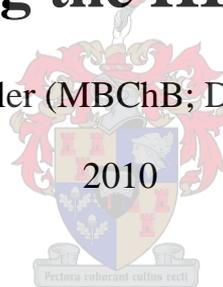


Attitudes and perceptions of Doctors and Clinical Nurse Practitioners regarding the HIV patient

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1. Declaration

I, Anri Wenteler, hereby declare that the work contained in this assignment is my original work and that I have not previously submitted it, in its entirety or in part, at any university for a degree.

Signature: _____

Anri Wenteler

Date: 20/09/2010”

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ATTITUDES AND PERCEPTIONS OF DOCTORS AND CLINICAL NURSE PRACTITIONERS REGARDING THE HIV PATIENT

2.1 Abbreviations

HIV; human immunodeficiency virus

ARV; anti retroviral drugs

CNP; clinical nurse practitioner

HCW; health care worker

Defaulter; person who stopped taking medication

PMTCT; prevention of mother to child transmission (with the use of ARV)

2.2 Definitions

Attitude: manner of behaviour showing feelings and thoughts regarding someone or something

Perception: a belief you have as a result of how you see or understand something

3. Abstract

seven point seven percent of the population in the Boland Overberg Region is HIV positive.²³ Attitudes of Health Care Workers (HCWs) impact on the quality of care given to HIV positive patients. This study explores the attitudes and perceptions of doctors and clinical nurse practitioners towards the healthy HIV patient. Thirteen in-depth interviews, including doctors and Clinical Nurse Practitioners (CNPs), from a variety of departments and levels of experience were done over six months using the Q-sort instrument⁶ as the basis for these interviews. Interviews were transcribed and themes identified using the cut and paste method. Twelve themes were identified namely;

- Anti retro viral drugs (ARVs),
- complexity,
- perceived ability,

- prognosis,
- prejudice,
- perceived risk of infection,
- anger,
- children,
- distancing,
- patient relationships,
- making a difference and
- obligation.

ARVs, while improving the health and prognosis of patients, also cause complications in patients. HIV patients were perceived to be more complex than others due to an increased incidence of infections, complications and uncommon presentations. Several respondents felt capable of managing HIV patients and knew where to refer while others perceived themselves to have a lack of knowledge. Most respondents viewed HIV as a chronic (manageable but not curable) disease. A shortening of life expectancy of ten years were expected. Prejudice regarding patients was due to heterosexual behaviour. Men were viewed much more negatively while women and children were seen as innocent. A fear of being stigmatised if the HCW became positive was shown. All respondents showed a change in behaviour due to perceived risk of infection, either by being more cautious or taking precautions. Anger was expressed regarding defaulters and failure to prevent infection. Children were viewed with sadness and anger towards the mother. Some respondents felt a need to emotionally distance themselves from patients while others built a relationship with patients. Several respondents felt they were making a difference in the lives of HIV patients. Two thirds of the respondents' attitudes were generally positive.

4. Introduction

Seven point seven percent of the population in the Boland Overberg Region is HIV positive²³. In all but 1 of the sub-districts HIV ranked as 1 of the top 3 causes of

premature mortality. Thus a large number of patients treated at the hospital are HIV positive. The attitudes of the doctors and sisters responsible for their health greatly impacts on their management. In the days before ARVs became freely available, patients often presented to the clinics and hospitals severely ill and in poor clinical condition. The life expectancy of HIV patients with stage 4 disease was about one year. Patients often died regardless of the treatment they received. ARV has since dramatically changed the picture of the presenting HIV positive patient from that of the person at death's door, to that of the patient presenting with disease often unrelated to HIV. Due to the significant change in the picture of presenting patients, as well as the fact that HIV has changed from a terminal disease to that of a controllable disease, one would expect a change in medical staff's attitude towards the HIV patient. Attitudes of HCWs impact on the quality of care given to HIV positive patients⁵⁰.

The researcher hopes to explore the attitudes and perceptions of the medical doctors and Clinical Nurse Practitioners towards the HIV patient and how this influences their treatment. The setting will be the doctors from Worcester hospital and Clinical Nurse Practitioners from the Breede Valley sub-district

5. Literature review

The literature search was done using Scopus, Biomed Central, Google scholar and the Stellenbosch university medical library. Searches were conducted using the internet and necessary articles requested from the library. The searches were done using the words Attitude AND HIV OR AIDS AND doctors OR Health care workers

In reviewing the literature 68 studies were found describing the attitudes of medical staff regarding HIV patients. Four of the articles reviewed were written before 2000, the rest were written after. Although some articles of studies done in Africa are recent, the poor availability of ARV and/or lack of protective measures might influence attitudes. In recent years ARV has become available to people in many countries including South Africa and this could have brought about a change in attitude towards HIV patients. Recent studies done have suggested this, but there is still a lot of variation regarding attitudes.

5.1 Measuring attitudes

Several methods of measuring attitude have been developed. Examples are the Fear of AIDS scale (that is often used in studies), the AIDS impact scale; Bougardus distance scale (not specifically developed for HIV), Clinical attitude scale and others⁶. Several of the studies used a Likert scale applied to statements given in questionnaires^{1, 2, 7, 13}. In-depth interviewing was used in studies by Deetlefs¹⁵, Dieleman²², Agnarson²⁵, Mahendra⁴⁴, Infante⁵⁰ and Massiah⁵⁵. This required training many interviewers in order to interview over a thousand respondents³. Some studies failed to mention what method was used in their questionnaires^{1, 14}. Ding et al. used patient folder review comparing outcomes to doctors' attitudes¹⁴. The problem with many of the above techniques is that they are only able to give a set response, agree or disagree. RS Prasad developed a Q-sort instrument to measure attitudes of physicians⁶. He tested 3 factors namely emotionality, ability and reluctance. This was done by placing words describing feelings and attitudes on a grid, following a normal distribution curve. This way, respondents are forced to consider where to place each word according to importance. It does not test actual knowledge regarding HIV, but only feelings and attitudes towards patients. As no knowledge is tested it can be used in HCWs with little experience in the HIV field. Another way of measuring attitudes is to use case studies as examples to see how physicians would treat patients. This has the benefit of having doctors say what they would usually do in a case and is more likely to get a true reflection as opposed to a rehearsed or "correct" response. Li et al⁷ used two case studies with the same history but different diagnoses and compared doctors' attitudes and treatment of the two cases. **5.2 Negative attitudes**

Many of the studies showed some form of negative attitude towards HIV patients. None of the studies specified the type of HIV patient encountered (sick or healthy). Nine of the studies reviewed were done in Nigeria. One in 1995⁸ and 2002⁹, two in 2003^{10,58}, 2005^{4,11}, 2006⁵¹, 2008⁴⁰ and 2009³². The studies done in Nigeria before 2005 showed significant stigmatisation of HIV patients. Although the number of staff refusing to treat patients has decreased in later years, most still believed HIV patients should be in a separate ward and their status should be made known to all staff who come into contact with them. A study conducted in 2002⁹, shows unwillingness for surgical trainees to open a practice in a high HIV prevalence area. Almost a third of the participants in the study wanted all patients

tested before treating them while almost half thought that patients had the right to know the treating surgeon's status. Although noted in the 2005 study⁴ that doctors were complying with their ethical obligations, they still had a discriminatory attitude towards HIV patients. Also noted was the fact that in more than 80% of hospitals basic protective measures were not always available and this could be a strong confounding factor. The 2005 study¹¹ showed a direct correlation with perceived self-efficacy and willingness to care for HIV infected patients. Participants who regarded themselves as having high self-efficacy were less likely to see treatment of HIV patients as futile. It also showed females to have higher rates of anxiety and perceptions of futility than males. The study of 2003⁵⁸ showed that 55% of health care workers in Lagos felt that people living with HIV were responsible for their disease. A further 35% felt that they deserved contracting HIV due to sexual misbehaviour. Only 52% of health care workers were willing to work with HIV positive patients. The study done in 2008 in South Nigeria⁴⁰ showed negative attitudes that were worse at the community health centre level than at the government hospital. The most recent study of 2009³² showed a good attitude towards HIV patients, but this was done in a specialist HIV clinic setting which might skew the findings.

5.3 Reluctance to treat

Several studies have shown a reluctance of HCWs to treat HIV positive patients. A study involving Kuwaiti doctors done in 2002¹ showed that more than 80% held very negative attitudes regarding HIV patients. They included being uncomfortable having social contact with a HIV positive person as well as opting out of treatment of HIV patients. A study done in Morocco in 2000 showed that half of the participants felt that HIV patients should be excluded from receiving treatment, while 56% of doctors and 62% of paramedical staff said they felt anxious in treating a HIV positive patient⁶⁰. A 2006 study from Mexico reflected that 16% of participants thought HIV patients should be banned from public services⁵⁰, while a study done in Spain in 2005 showed that only 29% of participants were willing to work with HIV positive patients⁵². Thirteen percent of HCWs, in the 2006 study of Sadob et al were unwilling to do vital signs on or examine a HIV patient⁵¹.

5.4 Occupational exposure

Fear of contracting HIV during occupational exposure had a negative impact on health care workers' attitude as described by several studies. A literature review regarding nurses' attitudes showed a fear of infection as one of the important factors influencing attitude. Other factors included education, knowledge as well as homophobia²⁹. Ninety five percent of health care workers in a Serbian study perceived themselves to be at high risk of contracting HIV. This perception was higher in personnel with an increased exposure to blood or body fluids⁴¹. This was confirmed in another Serbian study, which showed that HCWs who perceived themselves at greater risk were using more protective measures⁴⁹. A study done in Uganda regarding nurses' attitudes showed that 47% had a fear of contracting HIV but that they had a positive attitude regardless⁵⁹. Similar results were found in a study done in rural India⁶³. Two studies regarding midwives found that they perceived themselves to be at very high risk contracting HIV through occupational exposure^{43, 47}. A study in Malawi showed that fear of infection caused midwives to feel they are working in fear, refrain from touching a patient and losing interest in midwifery⁴⁷.

Studies showed a correlation between level of medical training and stigmatisation. The higher the level of training the lower the level of stigmatisation. Doctors showed a better attitude than nurses^{22, 31} and nurses better than auxiliary staff⁵⁶. Li et al⁷ showed the opposite though, with the higher the level of medical education received, the higher the level of prejudice, although doctors were more willing to have social contact with infected people than laboratory personnel. Higher levels of prejudice correlated with lower interaction with infected people and a higher perceived infection risk. A similar trend was shown in the study of Marca et al.¹² where participants with more experience regarding HIV patients were more likely to regard patients as dangerous to others. A study from Madagascar showed no difference in attitude between nurses and doctors⁵⁹.

5.5 Routine HIV testing

Another theme shared by many of the studies is that HCWs feel that all hospitalised patients should have a HIV test or could be tested without consent, to protect themselves. Two thirds of participants in a Moroccan study believed all patients should be tested⁶⁰ while 15% felt that way if a patient was to undergo an invasive procedure in a study from Barbados⁵⁵. Eighty two percent of medical

students participating in a study in Zagreb felt a HCW has the right to know a patient's HIV status⁴⁸.

