversant with all possible side effects of ARV's and management of those side effects	Enrolled and Assistant nurses	3
	Social worker	5
	Social worker assistant	4
	Dietician	4
9. You are aware of a successful adherence rate required in management of HIV and AIDS	Counsellors	3
	Others (clerks., Data capturers)	2
10. You know the meaning of treatment failure and how to detect that		

The results show that the counsellors and the support staff are not well trained in counselling skills and management of HIV and AIDS.

Objective 03:- To identify gaps that needs to be filled in order for ART adherence counselling to be effective

Research question	Staff category	Average score
11. You believe you have good counselling, listening and communication skills	Doctors	4
	Pharmacist	4
	Pharmacist assistant	3
	Professional nurse	4
12. You still further training in counselling skills	Enrolled and Assistant nurses	3
	Social worker	5
	Social worker assistant	3
	Dietician	4
	Counsellors	3
	Others (clerks., Data capturers)	2

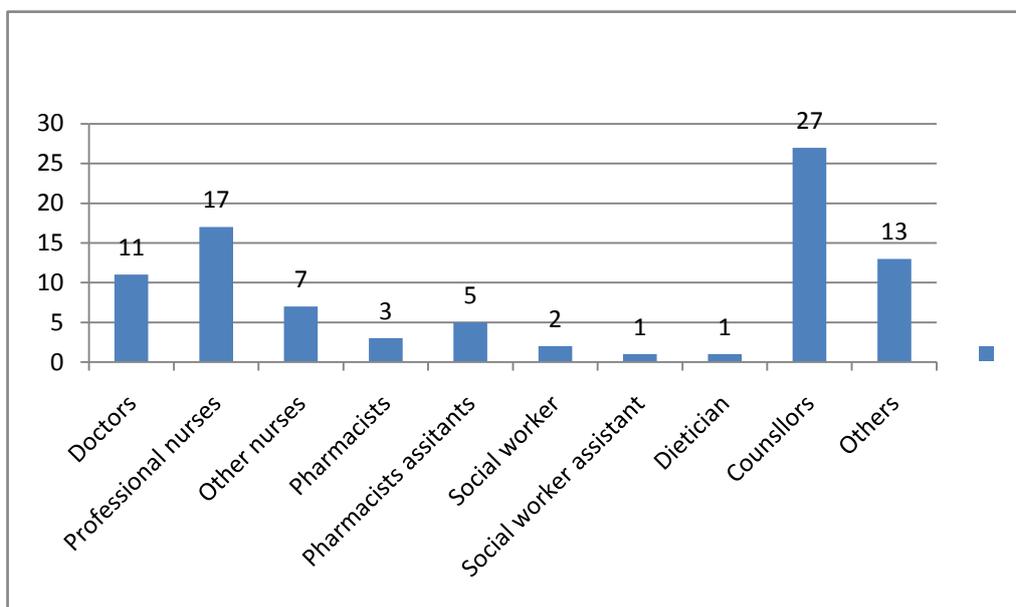
Counselling of patient should actually happen at all levels of care. A problem may be detected at the counsellors, the social worker or even the dietician. Multidisciplinary team

effort needs to be emphasised. This is an in-depth analysis of the training needs that are crucial for health care professionals in the CCMT sites.

Objective 04:- To provide guidelines for training of counsellors

The comment section made it possible for the participants to state their training need and make recommendations for management of HIV and AIDS at the CCMT site.

Figure 11: Any other training needed to ensure good adherence counselling:-



Training is seen as an essential element for all staff members as they indicated that they need training.

Comments on training already received:-

Staff members were requested to give their personal input on the training that they have. 10(90.91%) of the doctors responded that training did not incorporate skills such as counselling and communication. All professional nurses responded that training was sufficient and it covered all aspects of HIV and AIDS management.

Despite challenges in adherence counselling at the site, all counsellors responded that they received adequate training in HIV and AIDS management. The clinic support staff i.e. admin

clerks and data captures responded that they want to receive training in basic HIV and AIDS management to be able to attend to clients queries and to further have a better understanding of the system.

