

Focus group discussion with private sector doctors in the eThekweni Metro of KwaZulu-Natal on the management of HIV/AIDS patients

Naidoo P, MMedSc (Pharmacology)

School of Pharmacy and Pharmacology, College of Health Sciences, University of KwaZulu-Natal, South Africa

Correspondence to: P Naidoo, e-mail: naidoopj@ukzn.ac.za

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Abstract

Background: Highly active antiretroviral treatment (HAART) is essential in the treatment of HIV/AIDS; however, a holistic approach to HIV/AIDS management is important. This study was done to confirm the findings of two studies done previously in the eThekweni Metro of KwaZulu-Natal on private sector doctors' management of HIV-infected patients and to obtain more in-depth information about their nonpharmacological management of HIV-infected patients.

Methods: Two focus group discussions were conducted amongst private sector doctors in the eThekweni Metro, after obtaining their consent. The focus group sessions were scripted, audio-taped and transcribed verbatim. Prevalent themes were identified and reported.

Results: Eight doctors participated. Of the total patient population seen annually by the majority of the doctors, an average of 43.8% was HIV infected. Doctors in this study managed their patients both pharmacologically and nonpharmacologically. Seventy-five per cent of doctors indicated that the taste of medicine played an important role in nonadherence to treatment, but all agreed that cultural beliefs also influenced the patient's adherence to medication. Theft of medicines and the out-of-stock situation prevented antiretroviral drug access, which impacted negatively on adherence. Five doctors mentioned that depressed patients abused alcohol, resulting in nonadherence. One doctor reported that he used the biopsychosocial approach to improve adherence in his patients. Doctors indicated that the disability grant given by the South African Government caused patients not to adhere to treatment in order to maintain a CD4 count of 200 or less so as to qualify for the grant.

Conclusions: The study confirmed the previous study findings in that it showed that private sector doctors manage their HIV-infected patients both pharmacologically and nonpharmacologically. It further provided new and interesting information with regard to the nonpharmacological methods employed in HIV/AIDS management, that is the incorporation of cultural beliefs in the management of HIV-infected patients to improve adherence to treatment, and the role of the disability grant and pharmaceutical formulations in contributing to nonadherence by HIV-infected patients.

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Introduction

Globally, HIV/AIDS remains one of the most serious public health challenges, with 33 million people infected in 2008, of which 5.7 million were living in South Africa.¹ KwaZulu-Natal is the leading province in South Africa where HIV/AIDS is concerned, with 1.6 million people infected with the disease.¹ Since the introduction of highly active antiretroviral treatment (HAART), a significant improvement has been seen in patients' quality of life, thus making HIV infection a chronic manageable condition.^{2,3}

All doctors, regardless of where they practise, have an essential role to play in the treatment and management

of HIV-infected patients. This management requires that both the doctor and patient have accurate knowledge and positive attitudes regarding the disease,⁴ a multidisciplinary holistic approach be considered⁵ and both pharmacological and nonpharmacological management be instituted. Some of the nonpharmacological types of management include counselling on adherence to treatment, nutrition, side-effects of medication, psychosocial issues, family and support systems.^{5,6,7} Counselling in HIV/AIDS has become a core element in a holistic model of health care with psychological and emotional support recognised as being integral to patient management and being essential at all stages of the HIV infection.^{5,8} Despite the