5.6 High-risk groups

A study done in Turkey¹³ showed a strong correlation of discriminatory attitudes with traditional and religious values. Most doctors viewed HIV as something brought onto patients by themselves because of sinful behaviour. HIV was also viewed as a strictly homosexual disease not affecting the heterosexual population. Fifty percent believed that they should be able to refuse treatment to patients and there was a high prevalence of feelings of helplessness and perceptions of futility of treatment. The following studies also showed discrimination regarding high risk groups such as men who have sex with men, intravenous (IV) drug users and commercial sex workers as reflected in the literature study of Harrowing et al²⁷, a study in China by Chan et al³⁰, a Mexican study by Infante et al⁵⁰ and a study in Nigeria by Sadob et al⁵¹. In the case of stigmatisation of IV drug users with HIV, a study in China found that stigmatisation correlated more with the number of IV drug users treated by a physician than with the number of HIV patients treated. The larger number of patients using IV drugs treated, the less they were stigmatised³⁰. This corresponds with the study from Ireland, which found that stigmatisation of HIV patients correlated with how participants felt about homosexuality². Andrewen et al found that religious and female HCWs were more stigmatising towards patients than their male or non-religious counterparts³⁹.

5.7 Patient Exposure Experience or contact with HIV infected people strongly influences attitudes. HCWs with more experience with people living with HIV, either in their work or personal life, had a more positive attitude than their colleagues as was shown in six studies^{14, 12, 24,45,46,63}. Nurses' willingness to treat patients was increased as their experience increased²⁴. Obstetric nurses were found to have a more positive attitude if they knew more than four positive people⁴⁵. Students in Turkey also showed less stigmatisation if they knew someone with HIV or had previous experience with HIV positive patients⁴⁶.

Predictors of a more negative attitude toward HIV patients were that of physicians with no or little contact with HIV patients. Physicians who did not regard themselves as experts in treating HIV patients were also more negative. Negative attitude also correlated with patient load. Those with a lower patient load were more positive about HIV patients than physicians with a high patient load¹⁴.

5.8 Stigmatisation

Stigmatisation of HIV patients has resulted in a decrease in uptake of testing for HIV, using ARV and seeking medical help. The same trend was shown among medical staff themselves¹¹. Two studies showed significant stigmatisation of HIV infected colleagues, with 84% of participants refusing to have surgery or assistance during surgery by a positive co-worker in the study by Sadoh, et al³⁵, and 64% recommending infected colleagues refrain from performing any type of invasive procedure in the study from Kagan et al³⁷.

Herek et al³ studied the trend of stigma in the USA (this did not include any medical personnel specifically). Their study showed a decrease in stigmatisation over years by repeating the study and comparing the results. The level of stigmatisation correlated directly with misunderstanding of modes of transmission, overestimating risk of infection and stigmatisation of affected groups such as homosexuals and IV drug users. They showed that there had been a decrease in negative feelings toward HIV infected people and less support for punitive policies such as isolation and registering infected people. There has been an increase in thinking people are to blame for them having HIV. Surprisingly there has also been an increase in false beliefs of how the virus is transmitted, such as kissing, toilets, etc. Two other studies also showed an improvement in attitude when compared to earlier years, a study on medical students⁴⁸ and one on HCWs in Spain⁵². Both showed an increase in knowledge as well as an improvement in attitude.

Ding et al¹⁴ showed that doctors with a negative attitude towards their HIV positive patients were less likely to give ARVs. Landon, et al⁵ showed that the quality of care for patients treated by infectious disease specialists were the same as by generalists regarding themselves as experts, but that there was a decrease in care with non expert GPs. The level of care was better in practices where many HIV patients were treated⁵. A study from Nigeria found that 55% of participants thought that people living with HIV deserved getting infected while 35% believed it was due to sexual misconduct⁵⁸.

5.9 Nurses attitudes

A study on nurses' attitudes in South African also showed a negative attitude. Encouragingly many said they paid special attention to HIV patients. It was worrying though that many regarded themselves to be at high risk of infection through their job, but denied the risk in their personal lives¹⁵. A more recent study showed a mainly positive attitude in rural nurses regardless of a fear of contagion, gaps in knowledge and ambivalent feelings toward HIV patients³³.

5.10 Decreasing negative attitudes

Several factors have been looked at to decrease negative attitudes and stigmatisation of HIV patients. UNAIDS suggest we need to tackle the root causes by; increasing awareness of stigmatisation, decreasing fears of people living with HIV as well as fears in the rest of the community. HCWs need training and interaction with HIV infected individuals need to be increased¹⁶. A study done in India among HCWs showed a high level of incorrect knowledge of transmission and actual risk of infection. Ninety five percent of participants had the view that all patients should be tested in hospital and 15% believe they should be able to refuse treatment to HIV patients²¹. Brown et al did a literature review of methods decreasing stigmatisation, which showed that four basic approaches were used namely; (a) information based, (b) improving coping skills, (c) counselling and (d) increasing contact with affected groups¹⁷. Several studies showed improved attitudes as knowledge improves. Wu et al shows that improving knowledge by training trainers improved the attitude of medical personnel towards HIV patients¹⁸. A study comparing knowledge alone compared to knowledge-and-contact showed that knowledge-and-contact was superior to knowledge alone in the short-term follow-up but no difference in the long-term though²⁶. Another study paired nurses with people living with HIV to form teams planning and implementing strategies to decrease stigma. This led to greater understanding between the 2 groups as well as mutual support and a feeling of decreased stigmatisation in the people living with HIV²⁸. All the methods studied showed some improvement, though none were able to suggest which method was superior. Most studies were biased towards positive results and did not do long-term follow-up.

From the studies reviewed it appears that there is still a big problem regarding the attitudes of medical staff towards HIV patients. Even in more recent studies a large number of HCWs stigmatise HIV patients. Many factors play a role, but it would

appear that a lack of knowledge regarding HIV is the main problem. Fear of infection and contagion strongly influences attitudes but can be addressed by improving knowledge. It seems as knowledge of contagion risk and transmission improves, so views of involuntary testing, segregation and refusal to treat decrease. It does not however influence feelings of acceptance or wanting to socialise with patients. Other important factors appear to be religious, political and cultural views. This seems to be very significant in countries with strong traditional and/or religious values such as Turkey and Ireland. The profiles of transmission differ in different countries. In Southern Africa the mode of transmission is mainly heterosexual while in other countries such as Europe and the USA it is linked to homosexual behaviour and IV drug use. This differentiation in stigmatisation was reflected in studies from different areas.

Although several methods of measuring attitude have been developed it is difficult to quantify and there is no standardised method. In some studies improving knowledge has been shown to improve attitude toward HIV patient but not in others. More contact with people living with HIV in personal or occupational capacity was shown to decrease negative attitudes. Several methods of decreasing stigma have been studied but none prove to be superior. Doctors with a negative attitude toward HIV patients have shown to provide poorer quality of care than those who do not. Increased contact with patients was shown to improve quality of care as well as attitude.

Although several studies were done in South Africa none of those reviewed included doctors or specifically referred to CNPs. This would make this study valuable in regards to a study group not previously covered

6. Aim

The aim of this study is to explore the attitudes and perceptions of doctors and Clinical Nurse Practitioners towards the HIV positive patient.

The study originally would have included only well HIV patients. However, no differentiation was made by the respondents during the interviews and the well part was subsequently dropped.

6.1 Objectives

- ❖ To explore the attitudes and perceptions of doctors including community service doctors, medical officers, senior medical officers and consultants towards the well HIV patient.
- ❖ To explore the attitude and perceptions of Clinical Nurse Practitioners towards the well HIV patient.

6.2 Research question

What are the attitudes of doctors at Worcester Hospital and of Clinical Nurse Practitioners in the Breede valley sub-district towards the HIV patient?

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7. Methodology and Materials

This study uses a qualitative research methodology using in-depth interviews as the main method of data collection.

Attitudes are very difficult to quantify and it therefore lends itself to a qualitative study. Most studies regarding attitudes of medical personnel included knowledge of HIV. Although much easier to quantify, this is not something the researcher is interested in exploring. This study is aimed at exploring attitudes regardless of knowledge about HIV. As it is very difficult, if not impossible, to give a numerical value to emotional feelings a qualitative study is more appropriate.

The researcher decided to use in-depth interviewing as a way to collect data. Although questionnaires are an easy way to collect data, it does present several problems: It is very difficult to give questions regarding attitude without using examples, which is influenced by knowledge and experience with HIV patients. It is also difficult to formulate questions in such a way as not to be leading. Respondents will often give perceived acceptable answers rather than expressing their true feelings. Respondents are also unable to clarify questions they don't understand. Another option considered was using case studies. The problem with this is that it will be influenced in some way by the person's knowledge and experience with HIV patients. A lack of knowledge and experience might

negatively influence participants' treatment of patients, which may incorrectly be seen as having a negative attitude. The study aims to look at people's attitudes regardless of their knowledge and experience.

7.1 Triangulation

The researcher used data triangulation to increase validity of findings. This was done by interviewing a diverse group of HCWs: doctors from different departments, levels of training and years of practice and nurses with different years of practice were interviewed. Different types of data collection were included. Audio taped interviews as well as field notes were used.

7.2 Reflexivity

The researcher herself also completed the Q sort⁶ questionnaire and discussed it with the head of the Family Medicine Department to identify own biases and preconceptions. The result showed that the researcher's attitude were most strongly influenced by ability to treat patients and secondly by a lack of reluctance to treat patients. Emotionality did not feature prominently at all. The discussion showed this to be an accurate reflection of her attitude. During the discussion feelings of anger towards patients defaulting treatment came to light.

During the interviews with the respondents the researcher did not use direct questions to illicit answers and allowed the respondents to elaborate. The researcher did not ask specific questions regarding themes so that themes were allowed to emerge naturally. Responses by the researcher was kept to a minimum and used only to encourage respondents to elaborate or clarify their answers.

7.3 Setting

The study was conducted in the Breede Valley sub-district, which forms part of the Cape Winelands district in the Western Cape Province of South Africa. The medical facilities include a regional hospital (Worcester Hospital) and Worcester Community Day Centre.

7.4 Study population and study sample

Worcester hospital is a regional hospital in the Breede Valley. It services several clinics as well as district hospitals of the Cape Winelands district. The hospital has specialists in all the departments. The doctors working there include community

service doctors, medical officers (MOs), senior MOs and primary MOs. Worcester Community Day Centre is a primary health care facility with doctors and Clinical Nurse Practitioners (CNP). Primary patients are seen there as well as referrals from surrounding clinics. The study included 8 doctors working at the Worcester hospital and 5 clinical nurse practitioners in the Breede Valley sub district. The doctors interviewed were two community service doctors, four medical officers ranging from grade 1 to 3, and two consultants. The clinical nurse practitioners had experience ranging between 1 and 35 years. One of the CP worked at the ARV clinic, one at Worcester hospital primary health care clinic and three at the Worcester Community Day Centre. Five of the interviewees were male the rest female. Purposive sampling was done. Three respondents were selected as perceived to have a negative attitude towards HIV patients, three as having a positive attitude and seven were unknown. The respondents' attitudes were identified as positive or negative by consensus after discussion with colleagues in the ARV clinic. The decision was based on experience regarding the referral of patients as well as working with the health care workers. There were several doctors who declined to do the interview this might have skewed the study to the more positive side. It must be noted though, that none of them were the candidates selected for their suspected negative attitude. The doctors who declined gave time constraints or not feeling comfortable having the interview recorded as reasons. Not all departments were included in the study noticeably paediatrics, surgery (although ENT and orthopaedics are surgical specialities) and obstetrics and gynaecology.