The third comment on counselling as a career received a fair response from the counsellors. All the counsellors responded that they do not see counselling as a career.

The fourth comment on what is missing in the current training on adherence. As indicated earlier, the doctors responded that there should be skills component in the training.

The last comment will be covered extensively in the recommendation section. The recommendations will be summarised to include the entire staff category. The following were specific comments from the respondents on training.

✚ Comments on training already received:-

Under the comments section, the following are a summary of findings from the participants:

✚ Training needed to ensure good adherence counselling – all the participants mentioned the need for further training to improve adherence on their patients. Health care professionals as described above, indicate the need to know more on side effects and their management. For the counsellors, their training needs ranges from basic HIV and AIDS management, treatment regimen and basic counselling skills that include listening and effective, communication.

The results show that training is seen as an essential element for all staff members as they indicated that they need training. For the counsellors, their training needs ranges from basic HIV and AIDS management, treatment regimen and basic counselling skills that include listening and effective, communication

✚ Training already received – health care workers are happy with the training that they have received. For other staff members that have not received training yet, such as the support staff and the counsellors, they felt there is a need to train before they

start working with patients as this will boost their confidence in patients' management. Training should also emphasise on skills development, coaching and effects of drugs on the HI virus itself. Staff members were requested to give their personal input on the training that they have. 10(90.91%) of the doctors responded that training did not incorporate skills such as counselling and communication. All professional nurses responded that training was sufficient and it covered all aspects of HIV and AIDS management. Despite challenges in adherence counselling at the site, all counsellors responded that they received adequate training in HIV and AIDS management. The clinic support staff i.e. admin clerks and data captures responded that they want to receive training in basic HIV and AIDS management to be able to attend to clients queries and to further have a better understanding of the system.

Staff members were requested to give their personal input on the training that they have. 10(90.91%) of the doctors responded that training did not incorporate skills such as counselling and communication. All professional nurses responded that training was sufficient and it covered all aspects of HIV and AIDS management.

✚ Despite challenges in adherence counselling at the site, all counsellors responded that they received adequate training in HIV and AIDS management. The clinic support staff i.e. admin clerks and data captures responded that they want to receive training in basic HIV and AIDS management to be able to attend to clients queries and to further have a better understanding of the system.

✚ Counsellor as a profession – Counselling as a career received a fair response from the counsellors. All the counsellors responded that they do not see counselling as a career.

✚ What is missing in your current training on adherence – As indicated earlier, the doctors responded that skills component such as interviewing and listening should be included in the training. The question was designed to encourage participants to come up with any training elements that they think should be included in the adherence training curriculum. The health care professional mentioned elements such as approach to patients on traditional medicines.

✚ Recommendations from other staff members to improve on adherence –
Participants responded that in order to address all the social issues that may affect adherence to ART, all health care workers need to be geared up and well informed. The following are a summary of recommendations made by participants the recommendations will be summarised to include the entire staff categories.

- Adherence counselling for all patients during the clinic visits despite absence of challenges from the patient site.
- Referral of all patients to other health care professionals when a need arises, e.g. referral to social worker in case of social problems
- Patient education on the treatment and possible side effects
- Involve the patient in decisions making processes about their treatment and health
- Maintain a good relation with the patients to gain their trust
- Always provide a clear and accurate information on HIV and treatment and consult other health team members
- Involve the family and significant others if the patients so agrees
- Case presentations for staff and proper approach and management of such cases. Staff members will learn from each other and also clarify certain issues in patients' management
- Clear treatment guidelines and clinic protocols for all new staff members
- Clear referral guidelines to other department when a need arises
- Training of health care workers on adherence

6. SUMMARY OF THE SURVEY QUESTIONNAIRE

The research topic showed that health care workers need to always be reminded of the goals of the antiretroviral treatment of which the main aim is to increase people's quality of life. Lack of adherence and mismanagement may lead to fatal consequences.