enormous benefits obtained from HAART, the issue of nonadherence to treatment still remains unresolved.³ Adherence to medication and treatment is vital because it is one of the most important patient-enabling factors that is related to virological failure and drug resistance.⁹ Many factors seem to impact negatively on adherence such as the treatment regimen (complexity, heavy pill burden and food requirements), difficulty in taking medication, access to medication, side-effects, stigma, forgetting to take pills, psychosocial issues, the disease itself and concomitant substance abuse.^{7,9} Another important aspect in HIV/AIDS management is nutrition. Critical questions such as how well the antiretroviral (ARV) drugs work in people who do not have access to adequate nutrition and the role of vitamins and other supplements in HIV/AIDS management are emerging as HIV/AIDS treatment becomes increasingly available in the poorest parts of the world.¹⁰ The role of micronutrients in immune function and infectious disease is well established.¹¹ Researchers have found that people with HIV/AIDS are more likely to show signs of micronutrient deficiencies, compared to uninfected people. Various micronutrients have been linked to changes in the rate at which HIV infection progresses to AIDS.¹⁰ Without adequate food or the right nutrition, taking ARV drugs can be painful, causing people simply not to take the drugs. Dietary advice should be tailored to individual circumstances; however, in general the recommendations for people living with asymptomatic HIV infection should be to follow a healthy, well-balanced diet. Many types of support system are available in South Africa, ranging from simple availability of food parcels to disability grants, social grants and pension grants.¹² South Africa's social grants target the elderly, disabled people, poor families with children, and citizens who are incapacitated and unable to work due to illness.¹² These support systems, though available, may not be known to patients, especially those visiting private sector doctors. Even though some private sector patients may have their HIV/AIDS treatment paid for via a medical aid scheme, they may not necessarily have adequate funding to manage their HIV/AIDS condition holistically. Therefore, it is incumbent on doctors to inform and advise their patients about the different social support systems that are available in order to improve adherence to treatment, especially when food and financial considerations impact on adherence.

A study done in the eThekweni Metro of KwaZulu-Natal reported some of the factors that affected adherence to treatment in private sector patients taking ARVs,⁶ whilst another study done amongst private sector doctors in the same region during 2005–2006 gave some indication as to how doctors managed their patients and some of the topics they counselled their patients on.⁷ The current study therefore aimed to confirm the findings of these two studies and to obtain more in-depth information on the doctors' nonpharmacological HIV management practices.

Methods

Two focus group discussions with private sector doctors, which included both general practitioners and one specialist, were held in the eThekweni Metro of KwaZulu-Natal. This was found to be the most appropriate method of obtaining data collection as it allowed the researchers to interact with the doctors in order to obtain more in-depth answers, and by using open-ended questions it also allowed for free discussion without influencing the participants' thoughts.

In order to obtain a representative sample, an invitation was sent to all private sector doctors working in the eThekweni Metro, using the South African HIV Clinicians Society database and a private doctor grouping. Those doctors who indicated an interest in the group discussion were telephoned for more details. Two focus group discussions were conducted at two geographically distinct locations within the eThekweni Metro. At the start of the session, the facilitator introduced the researchers and the participants. The study was once again explained to the doctors and consent forms were distributed, signed and collected. The process was thereafter explained to the participants. The doctors were assigned letters of the alphabet by the researchers in order to collate the information and ensure anonymity. The focus group sessions were scripted, audio-taped and transcribed verbatim. Prevalent themes were identified and reported by the researchers. Confidentiality and anonymity were guaranteed to the researchers.

Ethics approval was obtained from the Biomedical Research Ethics Committee of the University of Kwa-Zulu Natal.

Results and discussion

A total of eight doctors participated. The demographic characteristics of the participants are illustrated in Table I.

The participants ranged in age from 31 to 70 years, with 75% of the participants being male and 25% female. The majority of the doctors reported that an average of 43.8% of their patient base annually was comprised of HIV-infected patients.

Overarching theme

Thematic analysis of the focus group discussions led to the identification of a theme with subthemes. The overarching theme that emerged was adherence to treatment, with various subthemes, categories and subcategories (see Table II).

Factors affecting adherence

Gender

Distinctive gender differences emerged with regard to compliance with both medication and advice. Five out of eight doctors stated that women were more adherent to

Table I: Demographic characteristics of study participants

Variable	Study sample (n=8)	Percentage (%)
Gender		
Male	6	75.0
Female	2	25.0
Race		
Black	1	12.5
Indian	6	75.0
White	1	12.5
Area of practice		
Specialist	1	12.5
General practitioner	7	87.5
Age		
31–40	1	12.5
41–50	2	25.0
51–60	4	50.0
61–70	1	12.5
Number of years of working experience		
0–11	112.5	
11–20	337.5	
21–30	337.5	
31–40	112.5	
Mean % of HIV-infected patients seen annually	43.8 (SD=26.7)	

