Authors: YA Vawda and F Variawa

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# CHALLENGES CONFRONTING HEALTH CARE WORKERS IN GOVERNMENT'S ARV ROLLOUT: RIGHTS AND RESPONSIBILITIES

YA Vawda<sup>\*</sup> F Variawa<sup>\*\*</sup>

## 1 Introduction

South Africa is renowned for having a progressive Constitution with strong protection of human rights, including protection for persons using the public health system.<sup>1</sup> While significant recent discourse and jurisprudence<sup>2</sup> have focused on the rights of patients, the situation and rights of providers of health care services have not been adequately ventilated. This paper attempts to foreground the position of the human resources personnel located at the centre of the roll-out of the government's ambitious programme of anti-retroviral (ARV) therapy.

The HIV/AIDS epidemic represents a major public health crisis in our country and, inasmuch as various critical policies and programmes have been devised in response, the key to a successful outcome lies in the hands of the health care professionals tasked with implementing such strategies. Often pilloried by the public,<sup>3</sup> our health care workers (HCWs) face an almost Herculean task of turning the tide on the epidemic. Unless the rights of HCWs are recognised and their needs adequately addressed, the best laid plans of government will be at risk.

Several national and international policies and guidelines pertaining to HIV/AIDS, its prevention and treatment have evolved over the past years. Unfortunately, South Africa has been slow in initiating antiretroviral treatment. After the country had

<sup>\*</sup> Yousuf A Vawda. BA (UDW), BProc (UNISA), LLM (UDW), LLD (UKZN). Associate Professor of Law, University of KwaZulu Natal, Howard College, Durban, vawday@ukzn.ac.za.

<sup>\*\*</sup> Farhana Variawa. BSc, MBChB (UKZN), FC Rad (Diag) (SA). Specialist Radiologist, KZN Department of Health, farhanavariawa@yahoo.com.

<sup>1</sup> Section 27 *Constitution of the Republic of South Africa*, 1996 guarantees a right of access to health care; the *National Health Act* 61 of 2003 contains extensive provisions on the rights of users and providers of the health system; and a range of other legislation such as the *Occupational Health and Safety Act* 85 of 1993 is applicable.

<sup>2</sup> For example, the cases of Soobramoney v Minister of Health, KwaZulu Natal 1998 1 SA 765 (CC) and Minister of Health v Treatment Action Campaign (Case No 2) 2002 5 SA 721 (CC).

<sup>3</sup> See for example Cullinan 2006 www.health-e.org.za.

undergone a period of denial by the government of the link between HIV and AIDS,<sup>4</sup> followed by legal action to force the government to provide anti-retroviral treatment to HIV-positive pregnant women<sup>5</sup>, the government eventually introduced the public HIV/AIDS treatment programme in five Gauteng hospitals on 1 April 2004.<sup>6</sup>

At present South Africa has the largest antiretroviral therapy programme in the world<sup>7</sup> yet, at the end of 2009, according to the recent World Health Organisation (WHO) guidelines, only about 37% of South African HIV-infected people were receiving antiretroviral treatment.<sup>8</sup> This can largely be attributed to the shortage of adequately trained health care personnel,<sup>9</sup> the inadequate supply or stockouts of antiretroviral drugs,<sup>10</sup> and lack of access to treatment entry points.<sup>11</sup>

The latest National Strategic Plan on HIV, STIs and TB 2012-2016 (NSP 2012-2016)<sup>12</sup> identifies as one of its key Strategic Objectives the aim to 'Sustain Health and Wellness'.<sup>13</sup> This objective must doubtless rest on the strengthening of the national health system. A pivotal component of an efficient system is the point of contact between the patient and the health care worker. 'Health workers' as defined by the WHO include people whose duties are centred on the enhancement of health.<sup>14</sup> They can be divided into two groups:

• Those who provide health services, namely, doctors, nurses, pharmacists, therapists and other providers; and

• Management and support personnel<sup>15</sup>

For the purposes of this paper, the sense of the term 'health care workers' will be confined to those who provide health services.

<sup>4</sup> Nattrass Mortal Combat..

<sup>5</sup> Minister of Health v Treatment Action Campaign (Case No 2) 2002 5 SA 721 (CC).

<sup>6</sup> IRIN 2004 www.irinnews.org.

<sup>7</sup> UNGASS 2010 www.unaids.org.

<sup>8</sup> WHO/AIDS/UNICEF 2010 www.who.int. More recent statistics indicate the South Africa's coverage is in the 40% to 59% bracket (UNAIDS 2011 issuu.com).

<sup>9</sup> WHO 2010 www.who.int.

<sup>10</sup> IRIN 2009 www.aegis.org.

<sup>11</sup> Barbara Hogan, Minister of Health (2009) 4th SA AIDS Conference.

<sup>12</sup> DOH 2011 www.anovahealth.co.za.

<sup>13</sup> DOH 2011 www.anovahealth.co.za.15.

<sup>14</sup> WHO/ILO 2010 whqlibdoc.who.int.

<sup>15</sup> WHO/ILO 2010 whqlibdoc.who.int.

The HCWs involved in the government's ARV treatment programme face many challenges in the course of their duties. This invariably results in their becoming frustrated, disillusioned and demotivated, states of mind which impact negatively on their delivery of an efficient service.

Some of these challenges, for example, staff shortages<sup>16</sup> and the lack of an adequate supply of antiretroviral medication,<sup>17</sup> have been sufficiently well documented. However, many of the challenges faced by HCWs on a day-to-day basis have not been adequately researched.