Support staff did not receive any trainings in HIV and AIDS management or even adherence counselling. HIV and AIDS management is not seen as their core business in the clinic despite the fact that they see patients on a daily basis. The administration clerks are at the fore front of the clinic and they are the first people to meet the patients when they come to the clinic. They book patients, open their files and check if they meet the criteria for ARV eligibility. Training for this group of staff should also be considered. Failure to train other staff members causes a breakage in the continuum of health care at the clinic. It is acknowledged that adherence counselling forms the basis of HIV and AIDS management programme. If patients adhere on their treatment, then it becomes clear that all the objectives of the ART treatment will be accomplished. Our overall goal in the management is to improve the quality of life of people infected with HIV. Adherence also involves the safe use of drugs to make sure that they are effective (International HIV/AIDS Alliance). Helping a person to get better on treatment is the most effective way to support adherence. It encourages them to keep taking their ARV's correctly. Training in HIV and AIDS management and adherence are the key elements to successful management of people on ARV's. Training in adherence counselling includes aspects such as social and psychological considerations of the patients. The multi-sectoral approach to HIV care is good, provided all the team members are familiar with their roles and there is proper coordination of such. Continuum of health care should not be broken by any of the team members.

The research also shows that counsellors are recruited randomly with no formalised set of criteria. Their schooling background is not much considered as there are some without Grade 12. A cause for concern in such a scenario will be comprehension and understanding of knowledge that they have to impart to patients. They did not receive training prior to being appointed at the CCMT site. This will mean that they only got on-site training by fellow counsellors and were then expected to work with clients. The in-service training is usually a

day or two where counsellors have to sit with another counsellor while conducting counselling to observe the skills of counselling. Basic HIV and AIDS information is not formally given during this in-service training and counsellors work on a trial and error model of managing patients. Training is only arranged within three months of employment depending on the number of trainees available and schedule for training by the training institution which is usually an NGO. Training by the government occurs only four times a year, quarterly, and this also depends on the number of prospective candidates per training session. Only 2(3.01%) counsellors received training before they started working at the CCMT clinic. The other remaining counsellors reported that they only received their training in their fourth or even fifth month of their employment.

The other challenge that was raised from the survey was the use of retired nurses who have been out of practice for some time. The decision to make use of the retired nurses was taken due to the fact that there is already a shortage of nurses in other health sectors and departments within the hospital. The HIV and AIDS pandemic has been around for sometime in the country but the CCMT roll out plan only came into effect in 2004 with only few hospitals offering the service. These nurses also find it a challenge to work in such a demoralising environment with a high workload (PHC Manual 2009). Training is also a challenge for these nurses as they are expected to start working without any formal training in HIV and AIDS management. Occupational injuries amongst the retired nurses were also reported. These may be due to their inability to focus and fatigue.

There is also a concern amongst the retired nurses and the counsellors on the content of adherence counselling. The Minister of Health's HCT campaign is a good initiative that will encourage people to test and be put on treatment. The minister advocates for testing of 15 million people by end of March 2011. The campaign was implemented in all health care facilities in the country. Human resource and capacity building becomes the most important factor for the HCT campaign. There is need for referral of HIV positive patients to ART sites. The challenge at Kalafong hospital on this HCT is lack of human resource for the campaign. Few people were recruited for the campaign with no training at all. Retired professional nurses were recruited back into the system with no training. Quality of care may be compromised by such challenges.

7. CONCLUSION AND RECOMMENDATIONS

Many factors that affect adherence to ART have been discussed. Adherence is essential to achieve the desired goal of the ART programme by the health care providers. Patients benefit from good adherence as well other government interventions. It should be noted that, it is not always possible for healthcare workers to predict which individual will ultimately adhere to their treatment plan. This is the case because adherence to treatment does not correlate with gender, cultural background, socio-economic status or even educational level of an individual. That is why it becomes very difficult to ensure good adherence on all patients. For these reasons, it becomes crucial for health care workers to provide all possible strategies to promote adherence to treatment. Healthcare workers usually focus their adherence education on the new patients while those that have been on treatment for long may be neglected. The participants came up with relevant recommendation to improve adherence at the clinic. Training of all healthcare workers in HIV and AIDS management is essential. Emphasis on adherence and its entire components should be made. Health care workers need to know the goals for the ART programme and always keep that in mind when they work with patients. It is acknowledged that there is an increased patient workload with limited human and other resources. These should not deter healthcare workers from promoting quality health care for the benefits of the patients. Monitoring and ongoing support of patients are essential for treatment success. Training should be offered to all staff members working at the CCMT site regardless of their job category. The intensity and depth of the training maybe be determined according to the staff category and the topic to be covered also. There should be regular in-service trainings for staff at the clinic to update them on latest developments or even to remind them of their core business. Offsite refresher courses can be arranged through the health department.