7.5 Method of data collection

In depth interviewing was done with all the participants and fieldnotes made after completion of the interview. All interviews were conducted by the researcher herself. The interviews were done in both Afrikaans and English depending on the language the respondent were most comfortable with. Saturation of information was reached after seven interviews were done. Saturation here refers to the fact that no new information came to light in following interviews.

The Q-sort instrument ⁶ was used as the basis for the interviews. This is an instrument developed to measure attitudes in medical staff and has been adapted to assess attitudes regarding HIV. Interviews were based on the results of the

completed Q-sort instruments. Using the instrument was aimed at getting people to think about their attitudes and was used as a foundation from which the interviews were conducted, much the same way a case study would be used. In this method respondents were given 27 descriptors (Table 1) describing their attitude and are given the opportunity to place them on a normal distribution curve. Three different factors are measured namely (a) emotionality where people's feelings toward HIV patients are explored, (b) ability which looks at how participants regard their skill in treating HIV patients and (c) lack of reluctance which looks at willingness to treat HIV patients. This test showed good test-retest reliability in the study of Prasad⁶. The researcher were not able to find any other reference to this specific Q-sort instrument being used in other studies.

For the purpose of this study reluctance was changed to lack of reluctance. This was done by changing the positive loaders to negative and visa versa. The reason for this was to keep all three evaluators positive and facilitate the explanation of the graphs to respondents.

Table 1: Descriptors

EMOTIONALITY		ABILITY		LACK OF RELUCTANCE	
Positive loading	Negative loading	Positive loading	Negative loading	Positive loading	Negative loading
Accepting	Angry	Capable	Anxious	Challenged	Duty bound
Caring	Aversion	Comfortable	Complicated	Gratifying	At risk
Compassionate	Disapproval	Able to help	Inadequate	Stimulated	Cautious
Empathetic	Dislike		Sad	Rewarding	

Open minded	Offended					
	Rejection					
	Unsympathetic					
	Pity					
			D			
			D			
		C	D	E		
		C	D	E		
	B	C	D	E	F	
A	B	C	D	E	F	G
A	B	C	D	E	F	G
-3 Least like my attitude towards HIV patients	-2	-1	0 Neutral	+1	+2	+3 Most like my attitude towards HIV patients

Although developed as a quantitative measurement it was not used as such but rather as a way to objectively consider respondents' attitude. It is aimed to decrease bias caused by the fact that the respondents know the researcher to be working in the ARV clinic. Both positive as well as negative descriptors are given and have to be

considered by respondents. This prevents them from giving only positive answers. Since there are limited spaces, descriptors had to be carefully considered and would hopefully exclude or at least diminish the chance of respondents having completed it quickly without giving it much thought. The instrument enabled the researcher to evaluate respondents' attitude regardless of knowledge of HIV and to discuss respondents' attitudes in a non-threatening way since there is no right, wrong or preferred answer. Each respondent completed the table a few days before the interview. The data were analysed according to the three main factors before the interviews were conducted.

Interviews were started by explaining the different aspects measured and how the descriptors were divided between them. The analysis of the respondents' answer was shown to them. They were asked to comment on whether they thought it to be a true reflection of their attitude and explain. They were then asked to discuss each descriptor starting with the ones most and least like their attitude. No other specific questions were asked. Interviews took between 20 and 40 minutes.

7.6 Piloting

As a pilot study two family physicians with extensive research experience were interviewed using the Q-sort instrument as discussed. This gave the researcher an indication of how the Q-sort instrument worked when used as the basis for the interviews. It also indicated the duration of an interview to ensure enough time was scheduled for interviews later on. Respondents in the pilot study were given the opportunity to comment on the Q-sort instrument as well as the interview.

The results of the pilot study showed the Q-sort instrument to be an effective conversation starter. Some of the themes later identified already emerged in the pilot study such as judgement, relationship, ARVs and ability. In the first interview the respondent wasn't asked to describe each descriptor. In the second interview this was done and it was found that a lot more information came to light this way.

The researcher found that a lot of information could be elicited by using facilitation and reflection as interview techniques. Avoiding direct questioning decreased possible bias from the researcher's own opinions.

7.7 Data collection

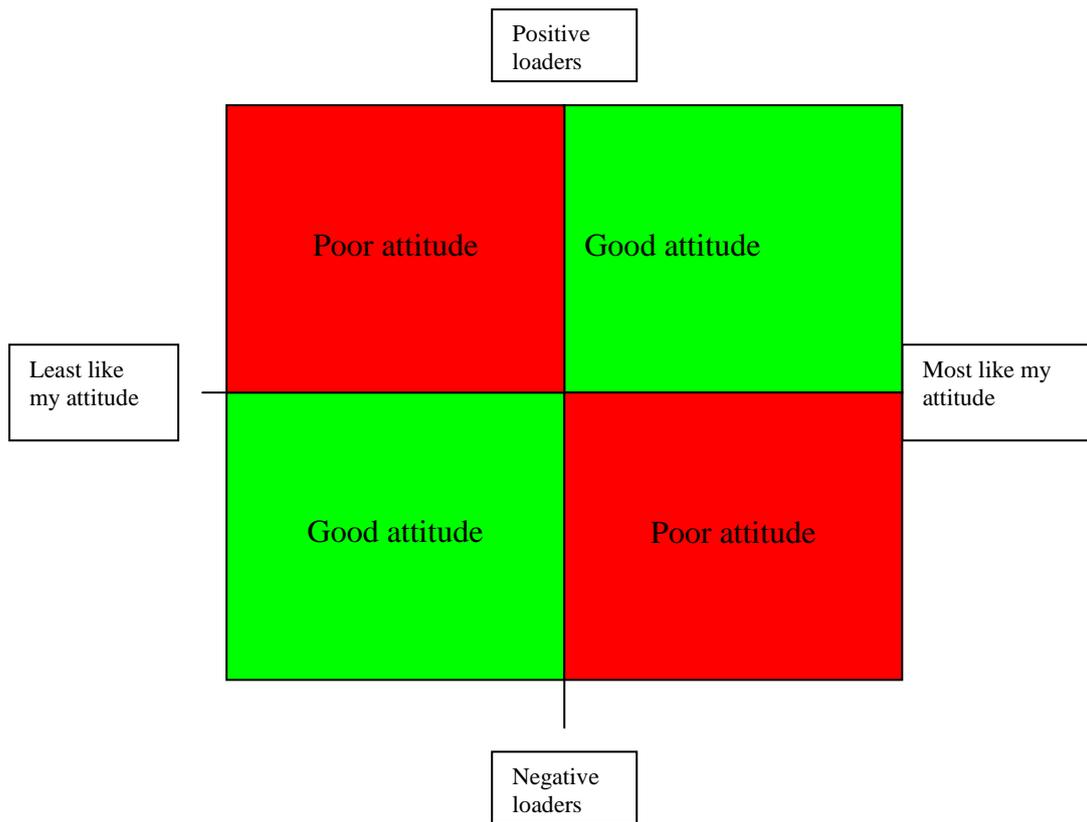
Interviews were scheduled and conducted during the course of six months. Respondents were given the Q-sort instrument to be completed within the same week of the interview, so they would still be able to remember their answers. The descriptors were given alphabetically so as to avoid obvious groupings regarding the loading. At the interview the respondents received the completed Q-sort form and the analysis back. The interview was audio taped and field notes made by the interviewer. These notes included both verbal and nonverbal cues. Both sources of information were used during analysis. Respondents were assigned numbers on receiving the Q-sort questionnaire. No names were used but respondents supplied demographics such as department she/he is working in and grade (medical officer, specialist etc.). The interviews were transcribed afterwards. The interviews were not translated if conducted in Afrikaans. Only the quotations used in the results section was translated by the researcher.

7.8 Data analysis

7.8.1. Analysing the Q-sort instrument.

The Q-sort instrument was not used as a quantitative measurement and was analysed purely as a visual representation of the respondent's attitude and used as basis for the interview. It was not statistically analysed. The instrument has 7 columns, numerical values were given to each column with the far left being -3 and the far right +3 and the middle column 0. The completed Q-sorts were evaluated under the three headings of emotionality, ability and lack of reluctance. Most like my ability and least like my ability results were analysed separately. (Refer to example). As there are 7 descriptors under ability and lack of reluctance respectively but 13 descriptors under emotionality the totals under emotionality were divided by 2 to have all 3 aspects carry the same weight. Attitude can then be visually represented as a good attitude if positive loaders were in the most like my attitude quadrant and negative loaders in the least like my attitude quadrant. A negative attitude would be if the positive loaders were in the least like my attitude quadrant and the negative loaders in the most like my attitude quadrant (Table 2). It would also show which of the three aspects (emotionality, ability, lack of reluctance) carried the most weight in determining attitude.

Table2:



Example

The following is an example of how the Q-sort was used. (Also refer to appendix B) The descriptors were given to each respondent as follows. The respondent then had to organise the numbers of the descriptors according to their attitude. Only one number per block is allowed.