This paper aims to highlight some of the more significant challenges facing HCWs employed in the government's ARV rollout programme. It is by no means a comprehensive review of all of the obstacles encountered at the various rollout facilities, but rather a discussion of the more pertinent issues that impact on patient management.

By far the most significant challenge is that of human resources: the adequacy of staff at the health care facilities, both in terms of their number and the appropriate training of personnel. However, this is merely the tip of the proverbial iceberg. In addition to the problem of human resources, this paper explores the following critical issues:

• the risk of infection from tuberculosis (including drug-resistant strains) and HIV, for example;

• environmental challenges, for example, ventilation, the shortage of consumables, and inadequate access to information systems;

• treatment challenges such as the availability of antiretroviral medication and medication to treat related conditions;

• the specific context of treating children with HIV;

• the emotional impact of their work on HCWs, and the adequacy of support programmes for them.

<sup>16</sup> AFP 2005 www.iafrica.com; Michaels et al Exploring Current Practices 32-35.

<sup>17</sup> Michaels et al Exploring Current Practices 33.

It is contended that the identification of these challenges and obstacles and the institution of appropriate remedial measures will allow for a better-equipped, more efficient workforce and hence more effective treatment of people living with HIV/AIDS.

#### 2 Challenges

#### 2.1 Human resources

The Health Systems Trust, a non-governmental organisation which has been monitoring the AIDS treatment programme in South Africa since 2003, acknowledges that the single most significant obstacle to attaining public health goals is the lack of adequate human resources.<sup>18</sup> It concludes that the strategies outlined in the Department of Health's Strategic Plan, 2004<sup>19</sup> have not been effective in addressing the issue.

The subsequent HIV and AIDS and STI National Strategic Plan 2007-2011 (NSP 2007-2011) acknowledged that there was an imbalance between the public and private health sectors in respect of the availability and training of health care personnel, with the informal and rural areas being most disadvantaged.<sup>20</sup> The policy cited the introduction of a rural and scarce skills allowance and the "improvement of conditions of work in the public sector" as remedial measures taken to improve the human resource shortage.<sup>21</sup> However, the policy did not explain what improvements were to be implemented in the work environment or to what extent these measures have been successful. The current significant lack of adequate human resources is a clear indication that these mechanisms have been unsuccessful in achieving the desired outcome.<sup>22</sup>

The latest NSP 2012-2016 is rather thin on the question of the human resource capacity required for the implementation of the plan. The issue receives passing

<sup>18</sup> Jaskiewicz et al 2010 SA Health Review.

<sup>19</sup> DOH 2004 www.doh.gov.za.

<sup>20</sup> DOH 2006 www.safaids.net.

<sup>21</sup> DOH 2006 www.safaids.net.

<sup>22</sup> SA National AIDS Council 2010 www.healthlink.org.za.

reference when dealing with the need for a 'skilled and capable workforce' in terms of the Medium Term Strategic Framework<sup>23</sup> and for 'workplace/occupational health policies on TB and HIV'.<sup>24</sup>

Another crucial factor contributing to the staff shortage is the migration of skilled HCWs to developed countries.<sup>25</sup> In order to combat this 'brain-drain' phenomenon, South Africa has signed 'memoranda of understanding' with certain countries such as the United Kingdom.<sup>26</sup> Although these agreements are designed to create obstacles to the migration of HCWs (for example, requiring the writing of various entrance examinations in order to practise, and having to work in a supervised environment for a period), they often exacerbate the frustrations and cause the HCW to become more determined to leave the South African health sector.

## 2.2 The risk of infection

HCWs in HIV/AIDS treatment facilities are at increased risk of contracting communicable disease, either by direct contact (for example gastroenteritis and scabies) or by droplet spread (for example tuberculosis, pneumonia and meningitis). By virtue of the nature of their patient base, they are also at risk of contracting blood-borne infections such as Hepatitis B or HIV via accidental exposure to blood or other body fluids such as cerebrospinal fluid.

Several studies have recognised that the health care workforce in South Africa is adversely affected by HIV and TB.<sup>27</sup> In countries with a high HIV/AIDS burden, HIV and TB (including drug-resistant strains) together account for an extremely high proportion of the morbidity and mortality experienced by health care workers.<sup>28</sup> This results in an increase in the frequency of disability and of sick leave taken by HCWs, further burdening the remaining personnel.

<sup>23</sup> SA National AIDS Council 2010 www.healthlink.org.za 30-31.

<sup>24</sup> SA National AIDS Council 2010 www.healthlink.org.za 44.

<sup>25</sup> DOH 2004 www.doh.gov.za 21.

<sup>26</sup> IBP Knowledge Gateway 2003 knowledge-gateway.org.

<sup>27</sup> Ncayiyana 2004 BMJ 584-585; Connelly 2007 SAMJ 115-120; Shisana 2007 SAMJ 108-109.

<sup>28</sup> WHO/ILO 2010 whqlibdoc.who.int.

The WHO and International Labour Organisation (ILO) have noted that, 'although health workers are at the frontline of national HIV programmes, they often do not have adequate access to HIV services themselves'.<sup>29</sup>

The WHO advocates primary, secondary and tertiary prevention programmes to curb the risk of and/or effectively treat occupational exposure to HIV and TB.<sup>30</sup> Primarv prevention includes measures aimed at preventing exposure to pathogens (for example respiratory and eye protection, immunisation against Hepatitis, and safe needle technology) and evidence of its efficacy has been well documented.<sup>31</sup> Primary prevention measures are closely related to environmental factors and are only as effective as the working conditions permit, as will be explained in the following section.