The following are a summary of the recommendations to promote adherence to treatment:

-  Counselling of all patients on every clinic visit – It is imperative that time is allocated to provide counselling to all patients on their clinic visits This should be done

consistently by all health care workers as it is evident that adherence gets less as time progresses (SA ART guidelines 2004). Every patient interaction should be seen as an opportunity for adherence reinforcement. Health education is required to provide clear and accurate information about HIV and drugs. These include but not limited to, drug interactions and side effects.

- ✚ Clinic to put systems in place to monitor and follow-up defaulters – There is a need for clear monitoring and evaluation of the ART programme within the clinic. Adherence monitoring and support should be fully integrated in the clinic continuum of care. Regular check-ups and clinical monitoring is also essential
- ✚ Timely response to any barriers such as drug side effects. Some patients experience severe side effects and may decide to stop taking their treatment. Side effects may also pose a challenge in patients. They have to be detected early and managed accordingly or they became fatal to patients.
- ✚ Regular on-site in-service training for staff. Management should make it their duty to ensure that there is an ongoing training and support for health care workers. New approaches to adherence should be emphasised. Information materials should be distributed to staff on regular basis. Up-dates on new guidelines, treatment regimen and protocols should also be done on regular basis
- ✚ Training of newly recruited staff members within a week or two of being employed at the CCMT site. Training of new staff member should be made a priority by the clinic management. The initial training should emphasise on basic management of HIV positive clients including the referral for continuum of care. Clear referral guidelines to other health team members for prompt continuity of care and management. Adherence counselling training is also crucial for the newly recruited.
- ✚ Training of other health care workers within the hospital on HIV and AIDS management and ART. HIV and AIDS training should not only be confined to the CCMT sites. HIV positive patients form part of daily patients seen at other hospital departments. They are seen at OPD, casualty and in the wards. Patients are not only

managed at the CCMT clinic. Continuum of care may be broken if some health care workers are not conversant with HIV patient management.

- ✚ Patients must be encouraged to disclose to a significant person in their lives. Disclosure of a patients' status should be given a thorough thought and be done diligently. There is still fear of rejection and stigmatisation amongst the patients. Health care workers need to work with the patient and encourage them to disclose to someone who will assist with their adherence to treatment. The people who will be providing support to patients also need to be educated on adherence and the treatment. The more people are involved in management of HIV and adherence, the more patients will get good results and improve their quality of lives. Patients may be encouraged to join support groups. The support group should be well organised and adherence to treatment should be made one of their major objective. Regular information sessions for the support group are also crucial.
- ✚ The Healthcare workers need to provide the patients with the means and methods to help them remember when to take treatment. Human nature does not allow us to remember everything every time. Patients do not have control over time, activities by other people around them and on what will happen in the future. It's only human to be forgetful at times. Diaries, charts, alarms and even pill boxes will be helpful to assist patients to remember to take their treatment. Patients can also be encouraged to keep few drugs with them when travelling. Taking of treatment can be linked to the person's daily routine.
- ✚ Reducing the number of pills that the patient is taking is also helpful. Providing combination drugs and reducing the frequency of taking the treatment may be beneficial to the patients. One of the reasons for non-adherence is pill burden. Pharmaceutical companies have come up with such drugs and in some cases; they produce drugs that can be taken once a day. Government may have to look into such drugs and make them available for patients. The government and relevant stakeholders need to work closely with pharmaceutical companies on this matter.