Table II: Subthemes, categories and subcategories that were identified

Subtheme	Category	Subcategory
Factors affecting adherence as reported by doctors of HIV-infected patients	Biographical	Gender
		Cultural and religious beliefs
	Acceptance of status	Stigma, denial
	ARV access	Theft of medicines, inadequate supply
	Pharmaceutical formulation	Taste, size of tablets
	Support system – disability grant	Criteria for eligibility
Factors used to improve adherence by private sector doctors managing HIV-infected patients.	Management style	Partnership approach, with patient and other health care providers
		Counselling
	Counselling	HIV/AIDS education
		Voluntary counselling and testing
		Lifestyle changes
		Nutrition
		Traditional medicine use
	Support systems	
Health model	Biopsychosocial model	

their treatment than men. Men were identified as the more problematic sex with regard to voluntary counselling and testing (VCT) and adherence to medication. It was found that women were more concerned about their HIV status and were more receptive to VCT. This finding was supported by an article that revealed that the male gender was associated with decreased adherence to treatment.¹³

Cultural practices

All doctors agreed that cultural beliefs influence the patient's adherence to medication. This study provided new and interesting information about the incorporation of cultural values in the management of HIV/AIDS patients in an effort to improve patient adherence. One doctor stated that he used innovative ideas to incorporate the cultural beliefs of the patient. He added that he used the *madlozi* (an ancestor) in the form of a human skeleton to compel his patients to comply with treatment. The patient swears to the *madlozi* that he or she will take his or her ARVs; this action scares the patient into taking his or her medication, thereby achieving positive results because of improved adherence. One study demonstrated that there is a strong association between cultural background and beliefs about the benefits and dangers of medicines and suggested a need for a greater understanding of the effects of cultural background on medicine usage.¹⁴ Another study indicated that clinicians who do not share their patients' religious or spiritual beliefs can occasionally contribute to patients' not adhering to certain therapeutic interventions.¹⁵ Thus the incorporation of such cultural practices in the management of HIV/AIDS patients can be complex.

Stigma, denial and disclosure

Five out of eight doctors felt that patients need to accept their HIV status in order for them to adhere to treatment, with one doctor stating that 70% of his patients did adhere to treatment and at the same time were concerned about their HIV status. He further reported that stigma is no longer a major concern amongst his patients who were accepting their status and this helped to improve their adherence to treatment. However, three doctors reported that one of the challenges in their management of HIV-infected patients was the denial by the patients of their status and that steps were taken to convince these patients of their status through repeating tests and changing laboratories. One study found that acceptance of one's HIV status, the ability to avoid internalising negative attitudes and the identification of a confidante, including a doctor, are key factors in adherence to treatment as they help patients to develop a positive therapeutic relationship with their ARVs,⁹ whilst the fear of stigma and the lack of disclosure of HIV status are barriers to accessing social support and to adhering to treatment, respectively.⁹ In addition, incomplete acceptance of HIV status impedes positive lifestyle changes, which is linked to depression in HIV-positive persons.⁹

Antiretroviral drug access

Theft of medicine

Two doctors reported that their patients using public transport generally complained of their medication and money being stolen. Most of the patients visiting private

doctors belong to a medical aid scheme, thus when their monthly medication is stolen, they are unable to pay cash for another set and therefore have to go without medicine for a period of time. Newspapers have quoted the abuse of ARVs by drug addicts, thus making it one of the commodities that are regularly stolen to be sold or abused.

Shortage of medicine

Three doctors complained about the inaccessibility of ARVs and the shortage of medicine due to cessation of production of medicine by manufacturing companies, as well as logistic complications. Studies have confirmed that nonavailability of drugs at treatment sites poses a barrier to adherence to treatment.^{16,17}

Pharmaceutical formulations

Seven out of eight doctors were of the opinion that pharmaceutical formulations affect adherence. One doctor, a paediatrician, quoted caregivers as saying that the medicine "tasted like diesel". This was especially relevant to the palatability of paediatric liquids. One participant added that HIV-positive patients with oral opportunistic infections have difficulty in swallowing tablets. All the doctors supported the use of combination therapy, stating that it reduced the pill burden, thereby improving adherence to treatment. Other studies have also found that large and difficult-to-swallow pills or the unpleasant flavour of a suspension have led to noncompliance with treatment.^{6,18}