In contrast to primary prevention measures, documentation on the efficacy of secondary prevention (the prevention of disease following exposure, for example post-exposure prophylaxis) is limited.<sup>32</sup> Tertiary prevention encompasses the treatment and rehabilitation of the HCW once disease has manifested.<sup>33</sup> These measures are aimed primarily at allowing HCWs to return to work as soon as possible. As such, it has been suggested that national policies are necessary in order to prioritise the health workers' access to prevention, treatment and care services with respect to occupation-related diseases.<sup>34</sup>

In November 2008 South Africa developed the Employee Health and Wellness Strategic Framework for the Public Service (Employee H&W Framework).<sup>35</sup> The initiatives and interventions in the framework embrace four broad objectives: prevention in order to reduce the incidence of HIV; the provision of treatment, care and support to infected employees; the protection of human rights and access to

<sup>29</sup> WHO 2006 www.who.int.

<sup>30</sup> WHO/ILO 2010 whalibdoc.who.int.

<sup>31</sup> WHO/ILO 2010 whqlibdoc.who.int 33.32 WHO/ILO 2010 whqlibdoc.who.int 33.

<sup>33</sup> WHO/ILO 2010 whqlibdoc.who.int 33.

<sup>34</sup> WHO/ILO 2010 wholibdoc.who.int 13.

<sup>35</sup> DPSA Employee Health and Wellness Strategic Framework.

justice; and a research agenda for the public service and the world of work in South Africa.36

Although the document outlines the framework for the integration of health, wellbeing, and safety in order to build and maintain a healthy workforce,<sup>37</sup> it does not provide details on the specific plan of action or practical steps to be implemented in order to achieve this. However, since the launch of the framework, the policy instituted for HIV/AIDS and tuberculosis is reported to be 'progressing well'.<sup>38</sup>

#### 2.3 Environmental challenges

It is a reasonable assumption that a safe and well-equipped work environment is conducive to increased productivity, a healthier workforce and improved patient management. For the purposes of this paper, the 'work environment' will be dealt with in terms of the 'physical' environment or the actual structure of the workplace (such as space and ventilation), and the 'functional' environment which includes the tools required for efficient service delivery (personal protective equipment and medical consumables).

The physical environment or infrastructure with regard to the health care facilities refers to the state of maintenance of the buildings; the availability of basic services (such as water and electricity); the availability of and access to the necessary technology (for example communication systems and laboratory data information systems); and the availability of functional medical and non-medical equipment.<sup>39</sup> Infrastructure such as viable surrounding roads and a transport system is also important in facilitating patients' access to the health care facility.<sup>40</sup> A fully functional, well-equipped and adequately staffed health care facility is of little use if it is inaccessible to those in need of health care.

<sup>36</sup> DPSA Employee Health and Wellness Strategic Framework 24

<sup>37</sup> DPSA *Employee Health and Wellness Strategic Framework* Annexure A.
38 DPSA *Annual Report* 11.

<sup>39</sup> Lutge and Mbatha PHC Facility Infrastructure.

<sup>40</sup> Lutge and Mbatha PHC Facility Infrastructure.

Several studies have revealed that poor infrastructure leads to both negative patient perceptions of the quality of care they are likely to receive at the facility and dissatisfaction amongst HCWs with regard to their working conditions.<sup>41</sup>

A major concern with regard to the physical environment is the lack of space in many ARV clinics.<sup>42</sup> Often, consulting rooms are shared by a variety of disciplines of HCWs consulting with different patients.<sup>43</sup> This is a serious issue because, in addition to the health risks associated with limited space, it violates the patient's constitutional right to privacy.<sup>44</sup>

A further problem with the lack of space is the overcrowding of waiting rooms, which can result in patients with communicable diseases infecting other immune-compromised patients.<sup>45</sup> Related to this is the lack of adequate ventilation and/or air-conditioning and ultraviolet light in many of the ARV facilities, which further contributes to the spread of air-borne pathogens.<sup>46</sup>

HCWs in HIV/AIDS treatment facilities, like most other workers, spend a minimum of 40 hours per week (excluding overtime duties) in the work environment. It is during this time that they are at increased risk of contracting communicable diseases. Hence it is vital that the work environment should be suitably adapted in order to provide adequate primary prevention measures. The literature, however, reveals few comprehensive studies aimed at determining the health effects of poor infrastructure, for example, the lack of proper ventilation, electricity (for refrigeration and sterilisation) or an adequate water supply.<sup>47</sup>

<sup>41</sup> Lutge and Mbatha PHC Facility Infrastructure; King and McInerney 2006 Curationis 70-81.

<sup>42</sup> Michaels et al Exploring Current Practices 36-37.

<sup>43</sup> Michaels et al Exploring Current Practices 36-37.

<sup>44</sup> Section 14(d) Constitution of the Republic of South Africa, 1996.

<sup>45</sup> Information from one of the author's personal experience of working in a government ARV clinic in Durban.

<sup>46</sup> Information from one of the author's personal experience of working in a government ARV clinic in Durban; Levin "Lecture"; Curtis 2008 *J Hosp Infect* 204-219.

<sup>47</sup> Most of the relevant studies have been conducted by the South African Municipal Workers Union, as detailed below.

The Occupational Health and Safety Act entitles all workers, including HCWs, to a safe working environment without risk to their health.<sup>48</sup> The Act also charges employers with the provision of the necessary health and safety measures for their employees.<sup>49</sup> In the case of public HCWs, the government is responsible for the provision of adequate measures to protect them against health hazards, particularly biological hazards.