- ✚ Improving relationships between healthcare workers and the patients. Healthcare workers should not be judgemental of their patients. They should be good listeners and counsellors. They should be approachable and accommodating to their patients. Relationships may include aspects such as availability of resources at all times. Clinic times should accommodate patients who are having fulltime employment. There is a need for flexibility to accommodate patients' circumstances.
- ✚ Assessing and managing patients' psychosocial concern at all times – There are lots of psychosocial issues that may affect adherence to treatment. Factors such as workplace, home background, non-supportive family members, stress, drug and alcohol abuse, food, traditional medicines and stigma and discrimination. These may be the most challenging factors to adherence hence healthcare workers need to be able to detect and address such issues. Referral of patients to other health team members and an increased level of effort to combat the issues.
- ✚ The Institutions of higher learning have to incorporate HIV and AIDS management in curriculums of health professionals. New graduates should have knowledge on HIV and AIDS management.
- ✚ Shortage of staff – the government will have to take it upon them to address the shortage of staff in the CCMT clinics and all other health departments. There is a shortage of nurses, doctors and pharmacists in all government institutions. This has a negative impact on delivery of care to the patients. Patients' numbers increases on daily basis and the workload is unbearable. Staff morale is dampened by the workload and the nature of their work.

Taking treatment for any kind of illness is not easy. Having to take treatment for the rest of one's life at the same time is even more complicated. Health care workers need to understand these dynamics and not be judgemental of their patients. Simplification of ART regimen is long overdue. Management of patients on ART need a holistic approach. Failure to manage the patients has serious health and social consequences. It affects all spheres of life and it also become costly for the government. There will be increased medical costs due to health complications. The workplace will be seriously affected due to absenteeism that

will lead to low production. There will be an impact in the communities and schools as it can lead to orphans and child headed families. HIV is no longer a health issue but need to be addressed across all spheres of life. Addressing and dealing with all those psychosocial factors that affects adherence to ART will see people surviving on treatment. Adherence to ART is the cornerstone to the ART programme as a whole and an increased quality of life of PLWHA will only be attained through good adherence to treatment. The health care system and other stakeholders have to ensure the success of the CCMT programme and meet the goals of the ART as stated in the National Guidelines. There is also a need to involve CBO and other HBC organisations to assist with adherence to patients. They will assist to look at the family background and situation at home. They may perform DOT strategies on patients who fail to take their treatment. The National Strategic Plan 2003 – 2007 advocates for use of such structures in the community and the use of Public Private Partnerships to fight HIV and AIDS. Training in HIV and AIDS management for all these stakeholders still plays an important role. All available resources need to be put together to combat HIV. Above all health care workers need to be adequately trained to address factors that affect adherence to ART.

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APPENDIX 01: Research Questionnaire

1. COUNSELLING SKILLS QUESTIONNAIRE – HEALTH CARE WORKERS

STAFF CATEGORY: _____

AGE: _____

QUALIFICATIONS: _____

NUMBER OF MONTHS OR YEARS AT THE CLINIC: _____

SCALE: 5 – STRONGLY AGREE; 4 – AGREE; 3 – NEUTRAL; 2 – DISAGREE; 1 – STRONGLY DISAGREE

QUESTIONS	1	2	3	4	5
Received any training in HIV and AIDS before starting at the clinic					
Received training within the first three months at the clinic					
You are adequately trained to address any issues in HIV/AIDS Management					
You fully understand what is meant by adherence counselling					
You know of factors that may affect adherence to treatment					

You are able to assist other multi-disciplinary team members to identify if patient won't adhere to treatment					
You believe you are good in counselling skills and HIV treatment knowledge for your patients					
You are conversant with all possible side effects of ARV's and the management of these side effects					
Aware of what is a successful adherence rate required in management of HIV/AIDS					
You know the meaning of treatment failure and how to detect that					
You believe you have good counselling, listening and communication skills					
You still need further training in counselling skills					

ADDITIONAL COMMENTS:

- Any other training needed to ensure good adherence counselling

- Comments on training already received

- If you are a counsellor at this present moment, would you consider it a career or a temporary thing?