Support systems

Amongst the many support systems available, the disability grant was discussed at great length by most of the doctors who highlighted its limitations in promoting adherence and obtaining good clinical outcomes. Their major concern was the criteria used by the government to give HIV-infected patients a grant that requires patients to have a CD4 count of 200 or below in order to qualify for this grant. If their CD4 levels increase, the grant is withdrawn. This therefore discourages patients from having a high CD4 count, which in turn means poor adherence to treatment and thus poor clinical outcome. Thus patients are forced to choose between receiving a disability grant and accessing life-saving medication. Studies have shown that the disability grant has been used to support entire families and households. The consequences of this intentional nonadherence to treatment in order to receive the disability grant include drug resistance and deterioration of the health of the patient.¹²

One doctor, however, did not share the views expressed by the other doctors, as he felt that the disability grant was fairly accessible with the necessary guidelines in place to assist those who required it.

Alcohol abuse and depression

Five out of eight doctors mentioned that patients who were depressed and/or abused alcohol tended to be nonadherent to treatment. In addition, these five doctors also agreed with and supported comments made by other doctors, such as the following:

"Alcohol is an issue with many patients as they use it as an escape route for depression; it drives them to drink. Alcohol abuse is associated with domestic violence and deteriorating health. This also results in nonadherence to treatment since patients cannot grasp the seriousness of the disease and substitute alcohol for ARVs."

"It also clouds their judgment and may cause the patient to get HIV initially. It results in promiscuous behaviour, which is an underlying problem."

"I find that most of these patients demise."

Studies have shown that untreated depression may increase hospitalisations, lead to substance abuse, lead to risky behaviours, increase the risk of suicide and reduce adherence to treatment and quality of life.¹⁹ In this study, doctors reported that some patients who abused drugs and alcohol did this to cope with HIV-related stress, thereby causing them to be nonadherent to treatment.²⁰

Factors used to improve adherence

Management through partnership with patients and other healthcare providers

All eight doctors reported that they included their patients in the decision making concerning their treatment by obtaining the patients' input about when and whether they wanted to start ARV therapy. One doctor stated that he had come to the realisation that a partnership approach was more effective than the previous model in which the doctor was seen as the 'God of the patient'. The doctors confirmed that when patients were involved in the decision making about their management, it resulted in increased compliance with treatment. This reporting by the doctors was confirmed by other studies in which it was found that therapeutic decision making by the patient led to increased compliance and satisfaction with treatment and made a potentially significant and enduring difference to healthcare outcomes.^{21,22} However, a study done to explore the views of doctors on involving patients in decision making resulted in some doctors stating that they were not trained in the skills required to involve patients in clinical decisions and that the 'doctor knows best'.²¹

With regard to multidisciplinary practice, one of the doctors stated that he needed the assistance of the pharmacist, nurse, social worker, dietitian and support groups in order to manage his patients, and he had consequently introduced

his patients to a multidisciplinary team for more holistic management. Interventions aimed at improving treatment adherence will require the implementation of a multifaceted approach involving physicians, nurses, social workers, family and friends in order to manage the multiple factors involved in HIV/AIDS.^{23,24}

Counselling

HIV/AIDS education

All the doctors agreed that HIV/AIDS is a lifelong illness and that patients require education to have greater insight into the disease and added that they educated patients on the natural history of the disease, their treatment regimen, side-effects, coping mechanisms and how the drugs act. One doctor used very basic science together with a microscope demonstration to illustrate this to patients whilst another utilised diagrammatic representations to explain the disease and treatment options to patients. The paediatric doctor reported that he stressed the importance of proper storage of ARVs, especially liquids for children. He mentioned aspects such as which liquids need to be shaken, as well as the difficulty some patients may have when measuring small quantities for children's use.