1 Able to help	14 Disapproval
2 Accepting	15 Dislike
3 Angry	16 Duty bound
4 Anxious	17 Empathetic
5 At risk	18 Gratifying
6 Aversion	19 Inadequate
7 Capable	20 Offended
8 Caring	21 Open minded
9 Cautious	22 Pity
10 Challenged	23 Rejection
11 Comfortable	24 Rewarding
12 Compassionate	25 Sad
13 Complicated	26 Stimulated
	27 Unsympathetic

			D 24			
			D 8			
		C 25	D 9	E 13		
		C 5	D 12	E 2		
	B 4	C 17	D 16	E 3	F 26	
A 6	B 22	C 14	D 19	E 27	F 11	G 1
A 23	B 20	C 15	D 21	E 10	F 18	G 7
-3	-2	-1	0	+1	+2	+3

EMOTIONALITY		ABILITY		LACK OF RELUCTANCE	
Positive loading	Negative loading	Positive loading	Negative loading	Positive loading	Negative loading
2 Accepting	3 Angry	7 Capable	4 Anxious	10 Challenged	16 Duty bound
8 Caring	6 Aversion	11 Comfortable	13 Complicated	18 Gratifying	5 At risk
12 Compassionate	14 Disapproval	1 Able to help	19 Inadequate	26 Stimulated	9 Cautious
17 Empathetic	15 Dislike		25 Sad	24 Rewarding	
21 Open minded	20 Offended				
	23 Rejection				
	27 Unsympathetic				
	22 Pity				

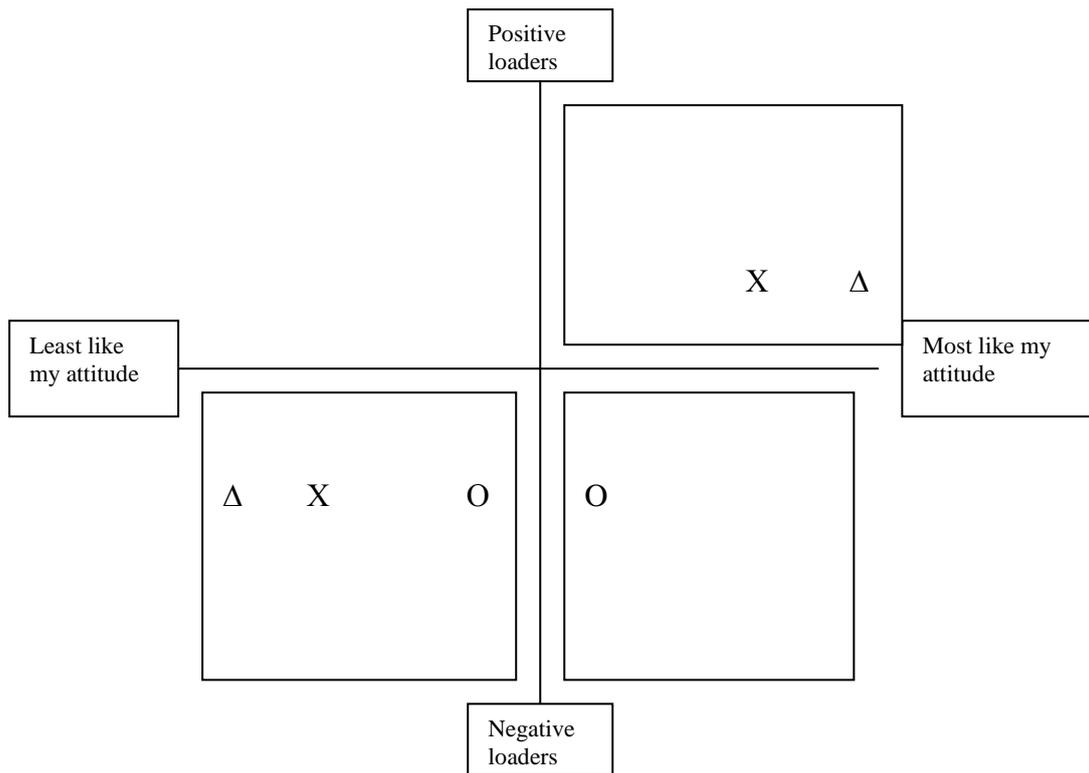
EMOTIONALITY			ABILITY			LACK OF RELUCTANCE	
O			X			Δ	
MORE LIKE MY ATTITUDE							
+ loader	- loader		+ loader	- loader		+ loader	- loader
+1	+1		+3	+1		+2	
	+1		+3			+2	
			+2			+1	
	+0.5 (1÷2)		+7			+5	

LESS LIKE MY ATTITUDE							
+ loader	- loader		+ loader	- loader		+ loader	- loader
-1	-3			-3			-1
	-2			-2			
	-2			-1			
	-1						
	-1						
	-4 (8÷2)			-6			-1

The results were then plotted on a graph (Table 3). As seen from this example the respondent attitude was predominantly driven by ability. Ability scored the highest in both least and most like my attitude. Both ability and lack of reluctance fell into the

“good attitude “quadrants. Emotionality however fell into the “poor attitude quadrant” on the most like my attitude side, which shows some negative feelings regarding HIV patients. This can then further be explored during an interview.

Table 3



O= Emotionality

X= Ability

Δ= Lack of resistance

7.8.2. In-depth interviews

In-depth interviews were audio-taped and transcribed. The interviews were then studied intensively. Themes and sub-themes were identified from the interviews and manually colour coded. Information was deemed to be a theme if mentioned in a minimum of 4 interviews. The themes and sub themes were grouped together using a cut and paste method. This was done by cutting out similar ideas from the different interviews and pasting them together on a wall. These themes and sub-themes were then described.

7.9 Informed consent

Each participant received a consent form, which was completed before the interview was conducted. This included the methods of information collected namely recording of interviews, as well as notes taken. The consent form (Appendix A), describe what was researched as well as options available to the participant. Participation was voluntary.

7.10 Confidentiality

In order to ensure respondents' information was kept confidential each respondent received a number for the interview. No names were used during the interview and the transcriber only received the taped interview. Only the researcher had access to the respondents' names. Information was treated with strict confidentiality. Interviews were not discussed with any colleagues. No information was made available until the completion of the study. Individual interviews was not accessed by anybody other than the researcher even after completion of the study.

The interviews were transcribed by a secretary working in the Family Medicine department. To ensure confidentiality during the transcription process the transcriber completed a confidentiality agreement. Although no names were used during the interview, respondents might have been recognised by their voices

7.11 Ethics:

Beneficence

Respondents will benefit from the study by increasing their awareness of their attitude towards HIV patients and how this might influence their treatment of such a patient.

The service will benefit by identifying learning opportunities that can be addressed, and hopefully improve attitudes where needed.

No harm will come to respondents since supervisors will not have access to the names of respondents or the interviews conducted. The researcher has no power to use the information in a detrimental way. The interviews will not be used in any evaluation of performance and will be kept strictly confidential by the researcher (appendix A).

Ethical approval: Ethical approval was granted by the Human Research Ethics Committee of the HSF, SU

8. Results

The interviews were studied and themes identified. During the research 12 themes were identified. These themes were further divided into sub-themes as indicated below.

Table 4

Themes	Sub-themes
Anti retrovirals (ARV)	Improvement Side effects Compliance
Complexity	Increased infections and complications Uncommon findings ARV Uncomplicated
Perceived Ability	Knowledge Comfortable Finding information

Prognosis	Chronic disease and Decreased life expectancy Incurable
Prejudice	Non-judgemental Promiscuity Male vs. female Children and Pregnant women Cultural differences Other peoples judgements
Perceived risk of infection	No increased risk Increased risk Behavioural change Social risk
Anger	Defaulters Failing to prevent HIV Wasting money
Children	
Distancing	
Relationship with patient	
Making a difference	
Obligation	Will treat Prefer not to treat

The number of respondent mentioning the themes are noted in the table 4 below

Table 4

Perceived risk of infection	13
Obligation	13
Judgement	13
Knowledge	13
Complexity	12
Anger	11
ARV	10
Children	9
Prognosis	8
Relationship	6
Distancing	6
Making a difference	6

References I followed by a number (I04) refers to the interview it was taken from

8.1. ARV (anti retrovirals)

ARVs were mentioned by 10 of the respondents.

Compliance

Three commented on the difficulty of taking ARVs especially in remembering to take it every day. Two of these had to take ARVs themselves after a needle stick injury. "...to take tablets every single day for the rest of your life twice a day, that's huge....for me to finish a course of antibiotics...I think I've only done it twice"(I05),

“dit is nie lekker om al daai medisyne elke dag te drink nie.”(I04) (*it's not nice to take all that medication every day*).

Improvement

The improvement of patients on ARV was mentioned in four interviews. They were discussed as the clinical improvement of previously ill patients as well as a change in management of patients when compared to the era before ARVs. “...wat amper dood was en dat die pille so ‘n omkeer effek het .”(I22) (*that almost died and that the pills caused such a turn-around*). “Die ARVs maak ‘n groot verskil...HIV en as dit positief was, sorry ons ondersoek jou nie verder nie.”(I04) (*the ARV made a big difference...if you were positive we didn't examine you further*).

Side-effects

Four respondents commented on the side-effects caused by the ARVs to complicate the management of patients as mentioned in the previous theme discussion.” Jy is stukkend van die HIV nou is jy stukkend van die ARV”(I11) (*you are broken from the HIV, now you are broken from the ARVs*).

ARVs affected attitudes in both a positive as well as negative way. Respondents who felt ARVs improved patients prognosis tended to have a more positive attitude. Those who were angry towards defaulting patients had a more negative attitude. Respondents perceived ARV to either improve the health of ARV patients or to be one of the causes for HIV being complicated.

8.2. Complexity

Uncomplicated (HIV patients are not clinically complicated)

Three of the respondents did not find HIV to be complicated. ”Die mense wat hier inkom is nie complicated nie, ons sien die gewone mense.”(I24) (*the people who come in here aren't complicated, we see regular people*), “HIV self is nie complicated nie”(I22) (*HIV itself is not complicated*)

Uncommon findings

The other nine respondents found patients to be more complex or complicated. Five of those thought patients get unusual infections. ”...hulle kan alle snaakse goed kry.”(I13) (*they can get all kinds of funny things*) “...sien dalk ‘n ander spektrum organismes”(I04)(*see a different spectrum of organisms*) or present in an unusual

way. “Niks lyk soos wat dit moet lyk nie”^{I20} (*nothing looks like it should*), “ often the presentations are not typical...”^{I03}.

Increased infections and complications

Three felt HIV patients got more infections “...meer geneig tot infeksies...”(I24) (*more inclined to get infections*), “Dit is die mense wat jy multi diagnoses gaan maak.”(I11) (*these are the people you make multiple diagnoses in*), and two as getting more complications “They obviously have a higher incidence of complications from any operation, wound infection and wound sepsis” (I03).

ARV

Three mentioned ARVs as being the cause for HIV being more complex.”...dat ek nie altyd seker is of dit nou die HIV middels of...”(I21) (*I'm not always sure if it's the HIV treatment or...*)“ Dit kan probleme wees met al hierdie middels...”(I13) (*it can be problems with these medications*).

8.3. Perceived Ability

This was to some extent influence by the participants work context. Doctors and CNPs with more exposure to HIV patients felt more comfortable in managing patients.

Knowledge

All the respondents discussed ability. Some felt capable and comfortable to manage patients in contrast to the others who did not. This was mostly interpreted by the respondents as caused by a lack of knowledge. A lack of knowledge regarding ARV featured most dominantly here. There was some overlap where respondents felt capable of managing patients but also felt a lack of knowledge regarding ARV and others that felt capable of managing the problems patients present with that was within their field of expertise. “...as dit buite die ear, nose and throat (ENT) veld is dan sal ek sê ek voel nie heeltemal capable om alles te hanteer met daai pasiente nie, maar binne my veld voel ek baie capable”(I04) (*if it falls outside the field of ENT then I don't feel completely capable of managing those patients, but I feel very capable within my field*)

Comfortable

Seven of the respondents felt capable to manage HIV patients. “Ek weet presies wat om te maak wanneer om te maak...”(I22) (*I know exactly what to do and when to do it*). “...I will be able to perfectly manage them most times”(I03) “Ongeag met waarmee hulle inkom, ek voel ek sal dit kan hanteer”(I11) (*I feel I can manage them regardless of what they present with*).