For HCWs employed in the ARV clinics there is a risk of infection by blood-borne pathogens such as Hepatitis B and, to a lesser extent, HIV.<sup>50</sup> This risk is increased by the inadequate supply and incorrect use of personal protective equipment (PPE), also referred to as 'universal precautions,' and negligent 'sharps' and waste disposal methods.<sup>51</sup>

Research conducted by a group of South African Municipal Workers Union (SAMWU) members at 38 municipal clinics over an 18-month period revealed minimal legal compliance with respect to health and safety requirements.<sup>52</sup> The study also revealed that many clinics 'did not even have such basic supplies as soap'.53

#### 2.4 Treatment challenges

The most significant challenge with regard to treatment is that of the limited and often inadequate supply of antiretroviral drugs at several ARV facilities.<sup>54</sup> This is also referred to as drug 'stockouts' and has a detrimental effect on the ARV rollout programme.

In November 2008 ARV shortages in the Free State led to an estimated 30 HIV patients dying daily, as reported by the Southern African HIV Clinicians Society.<sup>55</sup> At that time the Province's Department of Health placed a moratorium on the enrolment

<sup>48</sup> Section 8(1) Occupational Health and Safety Act 85 of 1993.

<sup>49</sup> Section 8(2) Occupational Health and Safety Act 85 of 1993.

<sup>50</sup> Marcus 1988 N Engl J Med 1118-1123.

<sup>51</sup> SAMWU Who Cares for Health Care Workers? 43-44.

<sup>SAMWU Who Cares for Health Care Workers? 43-44.
SAMWU Who Cares for Health Care Workers? 43-44.</sup> 

<sup>54</sup> TAC 2008 www.tac.org.za.

<sup>55</sup> Ndlovu 2009 mg.co.za.

of new patients in the ARV programme.<sup>56</sup> In June 2009 the Kwa-Zulu Natal MEC for health, Dr Sibongiseni Dhlomo, denied that there was a shortage of ARV drugs at certain health facilities in the province.<sup>57</sup>

The 2010 UN General Assembly Special Session (UNGASS) Country progress report confirmed the drug shortages during the period January 2008 to December 2009, and the four-month provincial moratorium barring new patients from obtaining life-saving ARV medication.<sup>58</sup> The report estimated that over 3000 lives were lost because of this moratorium, and that approximately 15 000 people were on a waiting list for ARV treatment.<sup>59</sup> Another serious consequence of ARV stockouts is that of drug resistance, which results in the need for more expensive second-line medication.<sup>60</sup>

In the course of treatment of HIV/AIDS and its complications, it is sometimes necessary to transfer patients to a regional or provincial hospital for specialised (step-up) care, or to ARV clinics for continuation of treatment in uncomplicated cases (step-down). In either case, the availability of ARV medication at the referral centre is not guaranteed or otherwise ascertained. For example, the Inkosi Albert Luthuli Hospital in KZN, which is the referral centre for KZN and some Eastern Cape hospitals, does not stock ARV medication for their in-patients.<sup>61</sup>

The second treatment-related challenge faced by HCWs is that of non-compliance, due either to the sometimes severe side-effects or to the lack of patient motivation. This is the primary cause of drug resistance.<sup>62</sup> Many ARV regimens are complicated and patients have to take multiple tablets at specific time intervals. There are also many adverse side-effects and drug interactions associated with ARV medication.<sup>63</sup> These factors contribute to non-compliance and hence treatment failure, especially if

<sup>56</sup> Ndlovu 2009 mg.co.za.

<sup>57</sup> SABC 2009 www.health24.com.

<sup>58</sup> UNGASS 2010 www.unaids.org 100.

<sup>59</sup> UNGASS 2010 www.unaids.org 100.

<sup>60</sup> Cornell 2010 AIDS 2263-2270.

<sup>61</sup> Personal communication with Prof L Hadley, Head of Paediatric Surgery at Inkosi Albert Luthuli Hospital on 16 March 2011.

<sup>62</sup> WHO 2011 www.who.int.

<sup>63</sup> Maskew *et al* 2007 *SAMJ* 853-854.

the patient has not been adequately counselled regarding the importance of the taking of the drugs as prescribed.

Non-compliance also includes patients' reluctance to practise safe sex. This can result in unplanned pregnancies and co-infection with a more virulent strain of HIV.<sup>64</sup>

## 2.5 Treating children with HIV/AIDS

The treatment of children with HIV/AIDS poses additional challenges. The physiology of a paediatric patient is not simply that of a diminutive version of an adult. HCWs need to be specifically trained in the skill of communication with children, using language that the child can identify with. A thorough knowledge of the spectrum of opportunistic infections that children are vulnerable to is essential in their management.

At present, most ARV drug formulations are available as tablets or capsules. These formulations are not suitable for young children. The currently available paediatric formulations, including syrups, are not conducive to use in rural areas due to the lack of proper storage facilities such as refrigeration.<sup>65</sup> Until more appropriate formulations are available, the contents of capsules are dissolved, and the required dose titrated and administered.<sup>66</sup>

In addition to the challenges already described, many health care workers may be apprehensive about treating children because of their 'lack of training and experience' in this field.<sup>67</sup> Adequate training in performing common procedures such as drawing blood samples or performing lumbar punctures is vital. At present this training is lacking at several centres.<sup>68</sup>

<sup>64</sup> Noorbhai Adolescent Females 13.

<sup>65</sup> Health Systems Trust 2005a www.hst.org.za.

<sup>66</sup> Health Systems Trust 2005a www.hst.org.za 15.

<sup>67</sup> Michaels et al Exploring Current Practices 33.

<sup>68</sup> Michaels et al Exploring Current Practices 55.