Voluntary counselling and testing and lifestyle

Two doctors reported that many patients are reluctant to go for VCT; however, they do try to persuade them by saying that they should get tested for the doctor's benefit instead of their own benefit. All the doctors encouraged the use of condoms and counselled on behavioural changes.

Nutrition

A well-balanced diet and exercise were recommended by all of the doctors who felt that nutrition is important in the management of HIV-infected patients. All of the doctors promoted nutrition by prescribing multivitamins. One doctor stated that he prescribed Vitamin A and zinc when patients come in to do their viral loads. Another doctor favoured the use of certain supplements such as Centrum® and DS-24®; however, he stated that he did not believe in other nutritional supplements due to the lack of scientifically based evidence.

The majority of the doctors reported that patients used traditional medicine and immune boosters.

Traditional medicine usage

All of the doctors encouraged the use of traditional medicine, provided that patients continued their ARV treatment; however, they stated that they continuously monitored for drug interactions, in which case the traditional medicine is withdrawn. This is important as it has been shown that forbidding the use of all traditional medicine for the rest of the HIV-infected person's life is unlikely to have the desired

results, especially in persons who believe in traditional medicine. Monitoring of interactions is important, though.¹⁷

Support systems

One doctor expressed the importance of the principal caregiver and the knowledge needed by such a person to adequately take care for the patient. It is imperative, as stressed by the all the doctors, that this caregiver be thoroughly educated on the illness and treatment regimen so that he or she is adequately motivated to aid the patient.

Support systems such as families and friends, one of whom is the principal caregiver, have been shown to play a vital role in patient care.¹⁹ Support systems that are available but not discussed in detail by the doctors are food parcels, social grants, pension funds and community-based organisations. These systems help to alleviate the financial and emotional burdens on patients.¹²

Biopsychosocial approach

One doctor commented as follows:

"I use the biopsychosocial approach: 'bio' in terms of medication, 'psycho' in terms of giving the patient hope that there are drugs available, buddy support groups and 'social' in terms of whether they want to disclose to families or close people."

The fundamental assumption of the biopsychosocial model is that any health or illness outcome is a consequence of the interplay of biological, psychological and social factors.²⁵ This approach enables persons with HIV/AIDS to develop strategies for coping, it helps to improve adherence to treatment and it helps to prevent transmission of the disease and suicide.²⁶

Limitations

Due to call of duty and time constraints experienced by doctors, only a small sample size for the one focus group was obtained. Secondly, it was difficult to synchronise a convenient time and venue for the various doctors and researchers. Thirdly, there could be a possible bias in terms of the study sample due to the use of the South African HIV Clinicians Society database, since doctors under this grouping will be practising within the guidelines set by this body. There is the possibility that those doctors who do not manage patients well would not have been willing to participate in the focus group discussion. Fourthly, the methodology of obtaining information through self-reporting could result in biased data.

Conclusion

The findings of this study should be interpreted in the light of its limitations. The size of the sample does not allow for the findings to be generalised to all private sector

doctors practising in the eThekweni Metro of KwaZulu-Natal. However, this study was able to confirm the findings of the two studies done previously in the eThekweni Metro of Kwa-Zulu Natal in that private sector doctors do manage their HIV-infected patients pharmacologically and nonpharmacologically to achieve the desired outcome whilst perceiving certain factors such as the criteria used to determine grant eligibility to affect management adversely. Of great interest, however, were some of the unusual methods used to improve adherence such as the *madlozi*, the biopsychosocial method and the various educational aids such as the microscope and diagrams to illustrate the virus and the disease in order to improve adherence to treatment in patients.

Recommendations

The support system in terms of the social grant for HIV-infected patients should be reassessed, especially in the light of using CD4 counts as a criterion to determine eligibility for the grant. Maybe rewarding patients for managing their condition optimally and appropriately would result in positive outcomes for HIV-infected patients. Pharmaceutical liquid formulations should be made palatable and tablets reduced in size in order to improve adherence in young children and adults, respectively. A study should be done to assess the impact of pharmaceutical formulations on HIV/AIDS treatment adherence by both private and public sector patients. The results can be used to make a pharmacoeconomic analysis of HIV/AIDS management in both sectors.

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