Ten respondents were not comfortable with the management of patients. Of these a lack of knowledge were given as a reason in five cases. “Lack of knowledge omdat daar verskillende ARVs is, when to start, what to start..”(I06), “...omdat ons nie soveel weet van ARV nie...”(I11) (*because we don't know that much about ARV*). Others included not having a lot of experience with HIV patients, not having learnt about HIV during their training and the complexity of HIV patients. “Onthou ek het 30 jaar terug klaar gemaak nie nou nie so ons het nie HIV geleer nie”(I13) (*remember I finished 30 years ago not now, so we didn't learn about HIV*)

Finding information

Seven respondents noted that they knew where to refer patients or where to get further information if needed. “Ek weet daar is back up as ek iewers vas draai”(I21) (*I know there is backup if I need it*), “...weet ek waar om iemand te kry wat dit kan hanteer.”¹¹ (*I know where to find someone who can manage it*) “...as jy nie weet nie dan kan jy hulle na iemand verwys.”(I24) (*if you don't know then you can refer them to someone*).

8.4. Prognosis

Eight respondents mentioned the prognosis of a HIV patient.

Chronic disease and decreased life expectancy

Four of these viewed HIV as a chronic disease such as hypertension or diabetes although three mentioned that their life expectancy were much shorter. “It's a chronic illness that you can treat ...”(I06), “want dit is soos enige kroniese siekte... jy kan nog 10 jaar leef”(I24) (*its like any other chronic disease... you can live another 10 years*). The other respondents felt it was a terminal disease “...jou tyd is ingekort weens ‘n siekte ...5 of 10 jaar of so...”(I04) (*your time is shortened due to a disease...5 to 10 years or so*), “...in many cases it's a fatal disease...”(I03), “...hulle gaan ook net ‘n kort tydjie hê.”(I13) (*they will only have a short time*).

Incurable

Two respondents commented on HIV being an incurable disease. This caused feelings of inadequacy and helplessness, “inadequate want jy kan nie altyd heal nie”^{I06} (*inadequate because you can't always heal*). “feeling helpless as my hands are tied. I can't cure you”(I20). This negatively influenced respondents' perception regarding their ability to help HIV patients. Respondents who felt HIV was incurable had a more negative attitude towards HIV patients than those who perceived HIV to be a chronic disease.

8.5. Prejudice

Non-judgemental

Of the 13 respondents four did not judge HIV patients. “Niemand is te goed om dit oor te kom nie...Dit kan met enige een gebeur.”(I24) (*nobody is too good to have this happen to them...it can happen to anybody*) “...ek hulle nie verstoot nie...Jy weet nie hoekom die persoon hom in daai kol bevind nie”(I04) (*I won't ostracize them you never know why someone finds themselves in that situation*).

Male vs. female

Four respondents differentiated between men and women. They felt more sympathy towards the women. They thought women had less of a choice in protecting themselves or had a male partner that was unfaithful. “...it is most probably because their husbands slept around”(I05) “'n groot deel van die vroue het nie 'n keuse partykeer nie...”(I20) (*a large number of women sometimes don't have a choice*, “die mansmense sien ek so 'n bietjie meer vir rondslaap as die vrouemense.”(I22) (*I think the men sleep around more than the women*). They felt the men knew about HIV and did nothing to protect them. “They sort of went out and looked for it”(I04). “Hulle weet HIV is daar en dis hoekom ek minder simpatie met hulle het.”(I25) (*they know there is HIV that is why I have less sympathy*).

Children and pregnant women

Three respondents mentioned children as being innocent and not having a choice in getting HIV. “...a child that gets transmission through pregnancy and is innocent in the thing.”(I20), “...kinders het nie werklik 'n sê nie...”(I25) (*the children don't really have a say*). Linked to this, is the feeling that pregnant women risked their children

and were irresponsible, as mentioned by three respondents. "...as hulle weer swanger raak en hulle is HIV positive en hulle weet die gevare daarvan..."(I22) (*they get pregnant again, they are HIV positive and they know the risks involved*) "...why didn't they think of their kids?"(I20).

Promiscuity

Promiscuity was given as a reason for getting HIV by seven of the respondents. In four cases this was linked to the thoughts that men were more responsible here. "...losbandigheid en sulke goed. Dit is deel van 'n leefstyl"(I13) (*promiscuity and such things. It's part of a lifestyle*). "...meer as een partner.."(I25) (*more than one partner*), "...you can assume on average they slept around with 250 people..."(I03).

Cultural and religious differences

Two respondents thought that there was more HIV in certain groups due to cultural differences. "...dis 'n kulturele ding dat jy meer as een partner het...wat vir my taboe is, is nie vir hulle taboe nie..."(I25) (*it is part of their culture to have more than one partner...what is taboo to me is not taboo to them...*), "Baie keer is dit social problems maar ek voel 'n mens kan nie oordeel op grond van jou kultuur nie."(I21) (*many times it is social problems but I feel one can't judge on grounds of culture*). . Only one felt that due to his religion he judged HIV patients while the other two felt that it was their religious (Muslim and Christian) duty to treat patients. (Ek probeer maar die Bybel inbring, dit is al wat ons krag gee deur die lewe (I24).

Unfair judgement

Three of the respondents admitted to thinking they might be wrong in their judgements. "As jy onderliggend so voel dan sê jy sterk vir jouself dat jy nie so voel nie."¹⁰⁶ (*if you feel that subconsciously, then you strongly tell yourself you don't*). "Even though what I'm thinking is not right because it is not necessarily true..."(I05). "I most probably do make some assumptions whether they're true or not..."(I03).

Other people's judgements

Nine of the respondents discussed other people's judgements. The fact that they fear other people would stigmatise and judge them should they become HIV positive after a needle stick injury featured very prominently. "...as ek positief is moet ander mense nie dink: 'sy het rondgeslaap nie'.."(I22) (*if I'm positive other people shouldn't*

think I slept around). “If I had HIV ...You don’t want other people to jump to conclusions about you personally.”(I03).

Opinions regarding others were that they were uncomfortable with HIV, scared to work with them and stigmatising patients. “I think it scares a lot of people”(I05), “...daar is stigma in die sosiale kringe daar buite, ons weet hulle word geïsoleer...”(I04) (*there is stigmatisation in social circles outside, we know they get isolated*).

8.6. Perceived risk of infection

No increased risk

All respondents acknowledge a risk of infection but two did not feel an increased risk. “I don’t feel at risk...”(I05) and “oral is oordraagbare siektes”(I21) (*there are infectious diseases everywhere*).

Increased risk

Eight of the respondents felt they were more at risk treating an HIV patient. “Met hulle voel ek altyd ek moet so half onthou dat dit iets is wat hoogs aansteeklik is”(I11) (*with them I feel I have to remember it is something that is highly infectious*), “You are slightly more at risk”(I03). This included some of the respondents working with patients already on ARVs: “ons is seker meer at risk hier as wat jy op ‘n ander plek sal wees”(I25) (*we are probably more at risk here than at other places*). Three respondents noted that they treat all patients as potentially HIV positive”. Ek behandel elke pasiënt asof hy HIV is” (I24) (*I treat every patient as if they are HIV positive*) “...elke pasiënt in elk geval ‘n potensiële gevaar is” (I22) (*every patient is in anyway a potential risk*).

Behavioural change Two of the respondents in this study admitted to not wearing gloves as expected in universal precautions(I11, I13), although one said it was due to eczema(I13). In four respondents, knowing a patients HIV status caused a change in behaviour such as avoiding taking blood, putting on gloves or double gloving.”...as jy hulle kan avoid is jou risiko ... minder”(I20) (*if you can avoid them your risk is less*). “Ek moet handskoene met hulle aantrek wat ek gewoonlik nie doen nie.” (I11) (*I have to wear gloves which I usually don’t do*). Six respondents felt they were more cautious with an HIV patient.”...’n bietjie meer versigtig.” (I21) (*a bit more careful*).

“As ek weet wat haar HIV status is gaan ek net meer versigtig wees”(I19) (*if I know her HIV status I will be even more careful*).

Social risk

Only three mentioned the possibility of contracting HIV outside of their job. One specifically said she did not see herself as contracting it “I don’t think that I would get it”(I05). The other two mentioned it only as a possibility if their partners were unfaithful. “As my man doen wat hy wil doen...” (I11) (*if my husband does what he wants to do*) and “...soos ek my man vertrou, so as ek positive is moet ander nie dink: sy het rond geslaap nie...”(I22) (*as I trust my husband, so if I become positive others shouldn’t think I slept around*).

8.7. Anger

Anger was the most prominent emotion described and was mentioned by eleven respondents. Anger was directed mostly toward patients defaulting on their treatment, people failing to prevent themselves or others from getting HIV. This include children prominently.

Defaulters

Seven respondents felt angry when patients defaulted their treatment.” as pasiënte default op ARVs raak ek verskriklik kwaad”(I19) (*I get terribly angry if patients have defaulted*) “...’n pasiënt het ‘n keuse en hulle het ‘n kans en hulle besef nie hoe verskriklik bevoorreg hulle is nie...”(I25) (*a patient has a choice and they have a chance, they don’t realise how privileged they are*). “dis daai tipe pasiente wat rêrig maak dat ek wil gil.”(I11) (*it’s that type of patient that really makes me want to scream*). “mense wat die vermoë het om beter te kan doen.”(I10) (*people who have the ability to do better*).

Wasting money

Two respondents were angry that the state was spending a lot of money on HIV. “Ek voel daai geld if you’ve got a terminal illness...I just feel someone who is healthy should get that money”(I20). “dit sit onnodige druk op die mediese kant...”(I13) (*it puts unnecessary pressure on the medical system*).

Failure to prevent

Anger at failing to prevent HIV was mentioned by five respondents. Most were directed towards mothers failing to protect their kids, “Iemand het nou hierdie kind geharm”(I20) (*someone has harmed this child*), “...a mother who doesn’t take responsibility in her pregnancy..”(I05). One respondent specifically mentioned the grandparents who then have to look after the orphans left behind “Die ou mense wat op die stoep moes gesit het”(I25) (*the old people who should have been sitting on the stoep*).

Anger was also directed towards patients failing to prevent getting HIV themselves “...anger towards the fact that they didn’t protect it themselves...I can’t accept you could have been so stupid.”(I20), “...dat ‘n vrou haarself in so ‘n situasie kan plaas...”(I25) (*that a woman can put herself in such a situation*) and lastly towards the state in not doing enough. “dit raak erger en erger in die land...dit word goed gepraat in plaas dat dit uitgesortword...”(I13) (*it gets worse and worse. It gets justifies instead of sorted out.*).

8.8. Children

Children were specifically mentioned by nine respondents and mostly in an emotional way. Many were angry that a child got HIV “The child that gets transmitted in pregnancy and is innocent ...”(I20) and blamed the mother as irresponsible “The women with HIV that then falls pregnant and risks her child” while others felt sad that they got infected and will die. “The sad part is the children...somewhere along the line things are going to change...”(I05), “Jy sien ‘n ma wat inkom met ‘n kind...daar is ‘n terminale element daarin.”(I04) (*you see a mom coming in with a child...there is a terminal element to it*).