Another important consideration in dealing with adolescent patients is the issue of sexuality and the appropriate use of contraception, with an emphasis on safe sexual practices.69

Dealing with paediatric HIV patients is undoubtedly physically demanding. However, the emotional demand on HCWs of attending to sick children is equally significant.<sup>70</sup>

#### 2.6 The emotional and psychological impact on HCWs

Stress, burnout and emotional exhaustion are common amongst HCWs in the HIV rollout programme. This occurs when they are unable to adequately deal with the day-to-day stressors facing them.<sup>71</sup> Information and research with respect to the emotional experiences and burdens of HCWs providing HIV treatment is inadequate.<sup>72</sup> However, studies reveal that despair, depression, helplessness and aggression are common amongst HCWs.<sup>73</sup>

A study by Wenche et al cited the following documented factors as reasons for the high stress levels amongst the HCWs: lack of resources; lack of support and training; high patient volumes; the unpredictable workload; the symptoms and inevitable death of patients with HIV/AIDS; over-involvement with HIV positive patients; and secrecy and the fear of disclosure among HIV-positive people.<sup>74</sup>

According to Maslach, burnout is 'characterized by emotional exhaustion, depersonalisation and a sense of reduced personal accomplishment, accompanied by a decrease in motivation' and occurs as a result of chronic occupational stress in 'normal' individuals.<sup>75</sup> Given the current conditions of employment at the government's ARV rollout facilities, it is not unusual for employees to manifest these psychological symptoms.

<sup>69</sup> Michaels et al Exploring Current Practices 42.

<sup>70</sup> Michaels et al Exploring Current Practices 33.

<sup>71</sup> Dagied et al 2007 www.hsrc.ac.za.

<sup>72</sup> Held and Brann 2007 *AIDS Care* 212-214.
73 Orner 2006 *AIDS Care* 236-240.
74 Orner 2006 *AIDS Care* 236-240.

<sup>75</sup> Maslach "Burnout".

Furthermore, there is an added burden of having in some instances to forcibly restrain and incarcerate patients. A case in point is the isolation for example of patients suffering from the highly infectious extensively drug-resistant tuberculosis (XDR-TB), which was determined by a court to be legal and justifiable.<sup>76</sup> HCWs in such instances have to contend with complicity in the potential violation of the human rights of their patients, as well as the emotional trauma of being party to the use of extreme and often inhumane measures in dealing with their patients.

Although these emotional challenges are recognised by the HCWs themselves, as well as the supervisors of the health facilities, it appears that many HCWs do not have access to facilities to assist them in dealing with these issues.

#### 3 Remedial measures

This section outlines some remedial measures advocated in order to alleviate the problems faced by HCWs. The efficacy of these measures will also be assessed as they apply to the South African context.

It should be noted that HCWs are also the bearers of fundamental rights protected by the Constitution, as well as the National Health Act, which protects them against unfair discrimination on account of their health status, and special measures to minimise injury and disease transmission.<sup>77</sup> In addition, there is a plethora of legislation related to their employment and occupational injuries, as well as legislation which regulates their professional conduct.<sup>78</sup>

#### 3.1 Human resources

The NSP 2007-2011 advocated 'task shifting' in order to alleviate the burden on the health care workers and thus improve the level of care they provided.<sup>79</sup> Task shifting

<sup>76</sup> Minister of Health of the Province of the Western Cape v Goliath 2009 2 SA 248 (C).

<sup>77</sup> Section 20 National Health Act 61 of 2003.

<sup>78</sup> For a general discussion of the rights and duties of health care workers, see Hassim *et al Health and Democracy* 316-347.

<sup>79</sup> DOH 2006 www.safaids.net.116.

entails the training of lesser-qualified HCWs to perform tasks which they were previously not qualified to do, or tasks that were beyond the scope of their practice, such as allowing trained nurses to initiate antiretroviral therapy.<sup>80</sup> The WHO defines task shifting as 'the rational redistribution of tasks among health workforce teams'.<sup>81</sup> The WHO acknowledges that shortages of HCWs are particularly acute in countries that face a high HIV burden.<sup>82</sup> Although the recommendations and guidelines provided by the WHO are meant to alleviate the staffing crisis to some degree, they recognise that task shifting alone will not solve the problem. Hence this process needs to be implemented along with other remedial measures in order to increase the total health care workforce.<sup>83</sup>

Task shifting is not a new strategy. It has been implemented in Zambia since 2004 with promising results.<sup>84</sup> Other countries that have implemented task shifting in varying degrees have formed part of the observational studies conducted by the WHO in order to formulate the recommendations and guidelines on task shifting.<sup>85</sup>

South Africa has implemented task shifting since 2010.<sup>86</sup> To date, no large scale objective study has been undertaken with regard to the success, efficacy and/or shortcomings of this approach.<sup>87</sup> It is submitted that task shifting will be a viable option only if the lower-qualified personnel are adequately trained and if the quality of patient care is not compromised. If these standards are not monitored and maintained, then the risk of complications from incorrectly administered antiretroviral treatment will be detrimental to the process in the long term. It is therefore vital that task shifting be implemented along with other measures to increase and maintain the workforce, such as increasing the number of students training for employment in the health care sector and improving the current working conditions to an acceptable

<sup>80</sup> Médecins Sans Frontières 2009 MSF.

<sup>81</sup> WHO 2008 www.who.int.

<sup>82</sup> WHO 2008 www.who.int.

<sup>83</sup> WHO 2008 www.who.int.

<sup>84</sup> Morris et al 2009 BMC Health Serv Res 9.