-
- What is missing in your current training on adherence

-
- What recommendations would you have for staff to improve adherence counselling
-

APPENDIX 02: Consent form

STELLENBOSCH UNIVERSITY CONSENT TO PARTICIPATE IN RESEARCH

Adherence to Antiretroviral Treatment.

You are asked to participate in a research study conducted by *Ramadimetja Elsie Raphela* from the *Africa Centre for HIV and AIDS management* at Stellenbosch University. The results of the study will contribute to a research paper. You were selected as a possible participant in this study because of your position in the ARV clinic and management of HIV and AIDS in the area where you operate.

1. PURPOSE OF THE STUDY

The study will help identify gaps that may be found in training of the ART programme and to further assist health care workers to better manage their patients and promote adherence to ART.

2. PROCEDURES

If you volunteer to participate in this study, we would ask you to do the following things:

Assess the current situation in as far as adherence counselling and management of HIV positive people are done in your work environment. Look at what you think is not done correctly by the health care providers when they conduct counselling and also on what need be to done to improve adherence of patients to treatment. Fill in the questionnaire and add your comments also if you have any.

The study will require you to use your own experiences that you already have in the field of HIV and AIDS management. Take your time to study the questionnaire and answer as simply and honest as possible. The questionnaire will require about 10 – 15 minutes of your time. The questionnaire should be filled at the CCMT clinic where you work. Questionnaires will be distributed at the beginning of the week and completed forms will be collected on Monday the following week. This will give you time to familiarize yourself with the contents of the questionnaire before you start completing it.

3. POTENTIAL RISKS AND DISCOMFORTS

The procedure does not require any physical contact or medical examination hence there is less or no potential risk or discomforts associated with the study or procedure.

4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

The study will assist the researcher to identify gaps in adherence counselling that can be communicated with policy makers to ensure that better services and management of HIV and AIDS is improved.

5. PAYMENT FOR PARTICIPATION

The research is purely voluntary and there is no remuneration budgeted for the participants

6. CONFIDENTIALITY

Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will be disclosed only with your permission or as required by law. Confidentiality will be maintained by means of safe data keeping where only the researcher will have access to the information. Participants should not fill in their names or any form of identity and they will remain anonymous in respect of the current study.

The data will be analysed by the researcher and only findings of the study will be communicated to the relevant university department.

The final result will be published in the researcher's final research document and this will contain analyzed data and results of the whole study. Under no circumstances will the participants' names or identities appear in the final document to be published.

7. PARTICIPATION AND WITHDRAWAL

You can choose whether to be in this study or not. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise which warrant doing so.

8. IDENTIFICATION OF INVESTIGATORS

If you have any questions or concerns about the research, please feel free to contact R.E Raphela on 082 579 3033

9. RIGHTS OF RESEARCH SUBJECTS

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Malenè Fouchè (mfouche@sun.ac.za; 021 808 4622) at the Division for Research Development.

SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE
--

The information above was described to [*me/the subject/the participant*] by R.E Raphela in [*Afrikaans/English/Xhosa/other*] and [*I am/the subject is/the participant is*] in command of this language or it was satisfactorily translated to [*me/him/her*]. [*I/the participant/the subject*] was given the opportunity to ask questions and these questions were answered to [*my/his/her*] satisfaction.

[I hereby consent voluntarily to participate in this study/I hereby consent that the subject/participant may participate in this study.] I have been given a copy of this form.

Name of Subject/Participant

Name of Legal Representative (if applicable)

Signature of Subject/Participant or Legal Representative
Date

SIGNATURE OF INVESTIGATOR

I declare that I explained the information given in this document to _____ [*name of the subject/participant*] and/or [his/her] representative _____ [*name of the representative*]. [He/she] was encouraged and given ample time to ask me any questions. This conversation was conducted in [*Afrikaans/*English/*Xhosa/*other*] and [*no translator was used/this conversation was translated into _____ by _____*].

Signature of Investigator

Date