8.9. Distancing

Six of the respondents said that they try to keep a distance from their HIV patients and not get emotionally involved. “I distance myself from, emotionally I cut myself off...”(I05), “Ek gee om so ver ek kan meer ek gaan nie betrokke raak nie...”(I25) (*I care as much as I can but I don’t get involved*). One of the respondents felt that if they get involved it would negatively affect their ability to do their job.” ...as ek elkeen van my pasiënte moet jammer kry oor, ai moeder jy is so siek, gaan ek ‘n useless dokter wees.” (I11) (*if I felt sorry for every patient I would be a useless doctor*). Two of the respondents said that it would affect them negatively by getting

involved. “As ek heeltyd daaroor worry gaan ek iets oor kom.”(I22) (*if I worried about it the whole time I would crack*), “...then that would be emotionally draining by the end of the day...”(I03).

8.10. Relationship with patients

Six respondents noted that building a relationship with the patient was important “...om hulle saam met jou in die span te kry, maar jy tackle dit saam”(I11) (*to get them in the team, to tackle it together*), “...soos die verhouding met hulle, vertrou, die pad saam loop...”(I21) (*like the relationship with them, the trust, walking the road together*) and two enjoyed the relationship of mutual trust. “...hulle vertrou my en ek vertrou hulle.”(I22) (*they trust me and I trust them*) “...die feit dat hy vertrou in my het voel ek half tevrede...”(I24) (*the fact that he trusts me makes me feel satisfied*). Three of these respondents also noted that they distanced themselves from their patients as discussed in the previous theme.

8.11. Making a difference

Four respondents felt that they were making a difference in the lives of their HIV patients, this positively influenced their attitude. “Dis lekker om te voel dat ek ‘n verskil kan maak”(I19) (*it is nice to feel I can make a difference*). “Jy kan ‘n verskil sien in die behandeling wat ek gee.”(I21) (*you can see a difference in the treatment I give*), “...dis rewarding want as jy informasie gee is dit goed an as jy behandeling gee is dit goed...”(I06) (*if its information you give its good, if its treatment you give its good*) “You can make a difference in someone with HIV’s life.”(I06)

8.12. Obligation

Prefer not to treat

Four of the respondents felt obligated to treat HIV patients. They would not refuse to treat a patient but given the option they would prefer not to have to treat them. “...as a doctor you have to help every patient but that doesn’t mean I want to in my heart of hearts.”(I20). “...op ‘n manier wil jy aan jouself nie eers erken dat jy dit doen omdat jy moet nie, nie omdat jy so voel nie.”(I10) (*in a way you can’t even admit to yourself that you do it because you must, not because you want to*).

Will treat

The other nine respondents felt they would treat patients even if they didn't have to. "Dit is my keuse, ek wil met hulle werk."(I21) (*it is my choice I want to work with them*) "hoekom sal ek hulle nie help nie? Ek sal hulle nog steeds behandel."(I19) (*why won't I help them, of course I will*)

8.13 Q-sort instrument analysis

Of the thirteen respondents eight had a graph that had all the evaluators fall within the "good attitude" quadrants (table 2). Emotionality was found to be the strongest influence in affecting these respondents attitude. The second was a lack of reluctance. Seven of the respondents described emotionality to be the biggest influence on their attitude, four a lack of reluctance and only one described ability on most like my attitude as having the strongest influence. When looking at having a more negative attitude a lack of ability in most like my attitude and reluctance to treat were the biggest drivers in having a "poor attitude".

8.14 Links between themes

Many themes were interlinked and shared overlapping ideas. Thoughts regarding ARVs overlapped with several other themes. ARVs influenced the perception of patients' prognosis from a terminal to that of a manageable (chronic) disease. It was also mentioned under complexity as one of the reasons respondents found HIV patients to be complicated. ARVs were also mentioned under perceived ability as one of the subjects respondents felt they had a lack of knowledge. Perceived ability and knowledge affected thoughts around complexity of patients, mostly due to a lack of knowledge regarding ARVs. The incurability of HIV (prognosis) caused negative perceptions of ability in respondents. ARVs were also linked to anger as expressed against patients who defaulted. Prejudice shared ideas with perceived risk of infection due to a fear of judgement if the respondent were to become infected. Children were also linked with prejudice especially regarding thoughts around the mothers of infected children. Anger was a prominent emotion and was linked to several judgements expressed by respondents.

Four of the themes were not linked to any of the others. They were Obligation, Distancing, Making a difference and Relationship.

The relationships are shown in the Figure 1 below.

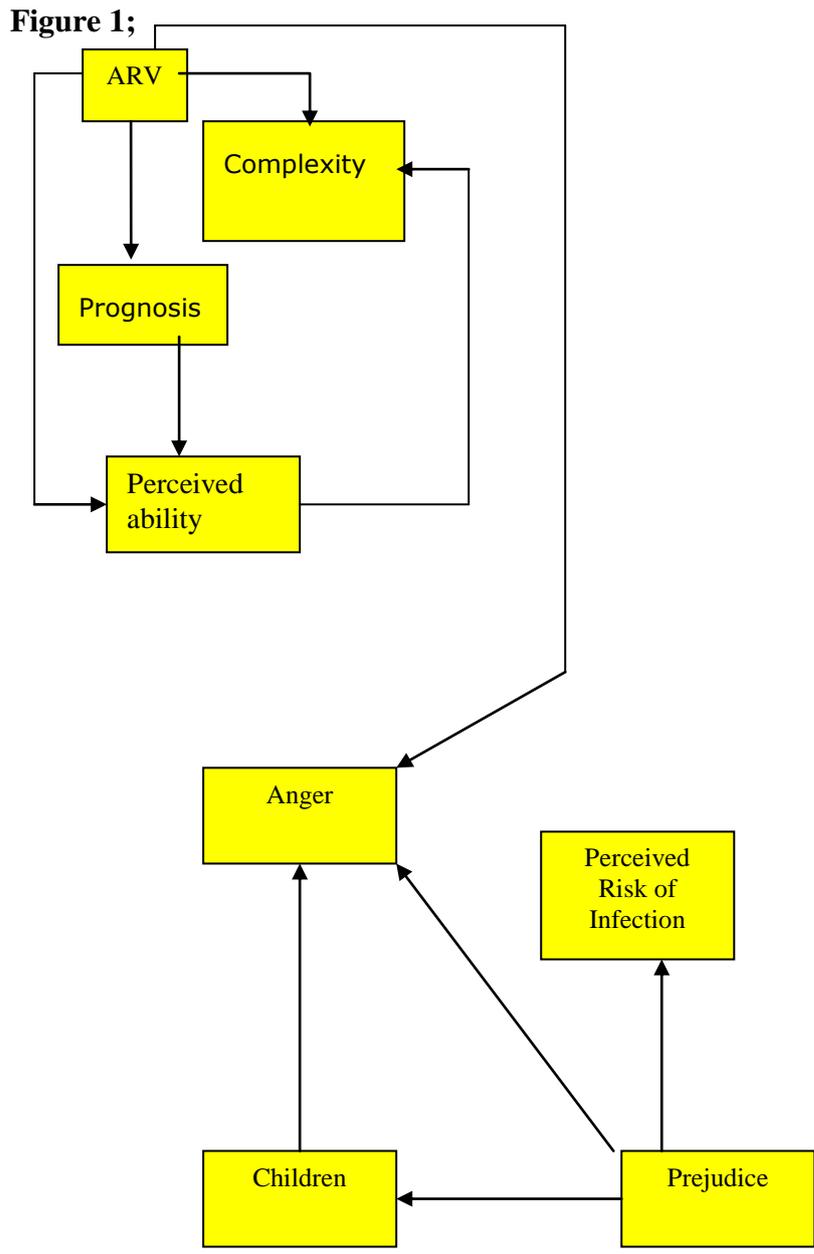


Figure X: Relationship between themes.

9. Discussion

9.1. ARV

ARV has brought about a change in the attitude of health care workers towards HIV patients as noted by some of the respondents (I04, I11). A prominent change noted in this study was a shift in perception regarding prognosis of patients. Most respondents have the view of HIV now being a chronic disease. This has changed from the view of HIV as a death sentence¹³ to that of a treatable though not curable disease. Several of the African studies done in earlier years showed attitudes of futility as shown by HCWs feeling it was a waste of resources to treat opportunistic infections in HIV patients⁴, or that they should not receive high tech treatment¹⁵. Some studies commented on staff having feelings of futility¹⁰, and helplessness^{53, 13}. Two respondents in this study mentioned feelings of inadequacy. This was due to a feeling of not being able to cure patients (I20). This respondent also commented on spending money on HIV patients (I20).

Attitudes regarding patients defaulting their ARVs are another new dimension added by the availability of ARVs. Many of the respondents in this study have expressed feelings of anger towards defaulters. This was found to be unique to this study. The respondents reported feeling angry because the patients were wasting their chances of becoming healthy (I25), were not taking responsibility for their health or were causing unnecessary work for the HCW (I11).

ARVs also influenced HCW perception of knowledge. Many felt they did not have adequate knowledge regarding ARVs and were unsure which ARV to use as well as experiencing problems discerning side effects of ARVs from other problems patients presented with. This lack of knowledge was also noted in other studies and HCW felt that only specialists could manage HIV patients^{61, 62}. Respondents in this study also commented on ARVs being one of the factors in the complexity of managing HIV patients (I06I21).

About a third of respondents commented on ARVs improving the health of HIV patients and that it has changed their perception of HIV (I22) as well as their management of patients (I06).

9.2. Complexity

Although HIV as a complex disease was not directly discussed in other studies this was alluded to by feelings of HCWs that HIV patients should be treated by specialists as shown in the study by Martin et al⁶². Respondents in this study felt that HIV patients were more complicated due to them contracting unusual infections that were not often encountered, presenting with ordinary infections in an unusual (I20), a higher incidents of complications and having side-effects from ARVs. The respondents who felt that HIV patients were more complicated were mostly doctors and worked in a secondary hospital. The respondents who did not find patients complicated were mostly nurses who worked in primary health care or doctors with previous experience in an HIV specialist clinic. These findings are probably due to doctors in a secondary hospital, seeing patients referred that were too complicated to be managed at primary level. They also tended to work in casualty and patients presenting there tend to be more ill than at primary care clinics. The nurses in primary care saw mostly uncomplicated patients and would refer difficult patients as they were not expected to manage them(I24).

9.3. Perceived ability

Seven respondents felt confident managing HIV patient. Four said they felt they were making a difference in patients lives. Five respondents felt they lacked adequate knowledge especially regarding ARVs and six noted they knew where to refer patients for further treatment should they not be able to manage them. As shown in other studies increasing knowledge lead to more positive attitudes in health care workers^{14, 10, 34, 39, 48,52, 61}. HCWs showed a decrease in stigmatisation and were more willing to treat HIV patients after training sessions. The respondents who felt confident in general had a more positive attitude regarding patients. The respondents who felt they had inadequate knowledge include the four who would opt out of treating HIV patients. It is encouraging though to find that more than half of respondents were comfortable in treating patients and that six had access to expert knowledge or referral. Knowledge deficits can be addressed to bring about a positive change in attitude. Knowledge however does not necessary bring about a change in prejudice. this was expressed by three of the respondents who noted that although they felt prejudiced toward some of the HIV patients they know, their assumptions

regarding their lifestyle might be wrong. “In my mind it’s in the majority of the time the men who cheat, even though what I’m thinking is not right”(I05)

9.4. Prognosis

Although most respondents viewed HIV as a chronic disease, in other words manageable though incurable, most thought patients would have a dramatic decrease in life expectancy. The longest life expectancy given was that patients might live another ten years(I04, I24) on treatment. There was a feeling that patients will frequently fall ill. (I05 I04) This was the most prominent reason for respondents feeling sad when it comes to children since they will either die young or be left as orphans by parents who died. These thoughts regarding prognosis also cause feelings of inadequacy and helplessness in respondents as HIV is an incurable disease(I20, I06). Similar feelings were described in a study in Turkey where doctors commented on feeling helpless and ineffective¹³. In a study in Nigeria feelings of futility were more pronounced in female HCWs than their male counterparts¹⁰. A study from Mexico noted that patients were viewed as hopeless cases⁵⁰.