<sup>85</sup> WHO 2008 www.who.int Annexure A.

<sup>86</sup> GG 33188 of 14 May 2010.

<sup>87</sup> Internet search results reveal a small-scale assessment of rural clinics by the Treatment Action Campaign, which shows that many clinics have adopted task shifting to some degree. However, some of the nursing staff initiating antiretroviral treatment are not adequately trained.

level. In particular Lund,<sup>88</sup> for example, cautions against the 'gendered implications' of task shifting as a greater burden may be placed on women (the majority of nursing staff) in both institutional and home-based settings.

Many health care workers migrate to developed countries in pursuit of better working conditions and remuneration. In order to curb this, the South African government entered into agreements with certain developed countries.<sup>89</sup> As was stated earlier, these restrictions appear to have achieved the opposite effect.<sup>90</sup> It is submitted that a secondary disadvantage of these restrictions is that HCWs who supplement their knowledge or acquire new skills in the developed countries are unlikely to return to South Africa and promote training and development in this country.

## 3.2 Infection

The South African Department of Health has based its infection control policy on the WHO guidelines of 2003.<sup>91</sup> The WHO introduces the concepts of 'standard precautions' and 'additional precautions'.<sup>92</sup> Standard precautions are protective measures to be used when dealing with any and all patients. They are based on the premise that all blood and other body fluids are infectious irrespective of the patient's pathology.<sup>93</sup> Additional precautions refer to additional protective measures taken, depending on the mode of transmission of the pathogen, with particular emphasis on air-borne pathogens.<sup>94</sup>

It is submitted that, given the high prevalence of blood-borne diseases (Hepatitis B and HIV) and air-borne pathogens (Tuberculosis, including multidrug-resistant strains) in South Africa, all HCWs should exercise both standard and additional precautions at all times. It is further submitted that exercising these precautionary measures is not always feasible, especially in busy health care facilities, or if there is an inadequate availability of personal protective equipment (PPE).

<sup>88</sup> Lund 2010 International Labour Review 505.

<sup>89</sup> DOH 2006 www.safaids.net 21.

<sup>90</sup> Anon 2005 www.bmj.com.

<sup>91</sup> WHO 2003 www.doh.gov.za.

<sup>92</sup> WHO 2003 www.doh.gov.za.

<sup>93</sup> WHO 2003 www.doh.gov.za.

<sup>94</sup> WHO 2003 www.doh.gov.za.

Blood carries the highest concentration of HIV or Hepatitis in infected patients, and the most common route of accidental exposure to these pathogens amongst HCWs is via needlestick injury.<sup>95</sup> HIV seroconversion following a needlestick or other 'sharps' injury from an infected patient is less than 0.5%, but this risk varies depending on the patient's viral load, the depth of the penetrating injury and the use of protective equipment.<sup>96</sup> Primary prevention measures should therefore be focused mainly on the prevention of needlestick injuries.

Studies have revealed that the use of protective equipment, the ongoing education of health workers, avoiding the recapping of needles and the use of sharps disposal containers reduce the risk of needlestick injuries by 80%,<sup>97</sup> whilst sleep deprivation and long working hours increase the risk by up to threefold.<sup>98</sup> A 2005 study of ARV clinics by the SA Municipal Workers Union revealed that 83% of the clinics surveyed had post-accidental HIV-exposure protocols in place, but preventative measures were 'haphazard and inconsistent'.<sup>99</sup> The study also found that HIV/AIDS policies were centralised in the municipalities and are not designed for, nor do they cater for the specific needs of the different facilities.<sup>100</sup>

The Employee H&W Framework provides for 'policies, systems, programmes, compliance measures, monitoring and evaluation of occupational health interventions on prevention, treatment, care and compensation of occupational health diseases'.<sup>101</sup> Although this framework is an elaborate overview, the document provides no clear guidelines on how its goals will be achieved or how progress will be monitored. Thus there is no measure of the efficacy of this framework at the service-delivery level. The NSP Midterm Review 2010 cites the lack of adequate data collection, collation and dissemination as possible obstacles to policy evaluation.<sup>102</sup> It is submitted that an effective monitoring and evaluation system,

<sup>95</sup> Centers for Disease Control 1988 Morbidity and Mortality Weekly Report 377-388.

<sup>96</sup> Cardo 1997 N Engl J Med 1485-1490.

<sup>97</sup> Ziady 2010 Professional Nursing Today 6-7.

<sup>98</sup> Fisman et al 2007 Infect Control Hosp Epidemiol 10.

<sup>99</sup> Health Systems Trust 2005b www.hst.org.za.

<sup>100</sup> Health Systems Trust 2005b www.hst.org.za.

<sup>101</sup> DPSA Employee Health and Wellness Strategic Framework 14.

<sup>102</sup> SA National AIDS Council 2010 www.healthlink.org.za 47, 75.

preferably employee-driven, will assist in highlighting the health concerns faced by employees, and in the formulation of policies to address these concerns.

## 3.3 Work environment

The current physical environment or infrastructure of health care facilities has been found to be in a poor condition as well as inadequate in addressing the needs of the patient population served.<sup>103</sup> The 2007 study by Lutge and Mbatha recommended the rehabilitation and maintenance of existing infrastructure to ensure safety and planning for infrastructure development, in order to accommodate an increased patient population.<sup>104</sup> It is submitted that these recommendations should be expanded to include diagnostic and monitoring equipment essential for patient management.

Despite current budget constraints, the provision of adequate space and ventilation in order to protect patients and HCWs from air-borne infection cannot be compromised. A related and equally important requirement is the provision of private consulting rooms, which need to be designed to protect patients' dignity and privacy, especially during clinical examination.