9.5. Prejudice

Several prejudices came to light in this study. One of the most prominent was that HIV infection was due to a promiscuous lifestyle. This was mentioned by more than half of the respondents. Although mentioned in other studies it did not feature as the dominant prejudice as found in this study. Another unique finding was the differentiation in attitude towards men and women. Most respondents were much more sympathetic towards women and felt that they did not always have a choice in getting HIV. This was opposed by the thoughts that men “went out and looked for it”(I05), they knew HIV was there and they failed to protect themselves or their partners(I25). This might be explained by the fact that in some of our communities women are not socially and economically empowered. They are often dependent on the male partner for money and support and don’t always have the power to insist on condom use. Similar social circumstances were mentioned in a study in Turkey; “Consequently, they hide their illnesses, and continue to transmit to others, especially to their wives. Stereotypical male and female sexual behaviour are determined by traditional values”¹³. As HIV clinics are struggling to get male patients to attend one wonders if this is due to the fact that they feel more stigmatized or that HCWs believe

in the difference because they have less exposure to male patients and their histories. Two respondents mentioned cultural differences and this was also mentioned in another study in South Africa done by Deetlefs¹⁵. As noted in the study from Mexico⁵⁰ HCWs differentiated between guilty and innocent HIV infected patients. In this study children and women were viewed as innocents while men, commercial sex workers and pregnant mothers not using PMTCT were viewed as guilty parties. Men were seen as promoting the epidemic. Mothers were particularly harshly judged as they failed to protect their children. This again makes one question if this judgement might be a reason ARV clinics are struggling to get the necessary number of children enrolled. Commercial sex workers were only mentioned by one respondent and then only in passing as a high-risk group. In most other studies high-risk groups were viewed as men who have sex with men, IV drug users and commercial sex workers. These groups were found to be much more stigmatized than others and in several studies described as important drivers in the stigmatization of HIV patients. This differentiation of high-risk groups and particularly stigmatized groups were noted in studies from several countries, first world as well as third world. These included the USA³, China^{7, 30}, Kuwait¹, Ireland², Turkey¹³, Nigeria⁵¹, Mexico⁵⁰. Notably this type of differentiation was not described in any of the South African studies^{15, 33, 53}. This is probably due to the fact that HIV is heterosexually transmitted in South Africa with a very small population of IV drug users. Men who had sex with men were only mentioned by one respondent and then only to say she did not view them as a high-risk group. Noticeably homosexuality was not mentioned by any other respondents which reflects on the way the epidemic is spread in this country as opposed to in other countries especially in the first world.

In many studies religion was found to cause people to be more stigmatizing as shown in the study from Belize¹⁹, Lagos⁵⁸, Turkey¹³ and Ireland². In this study one respondent mentioned religion while two others alluded to it. Only one felt that due to his religion he judged HIV patients while the other two felt that it was their religious (Muslim and Christian) duty to treat patients. Similar opinions regarding Christian duty were found in the study by Deetlefs¹⁵.

Almost two thirds of respondents mentioned other people's judgements in discussing their own. Several of them mentioned that other people might think that they were promiscuous should they become positive from a needle stick or mentioned a fear of

stigmatization if they were to be known to be positive (I20). This would feed into the fear of infection. Two studies noted that there was significant discrimination against HIV infected colleagues. Most HCW were of the opinion that they should not be allowed to do surgery or invasive procedures and many would refuse to have a positive colleague do surgery or assist during surgery on them^{35,37}.

9.6. Perceived risk of infection

In this study, as echoed by many if not most of the other studies, a fear of contracting HIV through occupational exposure featured prominently. Although not all of the respondents felt more at risk they all acknowledged the possibility of infection. All of them showed some change in behaviour whether it was just being more cautious or a change in behaviour such as following universal precautions or taking extra precautions such as double gloving. The same result was found in three South African studies looking at nurses' attitudes^{15, 33, 53}. The study by Deetlefs¹⁵ showed that HIV patients were considered dangerous and that there was an increase in the use of universal precautions if a HIV patient's status was known¹⁵. Several respondents mentioned not feeling anxiety when managing a patient (I19I06) and following the same precautions for every patient regardless of status (I24). Two of the respondents in this study admitted to not wearing gloves as expected in universal precautions(I11, I13), although one said it was due to eczema(I13). Many of the studies also mentioned inconsistent use of universal precautions such as two of the South African studies as well as studies from several other countries such as Nigeria^{9, 8, 4}, Serbia⁴¹ and India⁴⁴. In many of the studies this also increased the thought that all patients should be tested for HIV upon admission^{11, 4, 9, 13, 41, 48, 55, 60}. In many of the studies the number of HCWs feeling they have the right to know a patients status were as high as 80 to 90%. This type of attitude was not mentioned by any of the respondents in this study probably due to a clear national directive that no patient can be tested without consent.

Only two participants mentioned contracting HIV from non-occupational exposure but regarded themselves to be at low risk. They both mentioned this only as an option in the case of their partner being unfaithful. This trend of HCWs not regarding themselves at risk in a social setting has been noted in two other studies^{15, 34}. The one was a study involving peer group interventions to improve attitude that showed that

although knowledge was increased there was no change in behaviour regarding risky sexual practises³⁴.

9.7. Anger

Anger was an emotion frequently encountered in the interviews. This was mostly expressed against patients defaulting treatment as already discussed. Other respondents felt anger directed towards mothers who firstly became pregnant when they were HIV-infected and then not using ARVs to prevent their children from contracting HIV. Women who fell pregnant were viewed as irresponsible since they would either have a HIV infected baby or eventually die and leave an orphan behind. (I20). One respondent specifically mentioned the grandparents who then have to look after the orphans left behind (I25). Respondents also felt anger towards patients who failed to prevent themselves from getting HIV either by not using prevention or by putting themselves into a situation where they were abused. This is a surprising finding and has not been described in any other study (I20). Anger was also directed against the state who did not do enough to prevent the epidemic, are spreading confusing messages and then regarding the amount of money dedicated to the care of HIV patients only. The two respondents who had this opinion also felt HIV had a poor prognosis One would hope that this opinion might be changed as knowledge regarding the true prognosis is gained. Another South African study also mentioned the feeling that HIV patients should not receive high technology treatment¹⁵. Anger was also one of the emotions noted in the South African study of Smit et al⁵³. One might suggest the feeling of anger is linked to frustration caused possibly by the fact that HIV is a preventable disease by using either condoms or PMTCT in the case of pregnant women.

9.8. Children

Two thirds of respondents mentioned children. The most common emotions associated were anger directed to the mother as the guilty party in causing the infection and then sadness for them being ill or terminal. None of the other studies specifically mentioned children. It is interesting that they feature very prominently in this study even by HCWs not directly working with children. Children seem to evoke an emotional response from respondents unlike adult patients.(I20).

9.9. Distancing

As discussed in the results, six respondents noted that they did not want to get emotionally involved with patients. Interestingly three of these also noted that forming a relationship with the patient was important. Some of the reasons noted for not wanting to get emotionally involved were that it was emotionally draining on the health care worker(I03, that they would not be able to cope with all the emotion from so many patients(I22) as well that it might negatively influence their ability to treat patients(I11). This finding has not been described in any of the other studies although it was mentioned in some that HCWs did not want to socialize with HIV positive patients^{3, 1}.

9.10. Relationship

Six respondents noted that they build a relationship with the patient. Interestingly four of the six respondents were nurses. They specifically mentioned that there was a relationship of mutual trust. A study done to decrease stigmatisation where nurses and patients were working together in teams showed that patients perceived less stigmatisation and there was an increase in mutual support and understanding²⁸. It is encouraging then to see that almost half of the respondents were building relationships with patients.

9.11. Obligation

Four respondents commented that if they were to have the option to opt out of treating HIV patients they would do so. Although they upheld their ethical duty to treat patients this was not by choice. This concept has been reflected in many of the other studies done over the years. In a Kuwaiti study 83% of HCWs would not treat HIV patients¹, 54% in Turkey¹³, a third of surgeons would not operate on HIV infected patient in Nigeria⁸, 13% of nurses in another study in Nigeria would not do vital signs on a HIV positive patient. In a study in Mexico 13% thought that they should be banned from public services all together. This type of attitude seem to correspond with perception of high risk of infection

Encouragingly the other nine respondents said they would treat HIV positive patients regardless. With some commenting that they enjoyed working with these patients,(I05I21)

9.12. Exposure

Although not enough to qualify as a theme two respondent noted that they never saw the well HIV patient. The patients they come into contact with are only the ill ones. As shown in many other studies having experience with HIV patients were one of the most if not the most important factor in having a positive attitude towards HIV patients. A study from rural India showed nurses were more willing to care for a HIV patient if they had previous experience with this⁶³. The same was shown in an Eastern European study²⁴. Turkish students in a study were found to have a more positive attitude if they knew someone with HIV⁴⁶ and obstetric nurses in the US were more positive toward HIV patients if they knew more than four people affected by HIV⁴⁵.

“ons wat nie in HIV werk nie kry ‘n groot wanindruk van hoe ‘n pasiënt eintlik kan lewe met HIV. We don’t see the James Camerons, the judge wat al jare HIV het en niemand sal dit ook dink nie want hy is so gesond en alles”. All we see is CD4 of 3 or 30 coming in with PCP and TB and meningitis and looking basically terminal”(I20) *(we who don’t work in HIV get the wrong impression of how a patient can live with HIV. We don’t see the James Camerons, the judge who has lived for years with HIV, but no one will think that, because he is so healthy. All we see are the CD4 of 3 and 30 presenting with PCP, TB and meningitis and who basically looks terminal)*. Although not mentioned specifically this is probably a big driver in the doctors attitudes in the Worcester hospital, who only get to work with the very ill HIV patients during their casualty calls. The healthy HIV patients probably slip unnoticed through the clinics as their HIV status is not suspected or disclosed. In contrast the primary health care nurses felt that HIV patients were not complicated as they saw the majority of patients when they are newly diagnosed and not yet that ill, “ons sien die gewone pasiënte”(I24) *(we see the regular patients)*.