Although it is common knowledge that drinkable water and an uninterrupted electricity supply are essential for the provision of safe health care many hospitals, especially those in the Free State and Eastern Cape, are forced to operate without running water.<sup>105</sup>

The SAMWU 2004 study revealed that, in the health facilities evaluated, 'no proactive or preventive procedures are in place for identifying hazards, evaluating risks, preventing workplace injury and illness, and maintaining a safe workplace'.<sup>106</sup> It was also revealed that the supply and use of PPE was inadequate.<sup>107</sup> The inconsistent use of PPE may be due partly to the lack of education and motivation

<sup>103</sup> Lutge and Mbatha PHC Facility Infrastructure 2.

<sup>104</sup> Lutge and Mbatha PHC Facility Infrastructure 6.

<sup>105</sup> SAPA 2011 hwww.news24.com.

<sup>106</sup> SAMWU Who Cares for Health Care Workers?

<sup>107</sup> SAMWU Who Cares for Health Care Workers?

and partly to the overwhelming workload. These factors increase the health and safety risks faced by HCWs on a daily basis.

## 3.4 Treatment

Ensuring an adequate supply of ARV medication and preventing interruptions in patient treatment require a guaranteed supply of drugs from the manufacturer, reliable transportation, and safe and adequate storage facilities. Accurate assessment of the necessary quantity of drugs is needed, as over-purchasing of ARVs can be costly and may lead to the wastage of drugs with limited shelf-life, while under-purchasing can lead to stockouts.<sup>108</sup>

The South African government has embarked on certain programmes and instituted measures in order to prevent a shortage of life-saving medication. Following the stockouts, an Integrated Support Task Team was set up to review the procurement processes of the provincial departments of health.<sup>109</sup> The task team attributed the stockouts to poor budgeting and overspending with a lack of cohesion between policy plans and budget.<sup>110</sup>

In December 2010 the Minister of Health, Aaron Motsoaledi, announced that the new ARV tender process would result in a 53.1% reduction in the cost of ARV drugs.<sup>111</sup> This translates into a R4.7 billion saving.<sup>112</sup>

The NSP 2012-2016 envisages initiating 'at least 80% of eligible patients on antiretroviral treatment (ART), with 70% alive and on treatment five years after initiation<sup>113</sup> for the period of the plan. It is submitted that in order to realise this goal, a cheaper, equally effective and uninterrupted ARV drug supply is required.

<sup>108</sup> Avert 2011 www.avert.org.

<sup>109</sup> UNGASS 2010 www.unaids.org.

<sup>110</sup> UNGASS 2010 www.unaids.org.

<sup>111</sup> Anon 2010 www.health-e.org.za.

<sup>112</sup> Anon 2010 www.health-e.org.za.

<sup>113</sup> DOH 2011 www.anovahealth.co.za 12.

For HIV treatment to be effective, patients must adhere to the prescribed treatment regimens. Inability to do so results in drug resistance and opportunistic infections which are detrimental to the patient as well as being costly.<sup>114</sup>

Although the lack of patient compliance is frustrating for HCWs, who have to deal with additional disease complications, the patients' reasons for attrition and non-compliance warrant investigation.

Often all that is required for improved patient compliance is ongoing motivation, education and support.<sup>115</sup> A study by Miller *et al* cited the following resolvable reasons for patient attrition: logistical issues such as lost paperwork; limited clinic operating hours; inability to obtain an adequate supply of medication, for example, during travel; and personal reasons (for example, the desire to take traditional medicine or the perception that taking ARVs did not improve health).<sup>116</sup>

The study also made the following recommendations: extend the clinic hours; simplify the referral processes and schedule appointments at the convenience of patients; improve the communication between treatment facilities to ensure the continuity of care; improve the tracking of patients who transfer between facilities; and, where possible, employ a loss-to-follow-up counsellor who can offer assistance with small barriers to returning to care, such as paperwork, scheduling, and disclosure to families.<sup>117</sup>

It is submitted that although these recommendations are reasonable, their implementation is not practical in view of the current staff shortages taken together with the environmental constraints described above.

<sup>114</sup> Rosen et al 2007 PLoS Medicine.

<sup>115</sup> Avert 2011 www.avert.org.

<sup>116</sup> Miller et al 2009 www.ncbi.nlm.nih.gov.

<sup>117 &#</sup>x27;Loss-to-follow-up' refers to patients who are initiated on ARV treatment but thereafter default on their treatment and fail to attend subsequent clinic visits. There are various reasons for loss-to-follow-up, including the lack of motivation, the lack of access to treatment, and the disability or death of the patient.

### 3.5 Paediatric ARV

At present there are only a few research studies that describe the ARV services available to HIV-infected children.<sup>118</sup>

The most effective method of dealing with paediatric HIV infection is to prevent children from being infected in the first place. It is therefore imperative that government scale up the Prevention of Mother-to-Child Transmission (PMTCT) programme.<sup>119</sup> In addition to this, the early detection of HIV infection in infants, which may be carried out during immunisation visits, will result in the early institution of treatment and a reduction in infant mortality.<sup>120</sup>

It is suggested that paediatric-specific training for all HCWs should be included during basic training and supplemented by regular in-service training and development programmes.

Supplementary health services, including sexuality education, prescribing of contraception, prevention of teenage pregnancies, and accessing of social grants should be provided at all paediatric ARV sites by trained personnel.<sup>121</sup>

## 3.6 Emotional and psychological well-being

Emotional exhaustion and fatigue are extremely common amongst HCWs as they work under great pressure, dealing with large patient volumes, and 'meeting death and misery on a daily basis' – all of this without adequate compensation, encouragement and training.<sup>122</sup> At present there are no structured programmes in place to identify HCWs at risk for emotional burnout and to provide them with the required counselling and support.