9.13 Differences between Doctors and CNPs

Most CNPs felt comfortable in managing HIV patients as opposed to the doctors. This could be due to the fact that the CNP were only responsible for the care of uncomplicated and stable patients. Difficult patients were referred to the hospital. As Worcester hospital is a secondary hospital the patients seen there are mostly complicated patients and the doctors are expected to see and manage them. They

don't often get to work with uncomplicated patients. This can also be a cause for many of them to perceive HIV to be a complicated disease. The other difference highlighted was that the CNPs thought building a relationship with a patient an important part of their work. Both these reflect on how primary health care differs from secondary care. In primary care complicated patients are referred on. Patients in primary care gets seen several times and there is ample opportunity to build a relationship where in secondary care the patient is often seen only once and referred back to primary care once stable.

Other than the above mentioned differences similar attitudes and perceptions were found between doctors and CNPs

9.14. General attitude

As one respondent noted when asked which disease he could compare HIV to, he said Leprosy. In many ways this is an excellent comparison. People with leprosy were isolated from the community and shunned. As shown in many studies people thought patients with HIV should be isolated in specific wards^{1,4, 8, 50, 59}. Lepers were not allowed to drink from public fountains or eat with non-infected people and as shown in the study from Herek et al, 45% of respondents would not buy food from a positive shop owner³. Other studies showed HCWs not wanting to socialize with HIV positive people^{1, 35} or thought it can be contracted from social contact such as shaking hands, kissing, using the same utensils or toilets^{3, 13, 44, 61}. As in the case of HIV, leprosy had a vastly overrated infection risk. Most studies showed a fear of contracting HIV despite the fact that the chance of infection through a needle stick injury is only 0.3% with that being decreased by another 80% with the use of post exposure prophylaxis. Lepers were often viewed as being punished by God for their sins and similar views are held by many regarding HIV^{3, 4, 7, 13, 15}. It is sad that in our modern era we have an attitude towards a disease consistent with that of one of the most misunderstood and stigmatised diseases of the ancient world.

On a more positive note, two thirds of the respondents analyses showed all three evaluators emotionality, ability and lack of reluctance to fall in the 'good attitude' quadrants thus showing a positive attitude despite several prejudices as highlighted in the themes. Several studies have shown a generally positive attitude despite problems

such as fear of infection and lack of knowledge. South African nurses in a study of 2009 showed attitudes were mainly positive despite findings of a fear of infection and gaps in knowledge³³. The same was found in a study of Ugandan midwives⁴³ and one of nurses in 2004 also in Uganda⁵⁷. A study of HCWs in rural India also found a positive attitude regardless of fears of infection⁶³. It appears that even in the face of several stumbling blocks, HCWs can and do still have a positive outlook.

9.15 Limitations

The following shortcomings were identified in this study. As mentioned before, as the researcher is known to work in the ARV clinic this could have caused a change in responses given regardless of actions taken to limit bias. There were several doctors who declined to do the interview this might have skewed the study to the more positive side. It must be noted though, that none of them were the candidates selected for their suspected negative attitude. Not all departments were included in the study noticeably paediatrics, surgery (although ENT and orthopaedics are surgical specialities) and obstetrics and gynaecology.

10. Conclusion

Most respondents were found to have a general positive attitude regarding HIV patients despite several negative findings. This type of result has been shown in other studies as well and is therefore not unusual.

Factors negatively influencing attitudes were:

- **Fear of infection:** most respondents had a change in behaviour when working with a HIV positive patient, either taking extra precaution or consciously being more attentive on what they were doing. Fear of infection is a pervading factor described in many other studies.
- **Prejudice:** judgements made in this study related to heterosexual behaviour. Promiscuity featured prominently here. Similar thoughts were described in other studies. Unique to this study was the difference in judgment towards men and women and is worth some further investigation. Noticeably absent is any mention of men who have sex with men and IV drug users, which was a prominent feature in other studies when stigmatisation was discussed.

- **Feelings of anger:** this emotion featured often in interviews and although mentioned in other studies did not show similar prominence. Anger was shown towards patients failing to prevent HIV infection and defaulters.
- **Complexity:** respondents experienced HIV as a complicated disease to manage due to several aspects such as ARVs, high infection rates and uncommon presentations. Some studies referred to this as HCWs feeling HIV should be managed by specialists and feelings of inadequacy.
- **Lack of knowledge:** some respondents felt they lacked knowledge especially in the field of ARVs. A lack of knowledge was another prominent feature described in other studies and has been proven to have a detrimental effect on attitude.

Factors that had a positive effect on attitude were:

- Acceptance of HIV patients as shown by some respondents who made no judgments regarding HIV patients
- Respondents treating HIV patients not out of obligation but out of choice.
- Building relationships with HIV patients based on mutual trust.
- Respondents feeling they make a difference in the lives of HIV patients.
- Being comfortable and feeling capable in the management of patients
- Having support to either get information or refer patients if needed.

ARVs have brought about some changes in attitude though not always positively. Some change has been made regarding an improvement in prognosis to a chronic disease and improving the health of patients. Feelings of anger were expressed towards patients who defaulted treatment. ARVs caused some complications in the management of patients as well as a perception of a lack of knowledge. Specific thoughts regarding ARVs have not been described in other studies.

Unique findings to this study were a difference of judgment of male and female patients, the absence of homosexuality and IV drug users as a stigmatised group, prominent feelings of anger and children as a theme.

Although there is a general positive attitude towards HIV patients, there is still a lot of judgment of HIV patients and a feeling of a lack of knowledge.

11. Recommendations

The researcher recommends that information sessions be held to improve knowledge of ARVs and typical problems experienced in HIV patients, also to give information regarding the risk of infection and management thereof. Exposure of HCWs to healthy HIV patients will further improve attitudes. This can be done by organising rotations through the ARV clinic to see stable patients. This needs to be discussed with the medical superintendent of Worcester hospital and the clinical manager of the Day Centre. All doctors should be trained to be confident in managing HIV and prescribing ARV as they do for diabetes. Feedback will be given during the monthly doctors meetings held at the hospital. Feedback will be given to the CNPs during their weekly meetings. Smaller group discussions regarding attitudes and perceptions can be done with in each department during their Mortality and Morbidity meetings. Further investigation into the difference in perception of male and female HIV patients is warranted. A follow up study could be done to include all departments.

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Appendix A

PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

TITLE OF RESEARCH PROJECT

ATTITUDES AND PERCEPTIONS OF DOCTORS AND CLINICAL NURSE
PRACTITIONERS TOWARDS THE WELL HIV PATIENT

REFERENCE NUMBER

PRINCIPAL INVESTIGATOR

DR ANRI WENTELER

ADDRESS

WORCESTER HOSPITAL

MURRAY ST

WORCESTER

6850

CONTACT NUMBERS:

CELL: 0823733303

WORK: 023-3481292

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of the project. Please ask the study staff any questions about any part of the project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved. Also, your participation is **entirely voluntary** and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you agreed to take part.

This study has been approved by the **Committee for Human Research at Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical research Council (MRC) Ethical guidelines for Research

What is this research study all about?

This study will be conducted in the Breede Valley sub-district and will include doctors from the Worcester Hospital and clinical nurse practitioners from the Community Health Centre, surrounding clinics and mobile units.

The project aims to get an idea of the attitudes and perceptions of doctors and clinical nurse practitioners regarding the well HIV patient . In other words the HIV patient either not yet on ARVs or those stable on ARVs, with a high CD4. This will be a patient who do not present with an AIDS defining or opportunistic disease.

The study will collect information by handing out a questionnaire to be completed beforehand, and then conducting interviews individually. Interviews will be recorded and later transcribed. Names of participant will not be recorded and each participant will be referred to by a code given.

Why have you been invited to participate?

We would like you to participate so that we can get as many opinions as possible to be able to get a clear picture of health care worker' attitudes. Your opinion is important.

What will your responsibilities be?

You would have to complete a questionnaire handed to you 2 days before the interview. The interview will be conducted at your convenience.

Will you benefit from taking part in this research?

Yes, this research will increase your awareness of your attitude towards patient and will improve the service you provide by identifying possible learning opportunities.

Are there any risks involved?

No, all your information will be treated with the strictest confidentiality. No information would be available to anyone other than the researcher even after completion of the research. Your name would not appear on the recording or the transcript.

Will you be paid to take part in this study and are there any costs involved

There will be no costs involved to you personally. You will unfortunately not be paid to take part.

Is there anything else you should know or do?

You can contact Dr Wenteler at 023-3481292/ 0823733303 if you have any further queries or encounter any problems.

You can contact the Committee for Human Research at 021-9389207 if you have any complaints or concerns that have not been adequately addressed by your study doctor.

You will receive a copy of this information and consent form for your own records.

By signing below I agree to take part in a research study entitled: Attitudes and Perceptions of Doctors and Clinical Nurse Practitioners towards the Well HIV Patient

I declare that:

I have read or had read his information and consent form and it is written in a language with which I am fluent and comfortable.

I have had a chance to ask questions and all my questions have adequately been answered.

I understand that taking part in this study is voluntary and I have not been pressured to take part.

I may choose to leave this study at any time and will not be penalised or prejudiced in any way.

I may be asked to leave this study before it has finished, if the study doctor or researcher feels it is in my best interest, or if I do not follow the study plan, as agreed to.

Signed at (place).....on (date).....2008

.....

Signature of Participant

.....

Signature of Witness

Declaration by investigator

I (name).....declare that:-

I explained the information in this document to

I encouraged him/her to ask questions and took adequate time to answer them.

I am satisfied that she/he adequately understands all aspects of the research, as discussed above.

I did/did not use a translator

Signed at (place).....on (date).....2008/2009

.....

Signature of Investigator

.....

Signature Of Witness

Declaration of translator

I (name) declare that:-

I assisted the investigator (name)to explain the information in this document to (name of participant).....using the language medium of

We encouraged him/her to as questions and took adequate time to answer them.

I conveyed a factually correct version of what was related to me.

I am satisfied that the participant fully understands the contents of the informed consent document and has answered all his/her questions satisfactorily.

Signed at (place).....on (date).....2008/2009

.....

Signature of Translator

.....

Signature of Witness

Appendix B

Attitudes and perceptions of doctors and Clinical Nurse Practitioners regarding the well HIV patient

Please complete the following table by selecting from the words below and then writing corresponding number in the block of the table provided.

Block A of the table corresponds with the statement “least like my attitude towards HIV patients” and block G with the statement “most like my attitude towards HIV patients”

Please note that all numbers must be used and each number can only be used once

1 Able to help	14 Disapproval
2 Accepting	15 Dislike
3 Angry	16 Duty bound
4 Anxious	17 Empathetic
5 At risk	18 Gratifying
6 Aversion	19 Inadequate
7 Capable	20 Offended
8 Caring	21 Open minded
9 Cautious	22 Pity
10 Challenged	23 Rejection
11 Comfortable	24 Rewarding
12 Compassionate	25 Sad
13 Complicated	26 Stimulated
	27 Unsympathetic

			D			
			D			
		C	D	E		
		C	D	E		
	B	C	D	E	F	
A	B	C	D	E	F	G
A	B	C	D	E	F	G

A Least like my attitude towards HIV patients

B Most like my attitude towards HIV patients