<sup>118</sup> Michaels et al Exploring Current Practices 52.

<sup>119</sup> Michaels et al Exploring Current Practices 53.

<sup>120</sup> Michaels et al Exploring Current Practices 53.

<sup>121</sup> Michaels et al Exploring Current Practices 56.

<sup>122</sup> Dagied et al 2007 www.hsrc.ac.za.

Most ARV treatment centres now employ lay counsellors as part of their health care staff in order to alleviate the burden faced by professional HCWs.<sup>123</sup> It is submitted that this 'task shifting', if not supplemented by other remedial measures, will not improve the staffing situation.

The dire need for emotional support amongst HCWs must be addressed, and appropriate and sustainable counselling mechanisms should be implemented.<sup>124</sup> Dagied's study suggests that counselling and debriefing should 'mainly focus on the emotional challenges facing health care workers'.<sup>125</sup> These include anger (usually resulting from stress), death, loss, grief, and depression. Counselling sessions should provide the HCWs with 'tools' to cope with such emotions. At the same time, HCWs should be recognised for their accomplishments, and professional growth should be encouraged.<sup>126</sup>

### 4 Conclusion

HCWs play a vital role in the implementation of the country's health policy and the provision of health care services. They have the responsibility of ensuring that the government's health policies are translated into effective and efficient service delivery. However, their rights are often overlooked, and many HCWs are subject to poor working conditions, long hours and inadequate remuneration. As a result many HCWs have chosen to leave the public health sector. Some have moved to the private sector where conditions are better, and many have emigrated.

The single most important factor in achieving a successful ARV rollout programme is the retention and expansion of the present workforce. However, this cannot be addressed in isolation as there are various factors contributing to workforce attrition that need to be simultaneously addressed.

Although adequate remuneration for HCWs is important, non-financial incentives such as the improvement of working conditions and the provision of much needed

<sup>123</sup> Dagied et al 2007 www.hsrc.ac.za.

<sup>124</sup> Dagied et al 2007 www.hsrc.ac.za 21.

<sup>125</sup> Dagied et al 2007 www.hsrc.ac.za 21.

<sup>126</sup> Orner 2006 AIDS Care 236-240.

support facilities are equally vital. Upgrading the infrastructure within and around health care facilities with the provision of safe water and adequate sanitation facilities, and the availability of the correct quantity and dosage of ARV drugs, will contribute to the creation of conducive working conditions and an effective ARV programme.

Ensuring the availability of effective PPE, reducing the number of hours spent on duty per shift, and ongoing education of the workforce with respect to infection control could dramatically decrease the incidence of adverse events in the workplace. Ongoing in-service training aimed at improving overall skills as well as specific training in dealing with paediatric cases will increase HCWs' confidence and result in more effective service delivery.

HCWs treating patients living with HIV/AIDS experience significant psychological and emotional stress. Mechanisms should be in place to ensure that these individuals have timeous access to counselling and support facilities.

HCWs are the backbone of the ARV rollout programme. Thus, their complaints and grievances need to be urgently addressed. To this end, efficient monitoring and evaluation of all ARV rollout facilities should be undertaken in order to identify the deficiencies and institute remedial measures. The involvement of HCWs in the decision-making process, as well as setting time limits for the completion of specific interventions, will contribute to a more transparent process and better outcomes.

The government has made a commitment to expand the ARV rollout programme. The success of this programme will depend greatly on the HCWs implementing it. Furthermore, a key objective of the proposed National Health Insurance<sup>127</sup> is 'to strengthen the under-resourced and strained public sector so as to improve health systems performance.' It is imperative that due cognisance be paid to the rights of HCWs if we are to succeed in achieving these lofty objectives.

<sup>127</sup> GN 657 in GG 34523 of 12 August 2011.

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## List of abbreviations

| ART                           | Antiretroviral treatment                    |
|-------------------------------|---|
| ARV                           | Anti-retroviral                             |
| BMC Health Serv Res           | BMC Health Services Research                |
| BMJ                           | British Medical Journal                     |
| DOH                           | Department of Health                        |
| DPSA                          | Department for Public Service and           |
|                               | Administration                              |
| HCW                           | Health care workers                         |
| HIV/AIDS                      | Human Immunodeficiency Virus/Acquired       |
|                               | Immunodeficiency Syndrome                   |
| ILO                           | International Labour Organisation           |
| Infect Control Hosp Epidemiol | Infection Control and Hospital Epidemiology |
| IRIN                          | United Nations Integrated Regional          |
|                               | Information Network                         |
| J Hosp Infect                 | Journal of Hospital Infection               |
| MSF                           | Médecins Sans Frontières                    |
| N Engl J Med                  | New England Journal of Medicine             |
| NSP                           | National Strategic Plan on HIV, STIs and TB |
| PMTCT                         | Prevention of Mother-to-Child Transmission  |
| PPE                           | Personal protective equipment               |
|                               |   |

| SAMWU  | South African Municipal Workers Union   |
|--------|---|
| SAMJ   | South African Medical Journal           |
| STIs   | Sexually transmitted infections         |
| TAC    | Treatment Action Campaign               |
| ТВ     | Tuberculosis                            |
| UNGASS | UN General Assembly Special Session     |
| WHO    | World Health Organisation               |
| XDR-TB | Extensively drug-resistant tuberculosis |